interact
Learn Through Experience

www.teachinteract.com

ECONOMICS MADE EASY

Five Mini-Simulations: Budgeting, Business, Taxes and Government Regulation, Money, and World Trade

Interact
Learn Through Experience

ECONOMICS MADE EASY

Five mini-simulations: budgeting, business, taxes and government regulation, money, and world trade

DAVID R. ROSSER, a co-author of ECONOMICS MADE EASY, received his undergraduate degree from Ursinus College in Collegeville, Pennsylvania and his graduate degree at Clark University, Worcester, Massachusetts. He taught social studies for 30 years at Council Rock High School, Newtown, Pennsylvania. Presently he teaches classes in American History at Gwynedd-Mercy College, Gwynedd Valley, Pennsylvania. For Interact he has also written ENTERPRISE, PRESSURE, SPIRAL, TAXES, and TRADE.

DAVID YOUNT, a co-author of ECONOMICS MADE EASY, received his undergraduate degree from Wabash College in Wabash, Indiana, and did graduate work at the University of New Mexico. He taught American Studies at El Capitan High School in Lakeside, California, for 25 years with Paul DeKock. In 1968 Dave and Paul began Interact, their simulations company for which they still write and edit teaching materials utilizing cooperative learning, an integrated curriculum, and authentic assessment.

Interact
10200 Jefferson Boulevard
Culver City, CA 90232-0802
ISBN 978-1-57336-202-3

INT353 v1.02

CONCEPTS AND GOALS

"5 concepts"

"4 goals"

This program is based on five concepts:

1. **Economics is not too complex** for the typical high school student to understand clearly!
2. **Economics is not too obscure or abstract** to be interesting for the typical high school student!
3. **Economics is not too technical** for the typical high school teacher to teach effectively!
4. **Economics is a subject that is crucial** to all young persons' ability to cope with the world they are entering!
5. **Economics is a subject that can provide great satisfaction** to teachers when they teach it well!

This program has four fundamental goals:

1. **To create a basic learning process that is as real as possible!** Students do not just memorize abstract numbers and charts and graphs; they engage in activities that create real numbers and results.

2. **To create realistic situations for making choices!** Much of life (and economics) is choice. These can be time choices: *Do I take the job offered now or do I go to college and possibly get a better job later?* These can be pleasure choices: *A vacation now or a stereo for now and later?* These are not win-lose, high-risk choices; they are just plain value choices. Economics is loaded with choices which are great practice for the lives students are going to live.

3. **To create realistic situations of risk-taking and reward!** Your students will not just read about levels of risk; they will take their time, effort, and capital to compete with others in a market situation. They will not simply read about profit and loss; they will be in a situation where they can profit or lose.

4. **To create a sense of world economic participation!** Goal 4 will be a difficult goal to reach, but oil cutoffs, energy crises, and dollar panics have made this task easier. Your students will not just read about trade imbalances, oil price fluctuations, and official policy statements; they will work in situations where the actions of foreign nations impact basic daily lives, choices, and futures.

If students accomplish these goals, they will understand basic economics, economic decision making, and world economic reality. Economics will not be remote, abstract, dull, and quickly forgotten. This program is dedicated to that end.

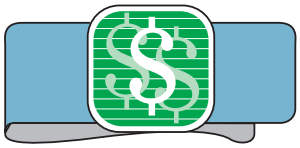
OVERVIEW - 1

The ECONOMICS MADE EASY notebook program is divided into five units. Each deals with a separate level of economic activity and may be used independently. Each part includes the following:

- a set of goals;
- items of teacher preparation;
- bulletin board suggestions;
- material to be duplicated; and
- a calendar of events that can be followed in long or short form.

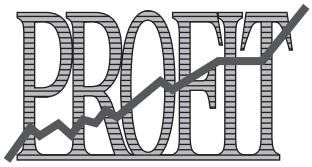
A full description of all the action and teacher input at each stage is incorporated in daily directions. Each part concludes with suggested follow-up activities.

Unit 1: The Individual in Our Economy



In this unit students learn about the basic economic choices most, if not all, must someday make: *Should I buy a house or rent? How do I get a mortgage? Should I buy a new car or save the money? Should I buy insurance for health? Or car? Or life? Or all three? How much should I take out of my paycheck for taxes? Whatever the choices, will I be able to balance my own budget? What does this "Supply-Demand Curve" have to do with me, anyway?* All activities center on the individual learning to cope in our economic system.

Unit 2: Business Organization



This unit moves to basic business organizations, how they operate, the kind of decisions they require, and the advantages and disadvantages of each. In Cycle 1 students form six different small businesses and learn how individual proprietor and/or partnerships are set up and run. In Cycle 2 students learn how corporations are formed, set up, and run. Both cycles have students analyze one another's work to determine which group would succeed best.

Unit 3: Taxation and Government Regulation

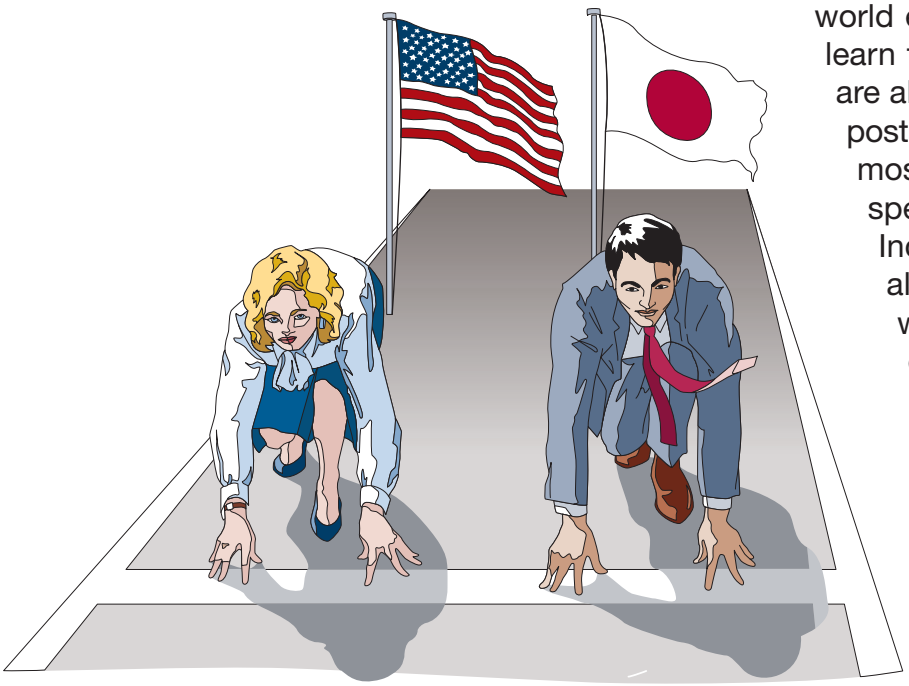
This unit features the interaction of economic interest groups as they deal with taxes and government regulation. These political "pressure groups" are embroiled in a local community's struggle to find a fair and just way to finance an upgrade of its sewer system while at the same time wrestling with the economic morality of allowing a potentially polluting factory to be built, but which would also go a long way toward solving the community's tax problems. Students learn it is no longer sufficient to act on the basis of what is best for the individual alone or one business alone; that, indeed, a citizen must think and act as part of a pressure group in order to be effective in our democratic republic.

Unit 4: Banks and the Federal Reserve System

This unit focuses on the areas of banks, banking, interest, credit, and the control of our money system. Acting as "economic units," students learn how they are affected by rates and procedures in our local banking system and how these banks are, in turn, controlled to a large degree by the federal government through the Federal Reserve system. Students go step by step through this seeming "maze" to learn how our "money" (not paper money or cash) is created or shrunk by actions of the "Fed." Many of the "warts" in this system also surface and provide stimuli for good discussions.

Unit 5: World Trade

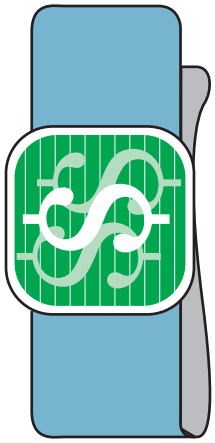
This unit has students join the largest economic groups—various types of nations engaged in international trade. Acting as these nations, students experience the problems of international trade balances, crises, money panics, and general world economic stress. They also learn that all economic problems are also political problems in our post-cold war world and perhaps, most importantly, that a "dime" spent in some remote village in India has a ripple effect across all the world. For, like it or not, we now are truly "one world" economically. Therefore, we have no choice (other than self-destructive war) but to negotiate ways for all nations to trade peacefully with one another.



"Are we going to have a fair race?"

INTRODUCTION

Individual Economy



This Individual Economy unit "hooks" students into studying economic theory by involving them directly in the economic decision-making all adults must make who live on their own.

Cycle 1

Students receive a "paycheck" and learn how "gross pay" differs from "net pay." They receive a checking account with a $5,000 balance plus their beginning net pay. Using this amount, they must make several decisions: **housing**—to buy or rent shelter and learn about mortgages; **transportation**—to buy a car and learn about car contracts; **insurance**—what risks to insure and learn about the various kinds most adults carry; **consumer purchase**s—what products (e.g., televisions and microwave ovens) to buy and learn about credit cards. Next, they must complete a **personal budget** outlining these decisions.

Cycles 2 and 3

They are introduced to "formal" economics as they make decisions based on "boom" and "bust" conditions as dictated by the economy's ups and downs in a typical business cycle. The **SUPPLY/DEMAND CURVE** is used to illustrate how these decisions affect not only their personal lives but also their nation's overall economy. This interaction plus your explanation of these personal economic factors will lead them to accomplish the following goals.

Goals

At the conclusion of the action cycles, your students should be able to do the following:

- supply the most basic economic item—their labor or skill—to the economic system you will create;
- understand the value of that labor or skill;
- make basic consumer choices and purchases;
- accept, understand, and deal with basic debt obligation such as mortgages and car payments;
- understand how that debt is financed, how the rates are set, and how to bargain about them;
- realize that we can acquire insurance to protect ourselves from some risks; and
- create a budget that reflects the reality of life in this economy.

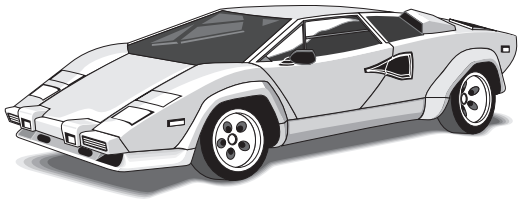
To accomplish all of this, first you will need to carry out the teacher preparation found on the next three pages. Then, you should study the Unit Time Chart on page 5 and the Daily Directions that begin on page 6.

TEACHER PREPARATION - 1

As always, good results require solid, traditional instruction in the basics of the subject! The main difference between this unit and a traditionally taught one is that you will intersplice your instruction when students are involved in solving personal economic problems and, hence, are motivated to listen to such instruction. Thus, using any good, up-to-date economics textbook, you must first provide your students with an introduction to the key concepts listed below. This may not be as simple as it sounds, depending on the textbook and supporting materials at your disposal. For example, to buy a house in the first activity, a student must understand what a mortgage is, what interest means, and how supply and demand are related to both the cost of the house and the cost of borrowing money to buy it. Since your students' first economic decision is to decide whether to buy a house or to rent, you need to brief them at this point on the advantages and disadvantages of both. *(**Note:** A detailed explanation of interest rates, including all aspects of banking, is given in Unit 4.)* For this unit, the student simply needs basic understanding of the economic choices any adult citizen has to make and, of course, something even more basic: *How much is it and can I afford it?*

Before the activity, give your students a brief introduction to the following concepts. Do not worry, however, about complete understanding at this point, for you will have ample opportunity to reteach these concepts when the students most need to understand them—that is, while they are actually involved in making economic choices.

- **Supply and demand.** The definitions of, curves, market price, and factors that push supply and demand up and down and affect individual choices.
- **Mortgage.** The main features of the usual contract to purchase a house.
- **Car contract.** The main features of the usual contract used to buy a car on time.



"... the usual contract used to buy a car on time ..."

- **Insurance.** Types, terminology, balance of cost and risk, and your need to choose what you need and/or can afford.
- **Credit.** Types of credit, credit terminology, mathematics, and reasonable limits for an individual.
- **Budget.** What it is, how it is constructed, and how to use it to organize your life.
- **Cost and profit.** The consumer's cost, the producer's material and labor cost of material, the retailer's cost, and the reasonable price to produce a profit for each.

Setup directions

1. **Duplication.** Duplicate the following items in the quantities indicated in parentheses. Cut apart pages with multiple forms.
   - UNIT 1: STUDENT INTRODUCTION (class set)

   Role descriptions:
   - HOME BUILDER (two: designate one A; one, B)
   - CAR DEALER (two: designate one A; one, B)
   - CAR BUILDER (two: designate one A; one, B)
   - CONSUMER PRODUCTS BUILDER (two: designate one A; one, B)
   - RETAIL SELLER (two: designate one A; one, B)
   - INSURANCE AGENT (two: designate one A; one, B)
   - ENGINEER/DESIGNER (four: designate Engineer A; Engineer B, Designer A, Designer B)
   - ADVERTISING/SALES (four: designate A male, A female, B male, B female)
   - MALE ASSEMBLY WORKER (six: designate 1-6)
   - FEMALE ASSEMBLY WORKER (six: designate 1-6)
   - CARPENTER (two: designate A male, B female)
   - PLUMBER (two: designate A male, B female)
   - ELECTRICIAN (two: designate A male, B female)
   - BANKER (two: designate one A; one, B)

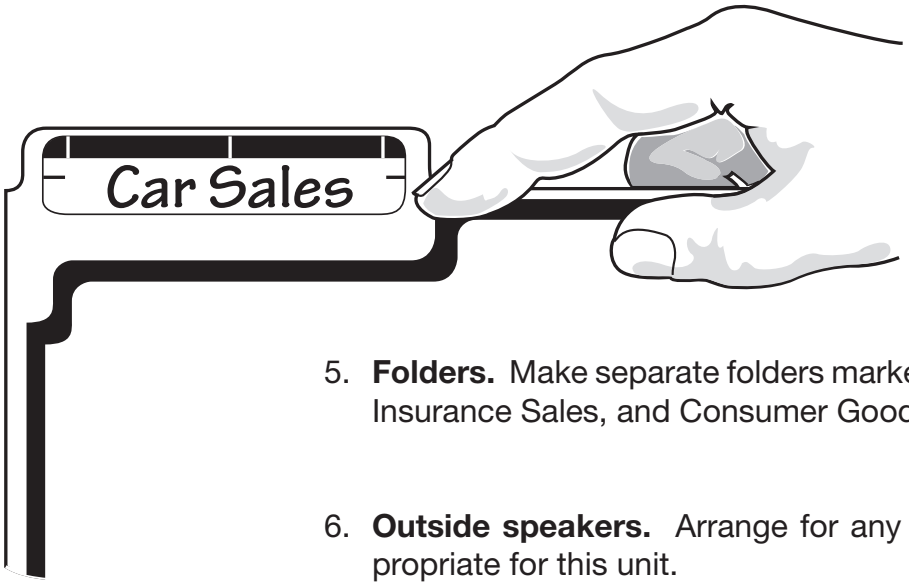
   Class handouts:
   - SHORT FORMS—home loan, bank, insurance (36 of each)
   - SHORT FORMS—car builder, car purchase, retail seller (36 of each)
   - SHORT FORMS—consumer product (enough for all products)
   - MODEL BUDGET (class set)
   - CHECKBOOK SHEET* (class set; cut apart and make up booklets)
   - PAYCHECK MODEL* (class set)
   - CAR PURCHASE CONTRACT* (class set or as needed)
   - MORTGAGE CONTRACT* (class set or as needed)
   - INSURANCE FORMS: CAR, LIFE, HEALTH* (class set)
   - VISA APPLICATION FORM* (class set)
   - VISA CARD* (30 sheets)
   - SUPPLY/DEMAND CURVE* (class set)
   - KEYNESIAN SUPPLY/DEMAND CURVE*

2. **Display copies.** Make one display copy of each of the starred items above.

3. **Awareness material.** Bring to class (and/or have students bring) good local publications, *Wall Street Journal, Business Week, Time,* and any other reliable source of business and economic

news. Cut out, put together, runoff, and hand out articles on jobs, unemployment, retail sales, price changes, interest rates, cost of insurance, bank failures, and anything else that will apply to the activities in Cycle 1. This is just as important as the text. We know that many students rarely read a newspaper, and *very* rarely read this sort of news. This material is the bridge between textbook learning and your actual classroom activity later. Put this together ahead of time; do some discussion about it; keep it as a sort of reference. It is crucial that students begin to see the connection between the seemingly abstract (textbook) world and their own (real) world of mortgages, car payments, jobs, and budgets that won't balance. Any bulletin board/visual material would also help at this point!

4. **Time decision.** Read over the following Unit Time Chart and Daily Directions pages to get a feel for the time the simulation will take. Also review the various forms given to obtain a sense of the teaching task involved. This unit can easily take three weeks, particularly if you wish to bring in outside speakers. This may seem too long, but, on the other hand, you will be giving your students some of the most practical instruction they will ever receive in everyday economics—instruction they will likely receive nowhere else. If time is a critical factor and/or you wish only to teach the "supply/demand" dynamics of everyday life, you can shorten the simulation by eliminating the detailed instruction associated with the mortgage, car contract, insurance, and credit application forms, and by having the students concentrate on buying and selling the various items only. Their interaction will provide you with many examples that you can use to teach the key principles of the unit.



5. **Folders.** Make separate folders marked House Sales, Car Sales, Insurance Sales, and Consumer Goods Sales.

6. **Outside speakers.** Arrange for any you can find who are appropriate for this unit.

UNIT TIME CHART

Note: This chart is intended as an example; alter as desired.

Organization Introduce simulation Assign roles; pass out role descriptions Hand out STUDENT INTRODUCTION, PAYCHECK MODEL and explain Hand out checkbooks Assign MODEL BUDGET as homework 1	Cycle 1 begins Shelter Hand out MORTGAGE CONTRACT and explain Students decide: buy or rent? Builders sell homes Bankers and buyers work on mortgages All review MODEL BUDGET 2	Transportation Pass out CAR CONTRACTS and explain Students decide whether to buy car or not Car dealers and buyers work on contracts All review budgets 3	Insurance Pass out INSURANCE CONTRACT forms and explain Students decide what insurance to buy Agents work with buyers All review budgets 4	Consumer goods Pass out VISA applications Students decide whether or not to have a credit card; whether or not to purchase goods Retail sellers work with buyers All review budgets 5
First budgets All costs are reviewed Students examine single vs. married consequences Students make final decisions on purchases First budgets completed Cycle ends 6	Cycle 2 begins Introduce “boom” cycle statistics Allow students to interact at will Use SUPPLY/DEMAND CURVE to explain how economy works Introduce problems as given in teaching directions 7	Continue activities started on Day 7 Set time limit to end interaction Debrief and summarize “boom” economy Cycle 2 ends 8	Cycle 3 begins Use SUPPLY/DEMAND CURVE to show effects of overproduction Introduce students to “bust” cycle and its effects Read emergency notices Allow students to interact 9	Continue activities started on Day 9 Set time limit to end interaction Debrief and summarize “bust” economy Cycle 3 ends 10
Conduct final critique 11	Have outside speakers Extra-credit projects Testing (optional) Moving on to next unit 12			

DAILY DIRECTIONS - 1

Day 1

1. Introduce the simulation.

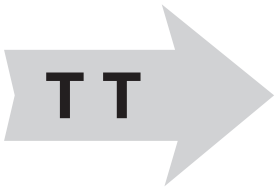
2. You may pick students for individual roles or allow them to draw roles by chance. Adjust roles to match class size. The model is built around a 40-member class. If your class is smaller, deduct assembly line workers or construction workers.

3. Pass out the role descriptions to the appropriate students. Have them read these carefully and answer any questions they might have, but indicate to them that the statistics given for each occupation are averages and might not apply to a specific person the student might know who has this particular job.

4. Hand out and have students read UNIT 1: STUDENT INTRODUCTION.

5. Hand out PAYCHECK MODEL. Call students' attention to the paycheck stub. Then, tell them the first thing you are going to do is give them their first semi-monthly paycheck. Display the model to illustrate. Have students fill out the paycheck stub with these figures:

Gross Pay (semimonthly)	$1,000.00
FICA (6.2%)	<62.00>
Medicare (1.45%)	<14.50>
Fed. Income Tax (single, one dependent)	<121.00>
State Income Tax (average is about 5%)*	< 50.00>
Other**	0.00
Net Pay	752.50



TEACHING **T**IP

This moment could be the first time students have ever looked at a paycheck stub.

6. Have the students analyze the paycheck stub which lists the various deductions employers are required to take out of their employees' pay. Explain briefly each of the following: Gross Pay; FICA (Social Security: 6.2% which employer matches); Medicare premium: 1.45%; Federal Income Tax: 15%-39%; *State Income Tax (average is 5%; if your state does not have this tax, you can omit it); **Other (You may want to add any other deduction, such as disability insurance if your state requires employees to pay it); and, finally, Net Pay.

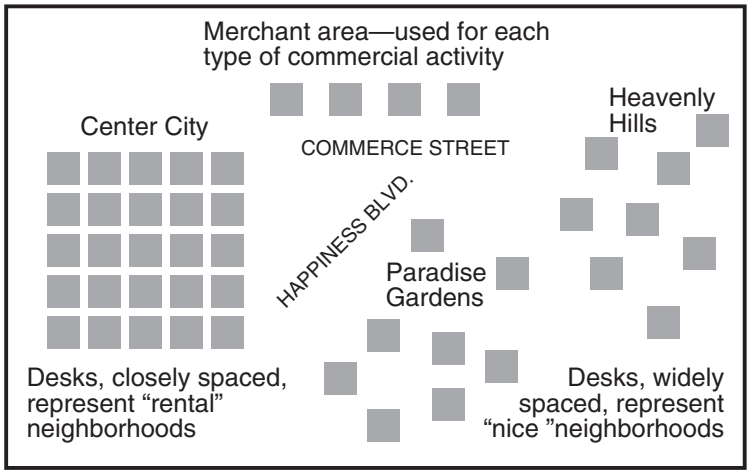
7. Hand out the checkbook booklets and show the display copy. Briefly explain how to write a check and how to fill out the check stub showing deposits and withdrawals. Tell students that each of them starts with a $5,000 balance, representing their savings to date, and that they can add their paycheck amount to that figure as their first deposit. Indicate their paychecks will vary after this, depending on their occupations.

8. Hand out the MODEL BUDGET. Explain that persons must use "Net Pay" and savings in determining their personal budgets. Explain each category briefly. Do not have students fill this out now, but rather explain to them the various alternatives they have in the coming cycles. Tell them they will have to make some hard decisions during the coming hours. Tell them to study the budget overnight.

Day 2

1. Call students' attention to the diagram of "houses" you have drawn on the board from the model given below. Explain that houses shown on widely spaced lots in the Heavenly Hills and Paradise Gardens areas are for sale, whereas the closely grouped houses in Center City are rentals.

HOUSING MAP



T T

TEACHING **T**IP

Note: *"Citizens" may have to physically move their own desks to the room area they have chosen to "buy" or "rent."*

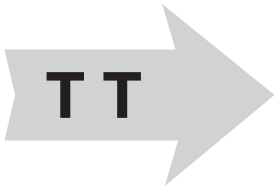
Important note: *Since mortgage contracts, as well as the other contracts given as models, would take too much time for each student to fill out, the simulation will allow sales to be made with only the short forms being used in each category. Each seller has been given these and will give the buyer a copy and you a copy. Keep your copies in separate folders marked House Sales, Car Sales, Insurance Sales, and Consumer Goods Sales. If disputes arise, you then can refer to these files.*

2. Tell the students that the room will be rearranged to conform to the diagram and that they will have an opportunity later to move when they decide to buy a house or to rent.

3. Pass out the MORTGAGE CONTRACT form. Using the display copy, explain the various items on this form. Also, using the Monthly Payment Chart, explain how the typical monthly payment is figured. Also explain how conventional loans require from 5% to 20% down.

4. Tell students that Home Builder A has eight houses for sale in Heavenly Hills and Home Builder B has eight in Paradise Gardens. If more than eight persons wish to buy from a particular builder, the builder will normally sell the homes to the highest bidders though he/she may decide to hold a lottery, since the price has already been advertised. Also, tell students we are assuming in this model that all of them are first-time buyers and, therefore, are eligible for down payment terms of 5%.

5. If students are unable, or do not wish, to purchase a house, they must rent one in Center City. The rent is $500 per month plus approximately $100 per month for utilities with the first month's rent plus a $200 security deposit being required to move in. Students need to take this into account when deciding whether to buy or rent. Renters have little or no maintenance costs; but, on the other hand, they do not build up an equity in the place where they rent, nor do they receive very much, if anything, in the way of a tax deduction.



TEACHING **T**IP

Note: *You may want to invite a local banker to conduct this part of the lesson for you. If so, allow extra time.*

6. Students who are able to buy homes must go to one of the bankers to get a mortgage. The banker will then process the loan (using the short form only) and give the builder the amount of the mortgage. (See the banker's directions.) Explain why the banker does this and that the bank makes its money from the interest charged on the mortgage.

7. Have the bankers and builders move to the "Merchant Area" shown on the diagram.

8. Make sure everyone has looked at their MODEL BUDGETS to see how housing costs affect them. Then, if time, allow them to purchase a house. (There is more action time scheduled, later, so students unable to buy now will get a chance at that time.)

Day 3

Note: *They may have to "physically" move their house into the area they bought or rented.*

1. Have students rearrange the room and move into their "houses."

2. Pass out the CAR PURCHASE CONTRACT forms. Go through the various items carefully. Call students attention to the Model Payment Chart for car loans and explain.

3. Have students look at their MODEL BUDGETS to see how purchasing a car might affect them.

4. Have students, who wish to do so, purchase a car from Car Dealer A or Car Dealer B (who will use the short form to expedite sales). The car dealer may have to also hold a lottery if there are more buyers than cars since he/she has already advertised the price. (If the dealer had not done so, he/she could charge whatever the customers would be willing to pay. This will be the case in Cycles 2 and 3.) Have the car dealer carefully keep records as indicated on his/her instruction sheet.

5. Have Car Builders and Car Dealers move to the "Merchant Area" in front.

Day 4

1. Pass out the INSURANCE CONTRACT forms. Explain that all car owners must purchase car insurance (as this is required by law), but that life and health insurance, while being desirable options, are not required.

2. Explain the various parts of a car insurance contract using the display copy.

3. Explain life insurance, especially the difference between term and whole life.

TEACHING **T**IP

4. Have Insurance Agents move to the "Merchant Area" in front.

Note: *You may want to invite a local insurance agent to class to do this for you. If so, allot extra time.*

5. Explain the various health plans now being offered in your area. Tell the local big employers—that is, the home builders and the car builders—that they must provide this coverage for their employees since it is in their contracts with the various unions. All others may, or may not, take this out.

6. Have students look at their MODEL BUDGETS to see how insurance costs might affect them. Also, have the Insurance Agents keep good records of their sales.

Day 5

1. Pass out the VISA APPLICATION FORM.

2. Have the students fill the application out whether or not they wish to submit it to the bank for a card.

3. Explain the typical terms imposed by a bank for use of the card: annual fees, interest rate on outstanding balance (varies from 10% to 22%, depending on bank), number of days before interest rate is imposed (this varies from 0 to 25 days), how monthly payment is figured, what happens if the card is stolen or lost, and the action the bank will take if monthly payment is not made on time.

4. Indicate that since neither the new houses nor the rentals have refrigerators, dishwashers, microwave ovens, VCRs, or TVs, these items must be purchased from the Consumer Product Dealers, who will accept VISA cards for purchases.

5. Have students who wish to do so obtain VISA cards from one of the banks (or both, if they wish).

6. Have students figure out how such purchases would affect their model budgets. Also, tell the Consumer Products Retailers to keep careful records as well as the bankers who interact with them in case of VISA sales.

7. Have Consumer Products Builders and Retail Sellers move to the "Merchant Area" to conduct any sales.

Day 6

1. Tell students that before they figure out their first budgets they need to decide about living with someone to share expenses and/or about possibly marrying someone.

TEACHING **T**IP

Note: *If students decide to "marry" or "live together," they must move their desks, front touching to front, so they face one another.*

2. Carefully go over the legal and tax ramifications of being single versus being married, and living together versus being married. Explain who is going to own what—houses, cars, consumer goods—should be spelled out in some sort of written contract. (In fact, some counselors advise people getting married to write up a contract that covers all aspects of married life.)

3. Once this decision is made, have students fill out their budgets for Cycle 1.

Note: *Merchants may conduct business out of their "houses" at this point.*

4. Have students spend the rest of the hour completing paperwork for purchases of houses, cars, insurance, and consumer goods. (You will have to circulate here to help out where needed.) Remind them that their basic objective is to make the system work in this cycle. They should try to get a house—there are not enough for all yet; try to get a car; to buy some consumer goods; and, without fail, to get enough insurance to be safe. Remember that production in Cycle 1 is fixed at 16 homes, 24 cars, and 130 consumer items.

Days 7-8

Note: *You may need to allow a limited time extension for insurance business* ***only*** *to get caught up.*

1. Before beginning Cycle 2, allow some time for everyone to get their "books" in order. All must know who owns what home, car, and television. Also who is now obligated to pay whom and how much. Be sure you have your copy of each transaction recorded on the short forms.

2. Everyone should now concentrate on their budgets. Be sure they use the correct column: single or couple. It should become clear who is doing fine, who is just okay, and who is in financial trouble. Point out that Cycle 2 is an economic boom period and most

Read or tell.

should do better if they really try.

3. Begin the cycle with this new economic reality announcement:

   "We are now in an economic boom. Car builders will now build a total of 30 cars, up 25%. Home builders will build 18 homes, up 12-1/2%. Consumer product builders will build 150 things, up 15%. More products for sale means the "Good Life" for more of the class, and the need for more labor means that all workers will receive more income."

   The question will be how much more since the builders must decide how much of this boom cycle they will share with their workers.

4. Pass out the SUPPLY/DEMAND CURVE. Show how this principle underlies all economic actions in our capitalist economy.
   a. Using your overlay, show how the demand for houses has led to an increase in supply. (Note: The builders have these "on paper only." When a student buys a new house in this cycle, the builder must move the buyer's rental desk to the buyer's new neighborhood.)
   b. Do the same thing for cars and consumer products.
   c. Now, using examples from above, show how supply and demand act to determine price. (You may want to bring in your textbook at this point.)

5. Using the same SUPPLY/DEMAND CURVE, show how it affects labor and wages. Explain what happens when union rules and/or government laws are instituted to "moderate" the curve. (For example, what will happen to a builder if zoning laws allow only two new houses in the subdivision he/she has developed.)

Read or tell.

6. Explain the decisions the following groups must make:
   - ***Workers.*** One of the following scenarios:

     Scenario 1. "Assuming you are not a member of a union, you, the workers, would normally get a pay increase in exact proportion to the need for labor in your industry. If your employer needs 25% more, he/she could require that you produce more and work 10% more hours which, with the time and a half overtime, would raise your wages 15%, overall."

     Scenario 2 "You could demand, as an individual, time and a half overtime rate plus a piece rate and get more than the 25%. (This act will force the builder to raise the price of his product, or reduce his profit margin.)"

Read or tell.

Scenario 3. "You, and other workers like you, could join a union and demand a larger pay increase. The risk here is that you may have to strike to get the raise. If you strike, that would mean *no* production and have an effect on everyone else who needs, retails, finances, or insures the product. You also get no salary. Finally, remember that all may not honor the strike, and they will go to work while you picket."

- ***Builders:*** "With wages up, you must raise your prices to maintain your profit margin per item. Or you could keep the old price, make less profit per item, but sell more items. But, what will your competition do?"
- ***Sellers:*** "Is this the time to charge more for your mortgage, financing, product, or insurance? Will you scare away customers?"
- ***All:*** "Will marriage pay at this point? If so, it is simpler to *go ahead with it* before the action goes any further."

7. Have the various occupations tell you what they are going to do before beginning interaction. Once the wage issue is settled, have all students deposit their pay in their checkbooks.

8. Then have students interact, paying their bills and buying houses, cars, and products as in Cycle 1. Have students clear up their business and checkbooks. Be sure they know who owns and owes what. Have businesspersons give you copies of all transactions. Have students get all budgets up to date. Again determine who is in good shape, who is not. Spend some time with problem budgets; try to get individuals and class to clarify problems and possible solutions. This is very important; we are at the core of the learning experience for this unit.

9. Debrief and summarize activity.

Days 9-10

1. Begin Cycle 3. If students have not noticed the possibility of problems in this economy, now is the time to bring them to everyone's attention! One of the first signs of a boom cycle about to turn bad is overproduction. Illustrate this effect on the SUPPLY/DEMAND CURVE. Students *may* have noticed that the home builders are producing too many homes. There should be some unsold homes still on the market. Indicate on the curve how overproduction will affect home prices.

2. Down cycles often start with one part of the economy creating a glut, then a contraction, then the effects spread. *The home situation is your starting point,* and cars and consumer products may also be a problem. Show how overproduction *cannot* continue beyond a price loss point on the curve. Supply and demand will always dictate this "business cycle" of ups and downs in a "free market" unless government takes actions to moderate it. (Note: Using the Keynes overlay, you may at this point want to show how John Maynard Keynes' theory of economic intervention by government action can be used to either "cool off" a boom cycle or stimulate a bust cycle. Simply stated, Keynes believed government should increase taxes, raise borrowing costs to reduce investment capital, and decrease government jobs during good times; and decrease taxes, lower borrowing costs, and increase government jobs during bad times. Students may have already been introduced to Keynes when they studied the Great Depression and the New Deal.)

3. Now tell students you have accelerated the business cycle on the down side to the point where the nation is in a deep recession. All builders must lay off 25% of their workers!

4. Split the class into the three basic economic segments: builders, sellers, workers. Have them form circles; then, read aloud for all to hear the following announcements. Tell everyone to listen before they discuss their mutual problems. Also, strongly indicate that though they are meeting as a group, each individual must make his/her own decision as to what to do.

Read or tell. 

- ***Home builders***

  "You have built 34 homes so far. You need only six more if everyone in the class needs a home. If some have married, you will not even need the additional six. If you can convince some people to get a second home (vacation-summer-rental), you can sell more homes. If you lower the price you may sell more. If you cut prices will there be any profit left? If you cut prices could you get the workers to take pay cuts? If none of this works and you must cut production, you must reduce labor in proportion and decide whom (specific individuals) you will lay off. Each home builder must now decide what has to be done."

- ***Car builders***

  "Let me remind you of the numbers so far. Even if you export your maximum allowed, you will have sold 36 cars into this 40-person economy. You are in the same position as the home builders: unless you

Read or tell.

sell more, you will have to have more production cuts and more layoffs of specific people. I encourage you to consider cuts and layoffs as the last resort, even though you may have to cut profits severely."

- ***Consumer products builders***

  "You can be a bit more flexible. Multiple televisions and refrigerators in a home are common; but many families still do not have VCRs, dishwashers, or microwave ovens. You, too, must consider the various options given to the other builders."

- ***Sellers*** (mortgages, cars, insurance, consumer items)

  "With poor economic conditions comes a lowering of demand. Consider these options. You, a seller, could slash prices and take less profit but hold on to your customers. You, a banker, could lower interest rates to make the mortgage more attractive (less profit for you) or refinance to stretch the payments and take pressure off customers' budgets. You car dealers could offer rebates; appliance stores can have sales, but you cannot go without any profit for very long! Remember, sellers, if you fail, you will not collect unemployment as workers do, because you are self-employed small businesspersons!"

- ***Workers***

  "You know that economic production is about to be cut, by how much you don't know. Some of you may/will lose your jobs. You *must* prepare for all possibilities in a good news-bad news world."

  "**Possibility 1:** You do not lose your job; and as the economy tries to bring supply and demand back into balance, you will be able to get bargains in goods and services. This is a great opportunity!

  "**Possibility 2:** You do lose your job. Then you should think about signing up for unemployment benefits. This will vary from state to state; in this class it is one-half of your normal pay. You should think about signing up for food stamps. You can use this to reduce your food line on the budget by one-third. Also you should consider clipping coupons, changing your lifestyle, carpooling, bartering, selling assets, refinancing. The last may be hard to do if you don't have a job.

TEACHING **T**IP

Research the unemployment benefits in your state.

"You must be able to demonstrate to me and the class that these ideas will save specific dollar amounts."

5. Leave the groups—they have things to discuss. Allow some time, say about 15 minutes, for each group to consider options. Then, Cycle 3 action must begin. All students should be in original places before total class action begins again.

6. All builders must announce their plans, as much as they can at this point, so that sellers will have some idea of the number of items they will work with, and workers will have some idea of who may be out of work.

7. The action cycle should now proceed as in Cycle 2. Students should try their best to succeed. Allow sufficient time and then stop action.

8. Take some time to sort out the numbers and have students complete their budgets for the last time.

Day 11

1. This is the *most important* single part of this activity! Your students must leave this process, especially the difficult Cycle 3, with some answers. Begin with identification of those who coped well and those who did not. Try to be non-judgmental. Discuss whether a good or bad outcome was caused by some of the following:

Read or tell. →

   - **Luck.** It does play a part in life. Which students had it?
   - **Job/Role.** It can make a difference. Is there a lesson(s) here about education, school value, skill acquisition?
   - **Choice(s).** Many of the problems that really hit home in Cycle 3 may have been caused or made worse by earlier choices. Now is the time for discussion of specific examples by individual students.

Read or tell. →

2. When you have had sufficient informal analysis from the view of the students, finish up with a formal, economic analysis:
   - Did supply and demand have an effect? Where and how?
   - What is a "cost" to an individual or to a business?
   - What is a reasonable profit?

Read or tell.

- What are the basic economic risk choices that determine supply and demand? Such as: How many items do we produce? How much profit do we aim for? How much do I buy, when, and at what price?

Day 12

1. This is another good time to have a speaker or speakers who can really explain the basic economy as they live it. A banker, a car dealer, an insurance salesman, a home builder could really speak to an "aware" audience at this point. There are specific and detailed questions to be answered; there is a high-interest level. Make use of it!

2. Since this entire activity is based on action and participation, you might consider an extra-credit "Take-Home" activity. There are many possibilities. The idea should always be to move from the class simulation to the real-world situation. A project or extra-credit assignment at the beginning of this sort of activity is tied to nothing. Now you can tie it to an action or to a problem that was real for a student. Each class is unique; each community is unique, but the following examples might work in most places.

Read or tell.

- ***Promotions.*** Take each line of expense on your budget and scan the newspaper, television, mailings, and look for and *record* every discount, percentage off, today only, etc., that would apply to your budget for one month. Show the exact dollar savings; get a total and multiply by 12 for your personal ABR (annual bargain rate).
- ***Car shop.*** Pick your dream car and a sensible car. Go to the dealers, get the correct price, the monthly payments, and the cost per mile based on the numbers on the sticker. Calculate the true dollar cost of buying car A and of buying Car B. Then convert the difference into other consumer items that you could pay for with the savings. This is a lesson in values and priorities!
- ***Interview.*** Do a series of interviews with an older brother or sister living independently away from home, your parents, your grandparents. What are the "tricks" of a budget that works? Where are hidden savings possible? What are the things that you never do—the budget wreckers? You have a three-generation study.

Read or tell.

What lessons apply to you?

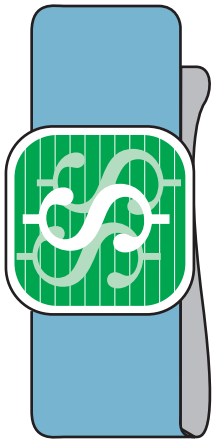
- ***Invisible costs.*** Go to a builder or seller in your community. Find out what are the less obvious costs of business, such as lawsuits, accidents, accident prevention and other training, theft by workers, etc. Get the picture of that whole area beyond simple wage and material costs. Could you run a business in this situation?

3. If you still feel a test is a must at this time, keep it simple and basic. Use true-false or multiple choice to check on understanding of terms such as the following or any other terms you have introduced: Mortgage, principal, interest, APR, down payment, profit margin, market share, labor cost, material cost, whole life, term, deductible, collision, replacement value, layoff, food stamps, compensation, supply/demand curve, price line.

4. All of our activity so far has been centered on individuals; our biggest combination is an occasional marriage. Our system, however, is not that simple. For example, in all of the activities of Unit 1, there were only single-owner businesses, which is an oversimplification of the present business world. In Unit 2 the activities are built around partnerships and corporations. They show the good and bad aspects of that part of our economic structure. In Unit 1, nobody paid taxes or dealt with any regulations; Unit 3 will deal with that. Since there is more to a bank than just being a place to get a mortgage and a VISA card, particularly its role in relation to the Federal Reserve System, Unit 4 focuses on "money" or, more specifically, the creation of capital. Finally, because we have ignored the rest of the world, Unit 5 will handle world trade. We recommend using Unit 2 next; but almost any combination will work.

UNIT 1: STUDENT INTRODUCTION - 1

Individual Economy



Welcome to the system

You are about to take part in an activity that will allow you to apply what you are learning so that you will learn a lot more! There is no win-lose situation—only a learning opportunity.

You must *make decisions* in regard to what you are learning. For example, when you study about insurance—the types, the advantages and the disadvantages of each—you will have to decide how much insurance you *want* to have, how much you *need,* and how much you can *afford.* ***Want-need-afford****—they are not always the same!*

Everyone will have a job/role. Some will produce goods, some will sell goods and services, some will supply production labor, but *all* will consume.

Welcome to your life

Read and reread your job description. Learn your age, sex, skill, and initial financial situation. Become familiar with the MODEL BUDGET. Plan what you *need* to have in life and then what you *want* to have.

Welcome to the action

There are no tricks or problems at this stage. Employers have hired all the people they need. Workers, engineers, sales/advertising people, and assembly line people all have jobs. This fact will give most of the class an income; but, of course, the employers will have to sell their products and/or services to make their payrolls—at least, in Cycle 2 and Cycle 3. Since everyone must decide whether or not to buy the houses, cars, appliances, and services that are offered, and since there are not enough of these for everyone for the first round, economic competition will naturally occur. You may concentrate on buying a house while your neighbor is getting a car. Many, but not all, will buy TVs, VCRs, etc. All will need to have a place to live, transportation, consumer goods, and at least some insurance. These activities will provide income for the rest of the class.

You will have a chance to buy more things during Cycle 2. Use the MODEL BUDGET as a model only; your number will not be the same in each category. You may want to quickly form a combination—marriage or live together. You can see from the model that there is a financial advantage here. If you do decide to get "married," you will have to move your desks together so that they touch one another, symbolizing the same house.

UNIT 1: STUDENT INTRODUCTION - 2

In Cycle 2 your teacher will announce that the prosperity and optimism of Cycle 1 is creating an economic boom. All the producers will now produce more things to meet the demand. To do this, they will need more labor. This situation will mean more income from overtime pay. If, for example, the car builders are now going to produce 25% more cars, they will need 25% more labor. If you now have a $25,000 per year assembly line job, you could get $6,250 more in pay! Will you buy more things, carry more insurance, save more, or have more recreation? The choice will be yours. Just be sure it shows in your budget and records.

In Cycle 3 there will be bad times—the economic bust! Your teacher will supply the exact numbers, but you will have to solve the problems that surface.

"... you will have to solve the problems ..."

HOME BUILDER __

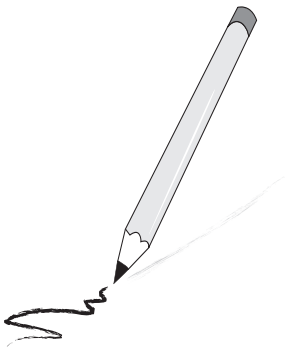
You are 45 years old and have been a successful home builder for 20 years. In Cycle 1 you will hire one carpenter, one electrician, and one plumber and pay each worker $25,000 per year. You will build eight houses. Your total labor cost per home will be $40,000 and your material cost will be $60,000. A home will cost you $100,000. You will sell them to individual buyers for $110,000. This will give you an income of $10,000 times eight homes, or $80,000 per year. You must keep the following two records accurately for each cycle:

Home Builder's Business Record

Cycle	Houses built	Cost Labor	Cost Mater.	Houses sold	Houses price	Return to buyer	Sales	Profit	Comment
1	8	40K	60K	8	110,000	0	880,000	80,000	No incentive
2									
3									

Home Builder's Personal Financial Record

Cycle	Income	Food/enter. (20%)	Clothing (3%)	Shelter Buy/Rent	Consumer Products	Trans-portation	Insurance	Savings
1	80,000	16,000	2,400					
2								
3								



Notes:

1. On your own paper, keep a written record of who bought each home. The banker must tell you when he/she has made a mortgage deal to finance the house, so that you can record the money paid you in your account.

2. You have only eight houses to sell in Cycle 1. Do not sell more than that as that would be criminal fraud.

3. You will need a house at some point for yourself. You must arrange to finance it just like everyone else.

4. Do *not* change the price in Cycle 1. Cycle 2 and Cycle 3 will provide a chance to deal with changes in supply and demand, labor costs, profit margin, and margin share. Keep it simple now so that the system can operate well to start the action.

CAR DEALER __

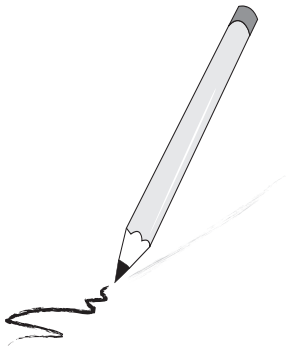
You are age 35 and have recently acquired your own car dealership. In Cycle 1 you have 12 cars to sell. You may export up to one-third of them and receive full payment just as if they were sold to a local customer. This is your option. You will pay $17,500 for each car and sell it for $20,000 in Cycle 1. The $2,500 per car times 12 cars will give you a sales income of $30,000. You could sell the cars for cash, but most people cannot afford that. In that case you must offer a monthly payment/loan deal. There is more than one way to do that, but this is a model to start with. You can take an old car as down payment for $2,000, which we will assume you get back by selling the trade-in at an auction. You can then allow the buyer to pay the remaining $18,000, plus 5% interest, over three years ($18,000 x .05 x 3 = $2,700 total simple interest). The buyer must also pay the principal of $6,000 per year. The total car payments will then be $20,700 with a monthly payment of $575. This is the number used on the model budget. Keep the following records accurately.

Car Dealer's Business Record

Cycle	Cars bought	Cost each	Rebate	Total cost	Cars sold	Sales	Profit	Comment
1	12	17,500	0	210,000	12	240,000	30,000	No incentive
2								
3								

Car Dealer's Personal Finance Record

Cycle	Income	Food/enter. (20%)	Clothing (3%)	Shelter Buy/Rent	Consumer Products	Trans-portation	Insurance	Savings
1	30,000	6,000	900					
2								
3								



Notes:

1. On your own paper, keep a written record of who buys what car (number or name them if necessary), at what price, and on what date. Record clearly the deal made, total debt, interest rate, and monthly/yearly payment amount.
2. You will need a car for yourself; pay for it and record it as you would for anyone else.
3. Do not sell/export more than 12 cars in Cycle 1.
4. Do *not* change the price in Cycle 1. Cycle 2 and Cycle 3 will provide a chance to deal with changes in supply and demand, labor costs, profit margin, and market share. Keep it simple now so that the system can operate well to start the action.

CAR BUILDER __

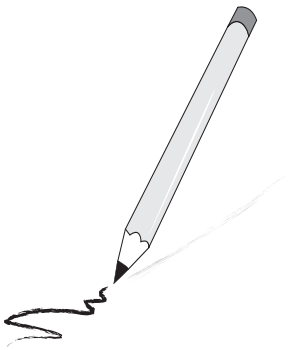
You are age 40, and have been recently promoted to be vice-president. In Cycle 1 you are supervisor of one engineer at $30,000 per year, one sales/advertising person at $25,000 per year, and three assembly line workers at $25,000 each per year. Your total labor cost to build cars will be $130,000, and you will build 12 cars. Your labor cost per car will be $10,800 and your material cost will be $4,200. Each car will cost you $15,000. You will sell your cars to one of the car dealers for $17,500 each. (Note: You may arrange for your dealer to export up to one-third of your cars each cycle and receive the full price, just as if a dealer had sold them locally.) Your profit per car is $2,500; your income from 12 cars is $30,000.

Car Builder's Business Record

Cycle	Cars bought	Cost each	Rebate	Total cost	Cars sold	Sales	Profit	Comment
1	12	15,000	0	180,000	12	210,000	30,000	No incentive
2								
3								

Car Builder's Personal Finance Record

Cycle	Income	Food/enter. (20%)	Clothing (3%)	Shelter Buy/Rent	Consumer Products	Trans-portation	Insurance	Savings
1	30,000	6,000	900					
2								
3								



Notes:

1. On your own paper, keep a written record of where the cars went. This is very simple during Cycle 1, so have a good system to start with; it will get more complicated.

2. Do not sell more than 12 cars, or export more than four, in Cycle 1.

3. You will need to have a car for yourself; buy it from the dealer just like everyone else.

4. Do not change any numbers or prices in Cycle 1. Cycle 2 and Cycle 3 will provide a chance to deal with changes in supply and demand, labor costs, profit margin, and market share. Keep it simple now so that the system can operate well to start the action.

CONSUMER PRODUCTS BUILDER __

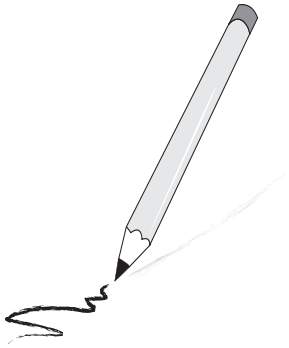
You are 40 years old and have been appointed recently at a salary of $35,000 annually to be the production supervisor of your company's division that produces TVs and VCRs. In Cycle 1 you will hire one designer at $30,000 per year, one sales/advertising person at $25,000 per year, and three assembly line workers at $25,000 per year. Your total labor costs will be $100,000 per cycle to produce 70 items, with the material cost per item inherent in this kind of production at $100.

Consumer Product Builder's Business Record

Cycle	TVs built	VCRs built	Cost Labor	Cost Mater.	Total cost	Unit cost	Wholesale price	TVs sold	VCRs sold	Sales	Profit (100 per unit)
1	35	35	165K	7K	172,000	246	300	10	10	6,000	1,080
2											
3											

Consumer Product Builder's Personal Finance Record

Cycle	Income	Food/enter. (20%)	Clothing (3%)	Shelter Buy/Rent	Consumer Products	Trans-portation	Insurance	Savings
1	35,000	7,000	1,050					
2								
3								



Notes:

1. On your own paper, keep a written record of which dealer bought how many of each item and the date. Create a good, clear system now. Things will get more complex.

2. Do *not* sell more than 35 items of each type.

3. If you want any of these items for yourself, you should buy them from a dealer, just like the rest of the class.

4. Do *not* change the price in Cycle 1. Cycle 2 and Cycle 3 will provide a chance to deal with changes in supply and demand, labor costs, profit margin, and market share. Keep it simple now so that the system can operate well to start the action.

RETAIL SELLER __

You are age 30 and own a small TV store that you and your spouse operate. In Cycle 1 you will have 70 consumer items to sell at a markup of 25% above your wholesale cost. Therefore a 27 inch TV is priced at $400 and a top-of-the-line VCR at $400. You may offer a discount for cash; or sell items on a VISA contract. VISA sales cost you 3% of the price, which you pay to your bank.

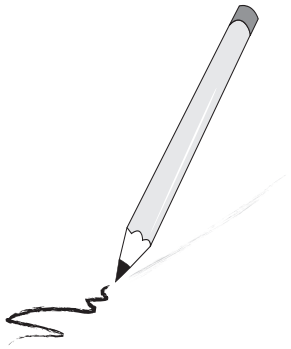
Retail Seller's Business Record

Cycle	TVs bought	VCRs bought	Unit cost	Total cost	Items sold	Unit retail price	Sales income	Gross profit	Operating costs	Net profit
1	35	35	300	21,000		375				
2										
3										

Retail Seller's Personal Finance Record

Cycle	Income	Food/enter. (20%)	Clothing (3%)	Shelter Buy/Rent	Consumer Products	Trans-portation	Insurance	Savings
1	39,500	7,900	1,185					
2								
3								

Notes:



1. Keep a written record of what item was sold to whom, for what price, and when. You can sell any combination of items; however, do not sell more than 35 each curing Cycle 1. Your records should also indicate which manufacturer you bought from and that you paid for the merchandise in full.

2. You will need consumer items for yourself; do not forget to get them *and* pay the same price you charge others.

3. Do *not* change the price in Cycle 1. Cycle 2 and Cycle 3 will provide a chance to deal with changes in supply and demand, labor costs, profit margin, and market share. Keep it simple now so that the system can operate well to start the action.

INSURANCE AGENT __

You are age 30 and have been selling insurance for 10 years. In Cycle 1 you should try to sell a normal package of insurance protection to 20 consumers. Some people need more or less insurance than others, but if you sell an average amount you will have an annual income of about $30,000 per year based on 70% of the first year's premiums. Your products are as follows:

- **Car insurance package.** For $100,000 liability, $50,000 collision, and $100,000 medical comprehensive, with a $200 deductible the cost is $1,050 per year. All cars must be insured by law.
- **Homeowner's insurance package** For $80,000 on structure; $30,000 on contents; and $20,000 on outside buildings, the annual cost is $200. Note: All mortgaged houses must be insured.
- **Life insurance policy.** For five-year term insurance of $100,000 the annual cost is $100; for whole life, $1,000. The main difference is that whole life builds up a cash value for a set premium; whereas, term policies have no cash value and have premiums which go up every five years.
- **Medical insurance.** Many people who work for small businesses or for themselves have no medical insurance, but most people who are employed by big firms have medical insurance provided by their employer. We will assume this situation is true for all who work for the house, car, and consumer goods builders, but if you have insurance and you lose your job, you would need to pay $2,000 per year for basic hospital; $1,000 per year for major medical; and $500 per year for dental—all with a $200 deductible.

Insurance Agent's Business Finance Record

Cycle	Car policies	Premium	Total sales	Home policies	Premium	Total sales	Life insurance	Premium 100/1000	Total sales	Grand total sales	Income 70% of sales
1		1050			200						
2											
3											

Insurance Agent's Personal Financial Record

Cycle	Income	Food/enter. (20%)	Clothing (3%)	Shelter Buy/Rent	Consumer Products	Trans-portation	Insurance	Savings
1	30,000	6,000	900					
2								
3								

Notes:

1. Keep a written record of who has what insurance, what they pay in premiums, and when they started the policy/policies.
2. You will also need insurance yourself; pay for it just like everyone else.
3. Do *not* change the price in Cycle 1. Cycle 2 and 3 will provide a chance to deal with changes in supply and demand, labor costs, profit margin, and market share. Keep it simple now so that the system can operate well to start the action.

ENGINEER/DESIGNER __

You are one of four engineer/designer individuals, two male and two female, who are just out of college in their first year of work. In Cycle 1 you are guaranteed a job at the car factory or the consumer product factory, at a salary of $30,000 per year. You have an income, a skill, no house, and an older car. Your chief role is to supply product demand and keep this economy moving. This function is described in the introduction, and many of your possible problems are shown in the MODEL BUDGET handout. Reread them now, carefully.

Engineer/Designer's Personal Finance Record

Cycle	Income	Food/enter. (20%)	Clothing (3%)	Shelter Buy/Rent	Consumer Products	Trans-portation	Insurance	Savings
1	30,000	6,000	900					
2								
3								

ADVERTISING/SALES __

You are one of four advertising/sales persons. Two will be male and two will be female with an average age of 25 who have been working on this job for four years. In Cycle 1 you are guaranteed a job at the car factory or consumer products factory at a salary of $25,000 per year. You have an income, a skill, no home, and an older car. Your chief role is to supply product demand and keep this economy moving. This function is described in the introduction, and many of your possible problems are shown in the MODEL BUDGET handout. Reread them now, carefully.

Advertising/Sales person's Personal Finance Record

Cycle	Income	Food/enter. (20%)	Clothing (3%)	Shelter Buy/Rent	Consumer Products	Trans-portation	Insurance	Savings
1	25,000	5,000	750					
2								
3								

MALE ASSEMBLY WORKER __

You are one of 12 on the assembly line. Six will be male and six will be female with an average age of 25 who have been working on this job for four years. In Cycle 1 you are guaranteed a job at the car factory or consumer products factory at a salary of $25,000 per year. You have an income, a skill, no home, and an older car. Your chief role is to supply product demand and keep this economy moving. This function is described in the introduction, and many of your possible problems are shown in the MODEL BUDGET handout. Reread them now, carefully.

Male Assembly Worker's Personal Finance Record

Cycle	Income	Food/enter. (20%)	Clothing (3%)	Shelter Buy/Rent	Consumer Products	Trans-portation	Insurance	Savings
1	25,000	5,000	750					
2								
3								

FEMALE ASSEMBLY WORKER __

You are one of 12 on the assembly line. Six will be male and six will be female with an average age of 25 who have been working on this job for four years. In Cycle 1 you are guaranteed a job at the car factory or consumer products factory at a salary of $25,000 per year. You have an income, a skill, no home, and an older car. Your chief role is to supply product demand and keep this economy moving. This function is described in the introduction, and many of your possible problems are shown in the MODEL BUDGET handout. Reread them now, carefully.

Female Assembly Worker's Personal Finance Record

Cycle	Income	Food/enter. (20%)	Clothing (3%)	Shelter Buy/Rent	Consumer Products	Trans-portation	Insurance	Savings
1	25,000	5,000	750					
2								
3								

CARPENTER __

There will be two carpenters—one male and one female, both age 25. In Cycle 1 you will be guaranteed a job with one of the builders at a salary of $25,000 per year. You have an income, a skill, no home, and an older car. Your chief role is to supply product demand and keep this economy moving. This function is described in the introduction, and many of your possible problems are shown in the MODEL BUDGET handout. Reread them now, carefully.

Carpenter's Personal Finance Record

Cycle	Income	Food/enter. (20%)	Clothing (3%)	Shelter Buy/Rent	Consumer Products	Trans-portation	Insurance	Savings
1	25,000	5,000	750					
2								
3								

PLUMBER __

There will be two plumbers—one male and one female, both age 25. In Cycle 1 you will be guaranteed a job with one of the builders at a salary of $25,000 per year. You have an income, a skill, no home, and an older car. Your chief role is to supply product demand and keep this economy moving. This function is described in the introduction, and many of your possible problems are shown in the MODEL BUDGET handout. Reread them now, carefully.

Plumber's Personal Finance Record

Cycle	Income	Food/enter. (20%)	Clothing (3%)	Shelter Buy/Rent	Consumer Products	Trans-portation	Insurance	Savings
1	25,000	5,000	750					
2								
3								

ELECTRICIAN __

There will be two electricians—one male and one female, both age 25. In Cycle 1 you will be guaranteed a job with one of the builders at a salary of $25,000 per year. You have an income, a skill, no home, and an older car. Your chief role is to supply product demand and keep this economy moving. This function is described in the introduction, and many of your possible problems are shown in the MODEL BUDGET handout. Reread them now, carefully.

Electrician's Personal Finance Record

Cycle	Income	Food/enter. (20%)	Clothing (3%)	Shelter Buy/Rent	Consumer Products	Trans-portation	Insurance	Savings
1	25,000	5,000	750					
2								
3								

BANKER __ - 1

You are age 50 and are now a vice-president. Your basic function is to provide mortgages to people who need to buy homes and to make personal loans through VISA cards to persons wishing to buy consumer goods. All your prices in Cycle 1 are based on this financial model:

1. Depositors have put $2,000,000 in your bank, for which you pay 2% or $40,000 per year to them.

2. You can lend out 90% of this $2,000,000 at 7% interest (10% must be kept in reserve). If you lend out all of this money, you will earn $126,000 less $40,000 for a gross income of $86,000 to the bank.

3. You mainly loan money to persons wishing to buy homes. You offer persons with good credit ratings who are buying a home for the first time a loan equal to 95% of the value of the home. For example, if the home costs $110,000, you will loan $104,500 with the buyer having to put $5,500 down.

4. Your bank is offering you a bonus to make home loans under this new buyer program. This bonus consists of half of the first year's interest paid by the buyer, or 1.5% of the amount of the loan. If the loan is for $104,500, you will earn $1,568 for each loan processed. If you can make 30 such loans in this year, you will earn $47,040, or a projected $3,920 per month.

5. In addition to your mortgage loans, you also issue VISA cards which persons can use to obtain credit to buy consumer goods. These cards enable a person to buy goods from merchants that you have approved with no money down. The persons pay you 15% of the total value of the good as interest for the privilege of having use of the article now. This interest is added to the price of the article and then the total price is divided by 12 to come up with the monthly payment. For example, person A desires to buy a TV set for $375. He/she used a VISA card for the purchase. The total price is $375 + (.15 x $375 = $56.25) = $431.25. The buyer/borrower would then pay $35.94 per month for the TV.

"... you also issue VISA cards ..."

See forms given you.

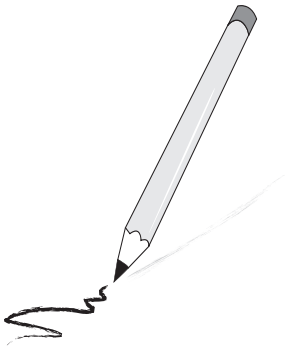
6. Finally, the merchants must also pay a fee to the bank for these VISA purchases. In this model we will set this amount at 3% of the total VISA purchases. Therefore, if a merchant sells items to customers using their VISA cards totaling $10,000 for the month, he/she must pay the bank $300 for the privilege of using the bank's credit program. (For each VISA credit card issued, you will receive a $25 bonus. This could add several hundred dollars to your salary.)

Banker's Business Record

Cycle	Money on deposit	Amount loaned	x7% int. = gross	Amt. pd. deposit	Income	Mortgage loan total	x 1.5% = bonus	VISA total	x 15% = profit	Total VISA
1	2,000,000	1,800,000	126,000	40,000	86,000					
2										
3										

Banker's Personal Finance Record

Cycle	Income	Food/enter. (20%)	Clothing (3%)	Shelter Buy/Rent	Consumer Products	Trans-portation	Insurance	Savings
1	36,000	7,200	1,080					
2								
3								



Notes:

1. Keep a written record of each mortgage: who bought the home, the price, the mortgage payment agreed to, and the date of the deal. (See MORTGAGE CONTRACT given you by your teacher.)
2. Do *not* finance more homes than are actually built (that is fraud, a criminal offense!)
3. You will need a home for yourself. You must finance it like everyone else.
4. Your records must show that all of the initial home purchase price goes to the builder. Your income will be taken from the mortgage payments from this time on.
5. Also, keep a record of all VISA card holders. In Cycle 1, you will issue these, free of charge, to persons wanting them. But in Cycle 2 and Cycle 3, you may decide to charge a yearly fee, usually around $25, to cover your administrative costs.
6. The retail dealers will give you a list of purchases made with your VISA cards at their stores. Note these purchases by the names of the VISA cardholders. Then, pay the merchants the total amount less the 3% fee you charge merchants taking your card.
7. Do *not* change your interest rates or fees in Cycle 1. Cycle 2 and Cycle 3 will provide a chance to deal with changes in the supply and demand, labor costs, profit margin, and market share. Keep it simple now so that the system can operate well to start the action.

Home Loan Form

Home Builder's name _____ Date _____

Home Description or # _____

Price _____ Down payment _____

Sold by _____

Mortgage provided by _____

Cash received _____

Bank Form

Banker's name _____ Date _____

Property Description _____

Interest rate _____% Down payment _____

Purchased by _____

Annual mortgage payment:

Principal _____ Interest _____ Total _____

Insurance Form

Insurance Agent's name _____ Date _____

Item insured _____

Person insured _____

Kind of policy _____

Annual premium _____

Cash received _____

SHORT FORMS—Car builder, car purchase, retail seller

Car Builder Form

Car Builder's name _____ Date _____

Car Description _____

Units sold _____ Unit Price _____ Total sales _____

Dealer sold to _____

Car Purchase Form

Car Dealer's name _____ Date _____

Car Description _____

Purchased by _____

Annual interest rate _____% Down payment _____

Principal _____x Interest _____ x Time _____ = _____

Monthly car payment: Total _____ ÷ _____ months = _____

Retail Seller Form

Retail Seller's name _____ Date _____

Item sold _____

Buyer _____

Price _____ Cash received _____

Amt. financed (VISA) _____ ÷ no. of months _____ =_____

Monthly payment _____

Consumer Product Form

Producer's name _____ Date _____

Item(s) _____

_____

Units sold _____ Unit price _____ = Total sales_____

Dealer sold to _____

Consumer Product Form

Producer's name _____ Date _____

Item(s) _____

_____

Units sold _____ Unit price _____ = Total sales_____

Dealer sold to _____

Consumer Product Form

Producer's name _____ Date _____

Item(s) _____

_____

Units sold _____ Unit price _____ = Total sales_____

Dealer sold to _____

MODEL BUDGET

Item, activity or service	Typical individual cost	Your cost Cycle ___	Typical couple cost	Your cost Cycle ___	Additional explanations
Groceries	$4,000		$5,200		Food & household items
Restaurants	$600		$1,200		2 meals per month + pizza or burgers
Clothing	$250		$500		New clothing
Cleaning	$150		$300		Dry cleaning and laundry
Mortgage	$9,600		$9,600		See banker description for numbers
Utilities	$2,000		$2,000		Heat, light, phone, sewer, water, cable
Insurance	$500		$500		See insurance description for numbers
Taxes	$1,000		$1,000		Property tax only
Upkeep	$1,000		$1,000		Paint, repair, renovation
Car loan	$6,600		$13,200		See car dealer description for numbers
Car ins.	$560		$		See insurance description for numbers
Car upkeep	$1,000		$		Gas, oil, repairs, tolls at 20 cents a mile
Medical ins.	$1,000		$		If you have a job, your employer pays*
Doctor	$1,000		$		Based on 80%/20% type policy
Dental	$1,000		$		Includes hospital
Fed. taxes	$3,000		$6,000		Based on 10% of $30,000
State taxes	$600		$		Based on 2% of $30,000
Local taxes	$500		$		Est. of income, per capita, occupation
Vacations	$1,000		$1,500		Pure estimate
Holidays	$300		$500		Pure estimate
Movies, etc.	$200		$400		Pure estimate
Life insur.	$600		$1,200		Based on term average cost**
Misc.	$500		$1,000		Estimate only
Savings	$		$		
Other	$1,000		$		
Total	$37,960		$45,100		

* If not, or if you lose job, you pay $350 per month. This is for 80/20 type policy (policy pays 80%; you pay 20%).
** You can choose term (inexpensive) or whole life (expensive) coverage.

BUDGET NOTES FOR ALL

1. These are model budgets for individuals (column 1) or couples (column 2). Use them as a starting point. You may get a pay raise later, you may get a bargain on a house, a car, or a television (or you may not!)

2. The numbers are based on *projected* incomes of $80,000 per year for the home builder, $36,000 for the banker, $35,000 for the consumer product builder, $30,000 for the car builder and car dealer, $39,500 for the retail store owner, insurance salesman, and engineers and designers. *All* other occupations earn $25,000 per year.

3. Problems! If you have a low-paying job and stay single in this economy, you have a problem. You cannot have the "full life." You *must* consider some alternatives!

   - ***Alternative 1.*** Do not buy a house. Rent an apartment or condo for $500 a month (it won't be very nice and you will build up zero equity). This will total $6,000 per year plus renter's insurance of $200. You will not pay mortgage of $9,600, property tax of $1,000, upkeep of $1,000. This is a savings of $5,400 per year. It will help balance the budget, but it is *not the good life.*

   - ***Alternative 2.*** Do not buy a new car. You may continue to drive your old clunker for Cycle 1 only; it is about to fail. This will save you car payments, but your old gas hog will cost more to operate and much more to repair. You will also have cab or bus costs on breakdown days. You could drop the $6,600 in payments, but add $2,000 to the operation line. A net savings of $4,600, but not the good life. If you do not get a car by Cycle 2 you will be totally tied to public transportation, if it is even available where you live.

   - ***Alternative 3.*** Do not go on vacation, skip the movies, and ignore holidays, birthdays, and gifts in general. You could save another $1,500.

If you take all alternatives—live in your apartment, hope your old car lasts, take no vacations, and have no holidays—you can cut your expenses by $11,500. You can now buy some extras, but you will not be building any equity.

Whatever choice you make, you *must* maintain a written budget and a written account of all major buying. What did you buy, when, from whom, at what price, and what payment deal*. This is crucial!*

CHECKBOOK MASTER

Date _____

Check # _____

Balance _____

Check amt. _____

New Balance _____

Deposit _____

New Balance _____

_____ Number _____

_____

_____ 20___

_____

Pay to _____ $ _____

_____ dollars

ROMEO SAVINGS
2371 Juliet Boulevard
El Cajon, CA 92040

Memo _____ _____

⑈245815078⑈ [ ]

Date _____

Check # _____

Balance _____

Check amt. _____

New Balance _____

Deposit _____

New Balance _____

_____ Number _____

_____

_____ 20___

_____

Pay to _____ $ _____

_____ dollars

ROMEO SAVINGS
2371 Juliet Boulevard
El Cajon, CA 92040

Memo _____ _____

⑈245815078⑈ [ ]

Date _____

Check # _____

Balance _____

Check amt. _____

New Balance _____

Deposit _____

New Balance _____

_____ Number _____

_____

_____ 20___

_____

Pay to _____ $ _____

_____ dollars

ROMEO SAVINGS
2371 Juliet Boulevard
El Cajon, CA 92040

Memo _____ _____

⑈245815078⑈ [ ]

PAYCHECK MASTER

Date _____
Gross _____
FICA _____
Med. _____
FIT _____
SIT _____
Other _____
Net _____
Check # _____

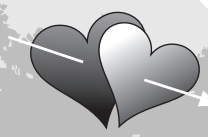
_____ Number _____

_____ _____ 20___

_____

Pay to _____ $ _____

_____ dollars



ROMEO SAVINGS
2371 Juliet Boulevard
El Cajon, CA 92040

Memo _____ _____

⑆245815078⑆ [ ]

Date _____
Gross _____
FICA _____
Med. _____
FIT _____
SIT _____
Other _____
Net _____
Check # _____

_____ Number _____

_____ _____ 20___

_____

Pay to _____ $ _____

_____ dollars

ROMEO SAVINGS
2371 Juliet Boulevard
El Cajon, CA 92040

Memo _____ _____

⑆245815078⑆ [ ]

Date _____
Gross _____
FICA _____
Med. _____
FIT _____
SIT _____
Other _____
Net _____
Check # _____

_____ Number _____

_____ _____ 20___

_____

Pay to _____ $ _____

_____ dollars

ROMEO SAVINGS
2371 Juliet Boulevard
El Cajon, CA 92040

Memo _____ _____

⑆245815078⑆ [ ]

CAR PURCHASE CONTRACT

(Modified: Not all conditions given)

Seller: _____ Buyer: _____

Address: _____ Address: _____

City: _____ City: _____

State: _____ Zip: _____ State: _____ Zip: _____

Vehicle Description:

Stock number: _____ Year: _____ Cylinders: _____

Make: _____ Type: _____ Vehicle ID # (VIN) _____

License # _____ Odometer reading _____

Itemization of the amount financed

A. Cash price	$_____	
B. Accessories	$_____	
C. Documents preparation	$_____	
D. Smog fee paid to seller	$_____	
E. Sales tax	$_____	
F. Service contract (optional)	$_____	
Total cash price		$_____
Amount paid to public officials		
A. License	$_____	
B. Certificate of title	$_____	
C. Registration	$_____	
Total official fees		$_____
Amount paid to insurance company		$_____
Smog fee paid to state		$_____
Total		$_____
Trade-in allowance	$_____	
Remaining cash down payment	$_____	
Total down payment		$_____
Amount financed		$_____

Annual %age Rate	**Finance Charge**	**Amount Financed**	**Total of Payments**	**Total Sale Price**
The cost of your credit as a yearly rate. ____%	The dollar amount the credit will cost you. $ _____	The amount of credit provided to you or on your behalf. $ _____	The amount you will have paid after you have made all payments as scheduled. $ _____	The total cost of your purchase on credit, including your down payment of $ _____ $ _____

Your payment schedule will be:

Number of payments	Amount of payments:	When payments are due:
One payment of		
One payment of		
36 payments		__ Wkly. __ Semi Mthly. __ Mthly. Payment beginning _____
One final payment		

Security: You are giving a security interest in the goods or property being purchased.
Late charges: If any payment is more than 10 days late, you will be charged 5% of the outstanding balance.
Prepayment: If you pay early, you may be entitled to a refund of part of the finance charge.
See your purchase order documents for any additional information about nonpayment, default, any required prepayment in full before the scheduled date and prepayment refunds.

MORTGAGE CONTRACT

(Modified: Shows typical costs only; not conditions)

1. Contract sales price:		$ _____
2. Deposit paid by borrower:		$ _____
3. Down payment:		$ _____
4. Amount to be financed:		$ _____
5. Closing costs to borrower:		
a. Points (loan origination fee):	$ _____	
b. Bank fees:	$ _____	
c. Title insurance:	$ _____	
d. Property insurance (1 yr. in advance):	$ _____	
e. Taxes (1 yr. in advance):	$ _____	
6. Closing costs total:		$ _____
7. Total costs to borrower:		
a. Down payment:	$ _____	
b. Closing costs:	$ _____	
Total		$ _____

MONTHLY PAYMENT CHART

Monthly payment is determined by:	Example	Your costs
1. Amount financed:	$95,000	$ _____
2. Number of monthly loan payments:	360	_____
3. Interest rate:	7% (aver. 1993)	_____
4. Monthly payment*:	$665	$ _____
5. Total mortgage payments:	$239,509	$ _____
6. Total interest paid:	$139,511	$ _____
7. Total income tax deduction:	<$41,853>	$ _____
8. Gross cost of house:	$197,655	$ _____
Other considerations:		
1. Value of house in 30 yrs. at a 3% per year inflation rate ($100k x .03 x 30 yrs.):	$190,000**	$ _____
2. Net cost of house:	$7,655	$ _____
3. Plus $1,000 per year maintenance:	$30,000	$ _____
4. Net cost of living in house for 30 years:	$37,655	$ _____

Notes:

* An "Amortization Table" is used to determine monthly amount. "Rounding" causes some small variation in totals.

** House value increases vary tremendously due to neighborhood changes, economic changes, and demographic (people moving) changes. But, historically, for most areas, example given is conservative.

Car Insurance Form

INTEGRITY Insurance Company

Car: _____

Name _____ Address _____ City + state _____ Zip _____

Coverages	Premium	Description	Limits of Liability	
A	171	Bodily injury/Property Damage Liability	Each person Each accident Property damage	$100,000 $300,000 $300,000
D	44	Medical Payments	Each person	$100,000
B 200	104	$200 deductive comprehensive		
D 500	166	$500 deductive collision		
H	4	Emergency road service		
U	40	Uninsured motor vehicle		
Total	$529	6 month policy period	_____ month/year to _____ month/year	

Life Insurance Form

INTEGRITY Insurance Company

Name _____ Address _____ City + state _____ Zip _____

1 Face amount: $100,000

2 Annual premium: W. L. $1,000 Term: $100

3 Face amount:

Year	W. L. Cash Value	Term Cash Value
1	0	0
2	$ 4,000	0
3	$ 9,000	0
4	$14,000	0
5	$19,000	0

Based on good health, ages 16 to 18

Health Insurance Form

INTEGRITY Insurance Company

Name _____ Address _____ City + state _____ Zip _____

1 List age: _____ weight: _____ height: _____

2 List any previous major illnesses: _____

_____

3 List any medicine you are now taking: _____

_____

4 Summarize any other health problem: _____

_____

VISA APPLICATION FORM

ROMEO SAVINGS
We love to serve you!
VISA®

Name _____ Address _____ City _____ State _____ Zip _____

Birth Date _____ Social Security # _____ License # _____

Employer _____ Occupation _____ How long? _____ Gross Salary per mo. _____

ASSETS	Total Value	LIABILITIES	Total Value	Mo. pay
House: _____ address		House Mortgage		
Automobile(s): 1 _____ year make 2 _____ year make		Automobile(s): 1 _____ year make 2 _____ year make		
Bank Balance 1 Checking 2 Savings Other Assets (List): 1 2 3 4		Bank Loans 1 2 Other debts (include credit cards) 1 2 3 4		
Total Assets:		Total Liabilities:		

I attest that this is a true and accurate statement of my finances.

Signature _____ Date _____

Total Assets: _____

Total Liabilities: _____

Net Worth: _____

VISA CARD

After bank has filled out information, cut out card for your use.

Conditions of issue:

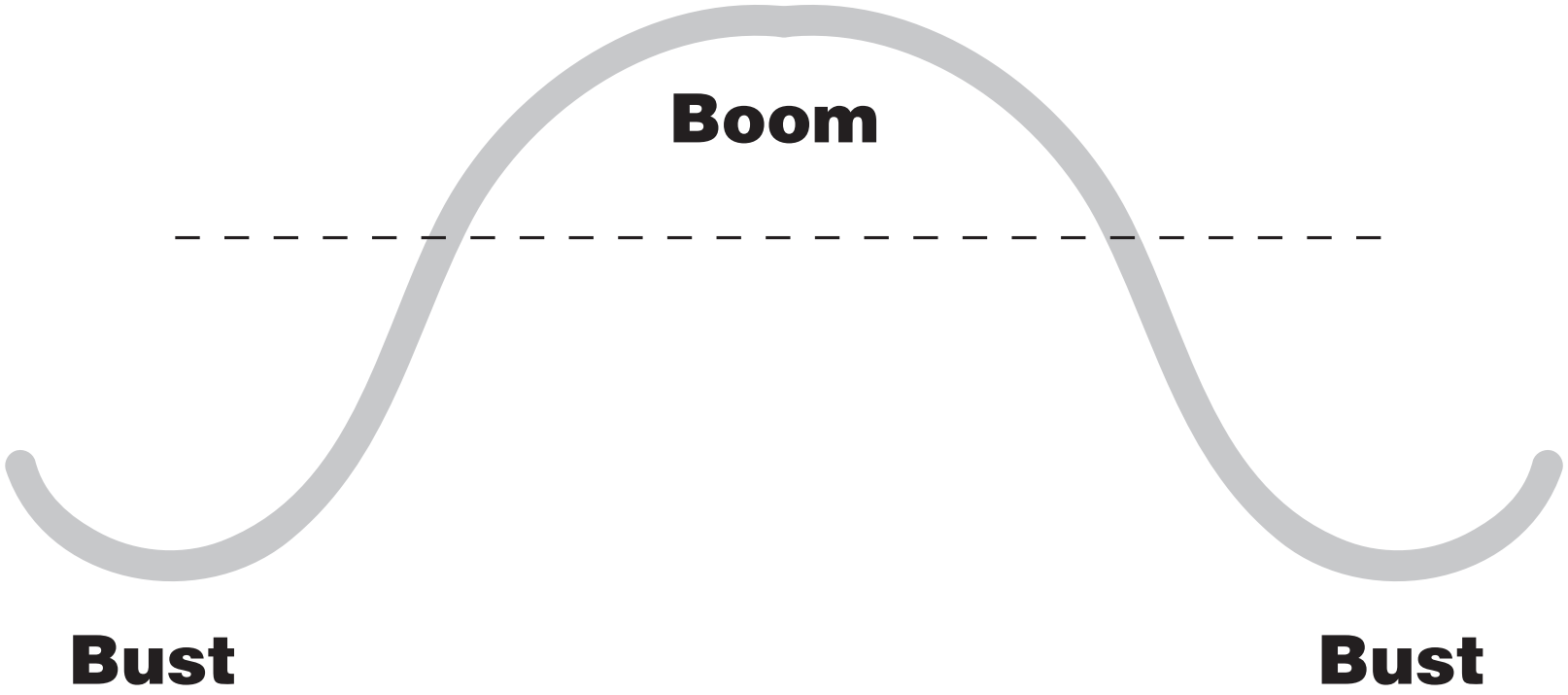
1. Annual fee is $25.

2. An interest charge of 1.5% per month (18% per year) will be charged on any unpaid balance that is outstanding for more than 25 days.

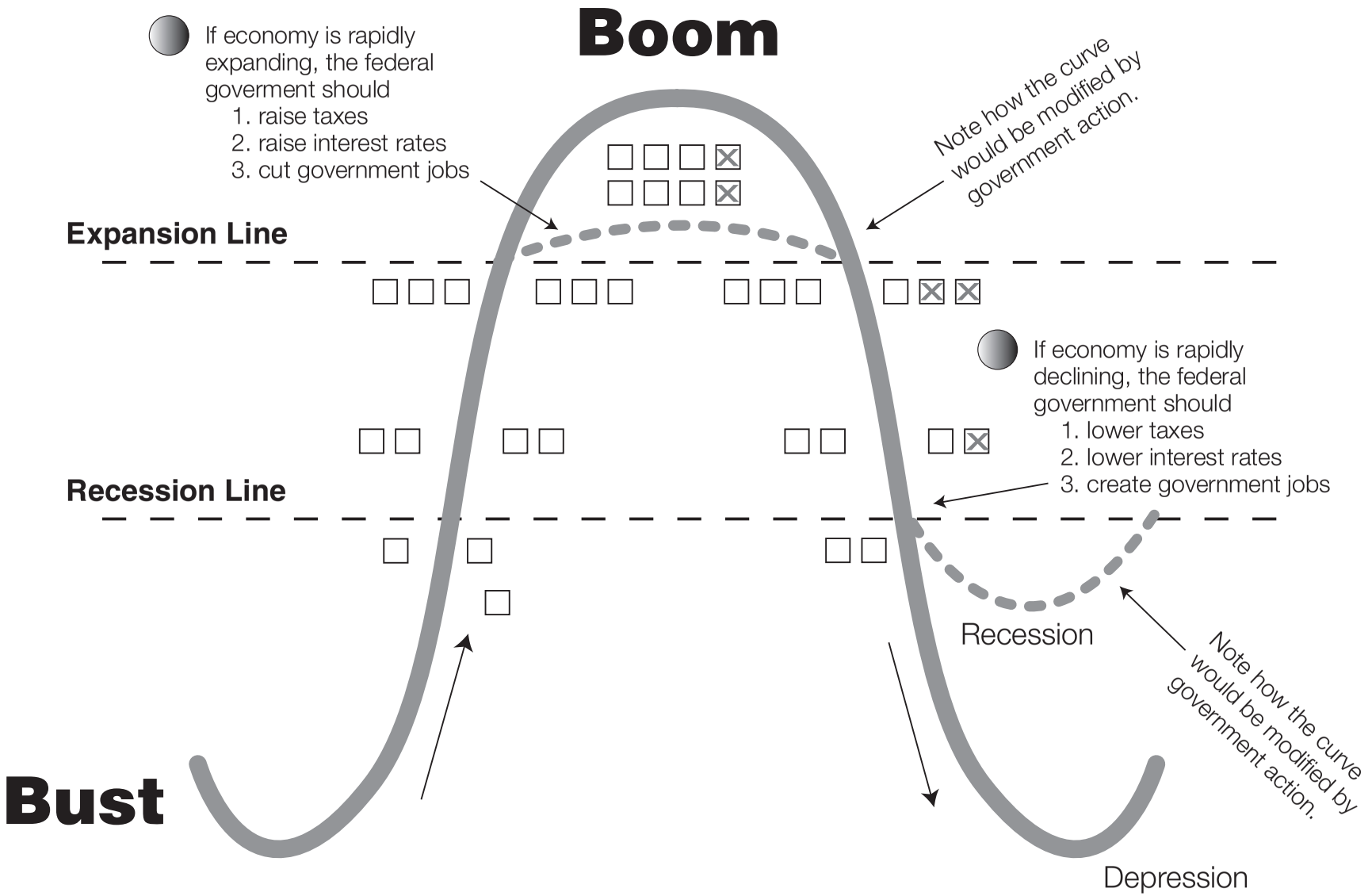
3. A monthly payment of 5% of the unpaid balance (if any) plus interest must be paid by the 5th of each month. If this payment is not made by the 10th, a late charge of $15 will be added.

4. If the payment is not made within 30 days of the due date, the entire balance becomes due.

5. Any attorney fees associated with the collection of unpaid balances will be paid by the card holder.



BASIC BUSINESS CYCLE
(Overlay Master)



KEYNESIAN SUPPLY/DEMAND CURVE
(Overlay Master)

Business Organization

INTRODUCTION

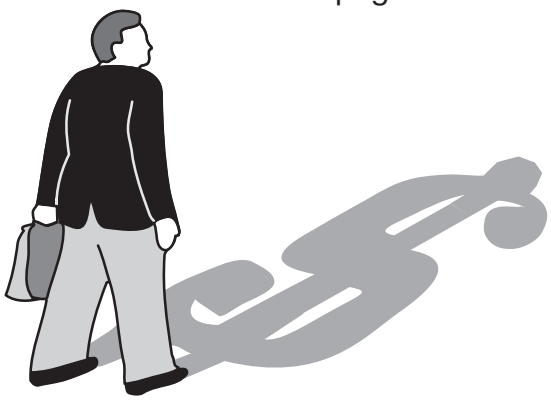
In Unit 1, all of your activity was built around the individual and his/her need for home, car, job, etc. Since no thought was given to the structure of the businesses in that unit, the focus of Unit 2 will be on business organization. Students will be able to simulate some of the decision-making process that is a part of our three basic business forms: individual proprietorship, partnerships, and corporation.

Goals

At the conclusion of the action cycles, your students should be able to do the following:

- understand the basic terminology of individual proprietorships, partnerships, and corporations;
- carry out, in simulated format, the basic decision-making functions of a business organization;
- appreciate the absolute need for any business organization to cover its costs;
- understand the crucial role of advertising in the success of any large business;
- understand that there is more than one correct price, depending on whether you want maximum unit profit or market share;
- discover the less obvious choices to be made in business—*(For example, is an illiterate worker really cheap labor?)*;
- consider the various ways to raise capital for a business, such as saving, borrowing, sale of stock;
- appreciate the complication created by geography, transportation, and open or restrictive government policy; and
- become aware of the complexity of making all of the above decisions into a simple, correct business plan.

To accomplish all of this, first you will need to carry out the teacher preparation found on the next two pages. Then, you should study the Unit Time Chart on page 4 and the Daily Directions that begin on page 5.



TEACHER PREPARATION - 1

T T

TEACHING **T**IP

Do not worry about complete student understanding yet, since the simulation activity will provide you with ample opportunity to reinforce and reteach these concepts.

Before beginning this activity, prepare your class by introducing the following terminology and basic concepts of our forms of business structure.

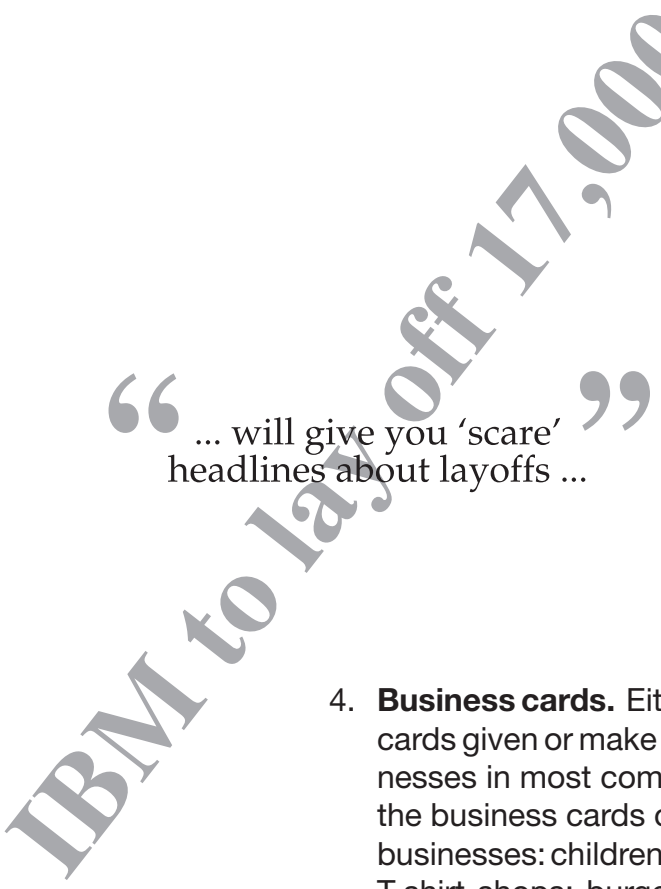
- **Fixed and variable costs** What are they and how do they affect your business decisions?
- **Economy of scale** What is it and what are its limits?
- **Liability** Why is it a problem and why do some forms of organization (corporation) have an advantage?
- **Immortality** What is the great advantage of a corporation in this area?
- **Pure competition** What is it? Does it exist? Is it good?
- **Pure monopoly** What is it? Does it exist? Is it bad?
- **Oligopoly competition** What is it? Is it the most common situation today?
- **Marginal** The term as it is applied to cost, productivity, and profit.
- **Diminishing return** What is it and how does it affect business decisions?
- **Types of business organizations** What are they? What are the chief differences between them?

Setup directions

1. **Duplication.** Duplicate the following in the quantities shown in parentheses.
   - INDIVIDUAL PROPRIETOR/PARTNERSHIP WORKSHEET (24: two for each team)
   - CORPORATE DECISION SHEET (24: two for each team)
   - CORPORATE SCORESHEET (180)
   - CORPORATE BALANCE SHEET (class set)
   - CORPORATE PROFIT/LOSS SHEET (class set)
   - BUSINESS CARDS (one per business owner)
   - SIGNAL PUBLISHERS SHARE CERTIFICATE (one per business owner)

2. **Basic instructional material.** A good readable textbook should provide the needed background knowledge for proprietorships, partnerships, and corporations, and the advantages and disadvantages of each. A sample end-of-the-fiscal-year report is given for the Signal Publishing Company; it should help clarify for students all the aspects of a corporation. There is probably no easily available similar source of information for the single proprietorship or partnership business although one of your students might be able to get his parents to allow you to use their business balance sheet as a model.

3. **Awareness material.** Most newspapers of any size have a business section which can be useful. Also a number of good business magazines exist. (Check with your librarian for copies of *Inc., Fortune,* etc.) Most popular magazines and newspapers will give you "scare" headlines about layoffs and record losses by big corporations. This is one-sided and distorted, but it could provide a reason to care about the survival of corporations. Local press will often cover the success stories of unique local businesses, but ignore the great mass of "ordinary" small business. Again, this material would be distorted, but it would attract some interest in becoming an individual owner and making a dream come true. Post the sensational stories on a bulletin board to get attention; however, your class will have to deal with the rugged reality that starting and keeping a small business going requires capital (i.e., money), a good product or service that people want, and hard work with a measure of luck thrown in.



"... will give you 'scare' headlines about layoffs ..."

4. **Business cards.** Either duplicate and cut up the sample business cards given or make up your own that represent six common businesses in most communities, one per business owner. To match the business cards on pages 16-17, consider using these paired businesses: children's toy and stuffed animals shops; pizza shops; T-shirt shops; burger and hot dog shops; bike shops; painting companies. Choose businesses that are simple, can be started by an individual or two, can be "costed" without endless research, and would make sense to your students. It might also be helpful if you looked over some of the *major* cost items for each business and did some informal cost research. Just what would a pizza oven cost? a commercial lawn mower? a stretch limo? Some of these major cost items would be very easy to find by either asking an owner in the community or by using the business pages in the phone book of a large city. Smaller items are more common knowledge.

5. **Stocks.** You should also make similar preparation for some of the basic corporate items in Cycle 2. You will need corporate shares of stock for each corporation owner.

UNIT TIME CHART

This chart is intended as an example; alter as desired.

Organization Divide class into teams Teams pick business Arrange classroom Hand out INDIVIDUAL PROPRIETOR/ PARTNERSHIP WORKSHEET Answer initial questions 1	Cycle 1 begins Teams meet, discuss proposals, and decide on a product Explain about advertising Circulate around classroom—advise, coach 2	Teams present proposals Each team answers questions 3	Continue Day 3 Conduct critique of Cycle 1 Class votes on team winner 4	Cycle 2 begins Introduce students to corporate level decision-making Form new teams Teams pick product Hand out CORPORATE DECISION SHEET Answer questions 5
Hand out CORPORATE SCORESHEET Teams explain operations Tally vote Conduct critique 6	Invite speakers on corporations, and individual proprietorships Extra-credit projects explained 7	Optional testing 8		

DAILY DIRECTIONS - 1

Day 1

1. Divide the class into 12 teams of two to three students each. Have one member of each team pull a business out of a hat. Use our suggestions or your choice, but six businesses is a good number. That will give you 12 groups with two teams in competition in each business. This one-to-one competition is a key item.

2. Arrange the class so that similar product teams are not next to each other and quickly review the goals. They will act as proprietors or partners and establish a local business in the area they have drawn. The class will judge who does the best job in each business.

3. Hand out the INDIVIDUAL PROPRIETOR/PARTNERSHIP WORKSHEET and allow time to read and study. Answer any initial questions now. Explain that individual proprietor businesses and partnerships follow the same practices in the small businesses the students are engaged in. There are, of course, many variations that need not be discussed at this point.

Day 2

1. Teams now meet to create their product and determine the final number and price as instructed in the handout. Your role is to help in the estimation of *major* cost items. Do *not* supply every cost. There is no problem if students share information as long as they are doing the job. You may have to add cost items to the list. The list is the basic guide, not the final word. You/they may have to do some creative guessing; none of this will hurt the desired outcome.

2. Remind them to be complete in their thinking. Don't just say, "We will spend x dollars to advertise"; explain how they would advertise. After all, their competitors will, and they should not wish to look stupid.

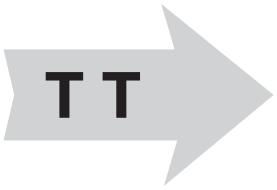
3. Tell teams they must pay at least the federal minimum wage as hourly payment to workers. When they present their product to the class and have a super low price, it *cannot* be based entirely on minimum wages for everyone. No one with any skill will work long for that wage, and the class will see it immediately.

4. Circulate, advise, coach, help until you have your teams ready to present the products, number, and prices.

5. Tell the partners to use one of the worksheets for preliminary computations and the other as the final business plan which you will collect the next hour.

Days 3-4

1. Have each pair of teams put their key numbers on the board; then, have them explain items that need to be explained, and defend their final price and number as being the "correct" ones.



TEACHING **T**IP

This debriefing helps students focus on what they have learned.

2. Act as moderator of a full class critique. Who was most complete? most accurate? most realistic? most creative? Allow a limited discussion and then choose the best team by class vote. A tie is acceptable.

3. When all sets of teams have presented, you might want to go for a choice of overall winner if it can be done in a positive way and will help the class effort level.

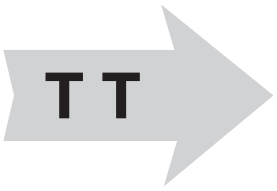
4. You must then step in to change the direction from "who" is winner to "why." What were the reasons for one team's better presentation? What can be learned from it? What was learned about partnerships—the problems, the risks, and the rewards? When this is complete, you are ready to go to Cycle 2.

Day 5

1. Prepare your students for a shift to the vertical line of corporate decision making wherein a decision made at the top level is passed down to lower levels as compared with partnerships wherein all partners generally share in the decision-making. You will not deal with specific numbers and dollars, as that would be impossible in the limited time available in a general economics class. The emphasis should be on how the corporate structure makes broad general choices and on developing awareness of the multiple risks, variables, and rewards inherent in corporate life.

2. Acquire sources, such as good business magazines, to give general background information on corporations. A good up-to-date encyclopedia should be available to the class with access to a computer on-line information source being even better. Always remember that the decision making, the logic, and the follow-up critique is the key to student understanding, not learning the exact statistics.

3. Pick five to six students to lead in forming six new teams. Try not to put the same people together as they were in Cycle 1. Then pull products out of a hat; two teams will each have the same product. The following are examples of things that will work: a manufacturer of athletic apparel; a computer builder; a pickup truck builder, a frozen food (use a specific item) producer, a health care product maker (pick a specific item—disposable diapers, cold medicine), an airplane maker, a shoe company. Add to the list with other ideas, but limit your final choice to three, two corporations per product.



4. Hand out the CORPORATE DECISION SHEET. Answer any questions and set teams to work. Remember to separate teams of like products. Allow enough time to complete the decision task Reteach concepts introduced earlier.

TEACHING **T**IP

Moving the entire class to the library or computer center might be a good idea for one class period.

Day 6

1. Hand out CORPORATE SCORESHEET. Have each pair of producers present their proposals. Allow time for each team to explain its operations and rationale for its decisions. Then let the rest of the class tally score and "vote."

2. Tally the votes but do not stress winners or losers; go directly to serious critique and analysis. Why did some proposals convince the class that they had the "better way"? What are the lessons here? How does this compare with or add to or conflict with the textbook explanations? Was it a learning experience? How could the simulation be made better given the time constraints?

Day 7

1. Bring in an outside speaker who represents a local corporation. If this is not possible due to your location, show a good film on a specific corporation—many have them available for the asking. No other unit in this notebook is more of a natural for the use of outside speakers in the classroom. Large corporations are often quite willing and anxious to send people into schools to give a positive impression of big business. They are anxious to combat the stereotype of the greedy, heartless multinational monster. Of course, your students may get more public relations than hard economic facts, but brief them to ask some tough questions of the presenter.

2. As an added attraction, have a local individual proprietor come in. They are usually very proud of their accomplishments and often are examples of the "American Dream" at work. They can be great sources of inside information about this basic business form; no textbook will equal them. The only drawback is that your best people are often so busy making their business prosper that they do not feel they can spare the time for your class; or, if they do come in, they have a tendency to talk and talk. Also, this kind of speaker might be better used between Cycle 1 and Cycle 2.

> "... examples of the American Dream at work ..."

3. Consider the following research projects for extra credit:
   - ***Researching a specific small business.*** A student could use Cycle 1 projects as a model for a research project based on a kind of business that was not used in class but is of primary interest to the student. This could be step 1, leading to a long-term personal goal. Cycle 1 activities pointed the way to go in the search for information.
   - ***Researching why small businesses often fail.*** If owning your own small business is part of the "American Dream," then why do so many small businesses fail each year? A project on risks, errors, unplanned problems, bad location, partner conflict, etc., could be valuable.
   - ***Researching by surveying.*** Businesspersons who are not available to come to the classroom will often take time at their business to answer questions and be the subject of a project. It is also the chance for a student to understand the "real" business world. The student should work with you on refining his/her questions so as to not take up too much of a small businessperson's time.
   - ***Researching by doing comparisons.*** In a single industry with a similar product, why do some fail and some succeed? Why is one computer company a leader and another in trouble? Why is one car manufacturer expanding and another contracting? Use the corporate model from Cycle 2 and do a comparison paper. Direct students to business magazines, such as *Fortune,* to find articles making such analyses.

Day 8 (Optional)

1. This entire activity is intended to be just that—an activity. Formal testing should take place in a traditional, textbook fashion. If an evaluation in written form is a must, keep it simple and use the terms in this unit's Teacher Preparation section as the basis for the test.

INDIVIDUAL PROPRIETOR/PARTNERSHIP WORKSHEET

Congratulations, you have just been selected to go into business with one or more of your classmates. It may seem to be a very simple task, but the creation of a very basic business still will require you to make many decisions.

Directions:

1. Use the fixed or capital cost items, the A list, to determine what basic things your business will need and must pay for before you can sell anything. Note: All teams may not need every item on the list, or you may have to add unique items.
2. Use your best estimate of the total cost of these items to determine your starting capital needs. You will need to sign a note with a bank to borrow 80% of this total for five years at 10% interest. Thus, you must pay back 1/60th of the loan plus interest each month. Make a note of this at B.
3. Go to the operating cost per month, C, and estimate them for one month. Note that at D.
4. This step is the most difficult; you may have to try several times before you get a reasonable result. You must add B and D for a cost total. You must then find a reasonable number of items or units of service that you can sell and make a profit (and do it in a *human* work month). For example, if the B and D costs for the pizza maker are $1,000 per month and he/she offers to sell 10 pizzas to the public, he/she would have to sell them for $100 each and still would have *no profit.* Ten is obviously not your best unit number! When you have achieved a number that will cover your costs, give you some profit, is within your ability in time and effort, and will get customers, you are in business. Use the space provided to note the number and unit price.
5. When your team has completed this work, pick a spokesperson for your team to present your product and price to the class. You will be in direct competition with the other team in selling your product.

A: Fixed or capital costs		B: Capital cost per month		
Bldg./Shop	$_____		$_____	Use a calculator to find out how many items at what price will mean that your business is workable and profitable.
Machinery	$_____	C: Operating cost per month		
Vehicles	$_____	Raw materials		
Tools	$_____	_____	$_____	
Uniforms	$_____	_____	$_____	Number _____
Insurance	$_____	_____	$_____	
License(s)	$_____	Elect. &/or fuel	$_____	Price each _____
Other	$_____		$_____	
Other	$_____	Wages	$_____	
Total	$_____	Advertising	$_____	
x .80	$_____			
Loan needed	$_____	D: Total operating	$_____	
x .10	$_____			
x 5	$_____	Total cost = B + D	$_____	
Total loan	$_____			
÷ 60 = mo. pmt.	$_____			

Corporation

Place the name of your corporation in the above box.

Congratulations, you are now an officer of this corporation. You will have many choices to make later, but these items are equal for all, since we will assume you will be able to raise whatever "start-up" capital you will need. (You will have to decide what method to use for raising this capital, however.)

1. Your first task, acting as the board of directors (majority owners) of the corporation, is to devise a corporate organization chart, using the model as a guide. Then appoint a president, two vice-presidents, and two or three division heads. Although all will participate in discussing various decisions to be made, only the president will make the final decision. Hence, your choice of president is critical for the corporation's success.

2. You will run a United States corporation.

3. The model or reference factory location is in St. Louis, Missouri. The model corporation is located in a 10-year-old building, pays federal taxes, pays prevailing insurance rates, pays normal U.S. wages, is built on improved land (roads-railroad-sewer-water-power available), and uses skilled labor. Your location and condition must be compared to this situation.

4. Your headquarters must be in the United States, but your factory can be anywhere in the world. (How important is "made in the USA" anyhow?)

5. You will sell your product in the United States only.

CORPORATE DECISION SHEET - 2

6. Organize your group by dividing up the tasks below; then decide the following:

   a. Where your factory will be built _____
   Consider all of these costs before you make your choice. (Remember, geography will have an effect on all of the following items.)
   - labor cost (Will the plant use sophisticated machines only skilled workers can run—or simple methods requiring unskilled manual labor?)
   - construction cost (Will the product emphasize style vs. utility?)
   - raw material availability (How close is the source or sources?)
   - transportation (How are you going to distribute the final product?)
   - energy (What type of energy will the plant use? Environment vs. cost)
   - local government aid (What will you ask for?)

   (Note: When the entire class convenes to critique your choice, they may want to know why you did what you did.)

   b. Will you target your product for the high price luxury, medium price, or bargain market? _____

   Be ready to defend your choice, taking into account that luxury items cost twice as much to build, but can be marked up higher. This is basically a choice of whether you can make more money selling less for more, or more for less. For example, ask yourself why did Henry Ford decide to sell Model T automobiles at a 3% profit when he could have sold more luxurious models at a 20% profit?

   c. How will you advertise your product? _____
   - Will you stress television, radio, print, or some other media? _____
     Be ready to show why it is the best way for your product.
   - Will you use testimonials by famous people? Who? _____
   - Will you use any gimmicks, such as coupons, 2 for 1 deals, rebates, discounts, low-interest rates on time sales, etc.? _____

   d. How much will you pay your chief executive officer (in your case, your president)? high ($1,000,000), medium ($500,000), or low ($250,000)? _____
   (**Note:** This decision can have a big effect on the "image" of your

corporation; but it can also affect your shareholders' attitude toward the company. For example, what will happen to your corporation image if your shareholders "dump" their shares on the market? Will this affect your product sales? Why? or Why not?)

e. You will need to raise capital to start your corporation and, therefore, have to make these decisions:
   - Will you sell more stock and thereby dilute your current power as the board of directors?
   - Will you sell bonds and thereby mortgage your future profits (bond holders are paid first out of profits)?
   - Will you borrow from banks and thereby give up some control of your business as well as incur debt? (Banks do not make big loans without demanding to be involved in the corporation's decision-making.)

7. To make this mass of decisions, your president will chair a meeting in which you will have an opportunity to express your opinion. He/she will then make the final decision.

(**Note:** Your teacher can help you find sources such as encyclopedias that can help you determine where the high-cost and low-cost areas are, where your needed raw materials are, who controls the energy sources your company will need, how stable some nations are or are not, and if there are distance problems. Take your time and be ready to show the class that you can build in the best spot, come in at the best price, and promote your product in the best way. In other words, show you can be a successful corporation!)

CORPORATE SCORESHEET

Directions:

After you have heard the presentation by the two corporate teams involved with the _____ (product), rank them using a five-level score: A = Excellent, B = Good, C = Fair, D = Poor, F = Failure. Use their brand name or the leader's name for each one. (You may evaluate your competitor, also, though your score will not count.)

	1	2
1. **Geography:** How good a job did they do in picking the best location for their factory?	____	____
2. **Labor:** How did they do in convincing you that they had the best best combination of labor skill and labor cost?	____	____
3. **Transportation:** Was their location choice a good one for transport cost advantage?	____	____
4. **Price:** Did they match price goal to product for success?	____	____
5. **C.E.O.:** Do they have a good executive pay policy in reference to his/her ability?	____	____
6. **Advertising:** Did the advertising match the product and the market?	____	____
7. **Capital:** Did they raise money in the most efficient way?	____	____

I would buy the product of

_____

I would buy the stocks or bonds of

_____

Sign your name: _____

CORPORATE BALANCE SHEET

SIGNAL PUBLISHERS, INC.
BALANCE SHEET
FOR THE PERIOD ENDING October 31, 1993

ASSETS

Current Assets		
Petty Cash	1,200.00	
Cash in Bank	28,134.41	
Cash in Money Market	75,140.27	
Accounts Receivable	154,462.50	
Accounts Receivable, Employee loan	15,000.00	
Inventory	51,274.65	
Prepaid Franchise Tax	991.00	
Prepaid Federal Corp. Tax	1,775.00	
Total Current Assets		327,977.83
Fixed Assets		
Capitalized Leases	10,131.00	
Furniture & Fixtures	112,832.34	
Trucks & Autos	950.00	
Accum. Depreciation, Capitalized Leases	(10,131.00)	
Accum. Depreciation, Furniture & Fixtures	(84,636.36)	
Accum. Depreciation, Trucks & Autos	(950.00)	
Total Fixed Assets		28,195.98
Other Assets		
Officer Loan	13,621.00	
Split-Dollar Insurance Loans to Officers	144,367.55	
		157,988.55
Total Assets		514,162.36

LIABILITIES AND EQUITY

Current Liabilities		
Accounts Payable	22,702.16	
SDI Pay Roll Tax Payable	46.88	
FUTA Pay Roll Tax Payable	332.26	
Accrued Pension Plan	2,000.00	
Accrued Royalties	13,107.70	
Sales Tax Payable	1,733.21	
Total Current Liabilities		39,922.21
Equity		
Common Stock	7,438.67	
Retained Earnings	30,119.42	
Current Income (loss)	436,682.06	
Total Equity		474,240.15
Total Liabilities and Equity:		514,162.36

CORPORATE PROFIT/LOSS SHEET

SIGNAL PUBLISHERS, INC.
INCOME STATEMENT
FOR THE MONTH, October 31, 1993

Sales		
Retail Sales	112,442.81	
Resales to Wholesalers	2,604.00	
Resales to Print Brokers	912.00	
Shipping Charges	6,991.20	
Refunds & Allowances	(545.29)	
		122,404.72
Cost of Sales		
Docutec Supplies	2,160.00	
Paper	2,270.86	
Student Guides, Outside Printer	17,672.76	
Docutec Use Charge, Xerox	5,572.92	
Inventory Change	5,345.70	
Total Cost of Sales		33,022.24
Gross Profit = sales minus cos		89,382.48
Operating Expenses:		
Employee salaries and wages	18,650.75	
Officers' salaries	15,000.00	
Accounting	135.00	
Advertising	2,917.95	
Trade Shows	4,173.81	
Bank Service Charges	598.50	
Computer Software	2,148.57	
Copyrights	812.30	
Depreciation	969.92	
Insurance	2,473.10	
Postage and Freight	4,578.65	
Rent and Storage	3,147.00	
Royalties	14,115.18	
Taxes on Pay Roll	2,060.39	
Telephone	1,280.87	
Utilities	465.70	
Warehouse Supplies	2,650.00	
Office Supplies	695.13	
Computer Lease	370.00	
Docutec Printer Lease	6,272.37	
Total Operating Expense:		83,515.19
Operating Income:.		7,148.16
Other Income		
Interest earned	124.00	
Interest expense	(546.00)	
Total Other Expense:		(422.00)
Net Profit:		**6,726.16**

BUSINESS CARDS - 1

Alphabet Toys

Building blocks to Chess Sets

"The play is in the child—not in the toy!"

• 2233 Storybook Lane
• Lakeside, California

More animals to pick up and hug than any store in Georgia

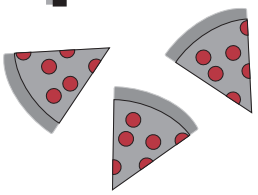
123 Dawson Seaview Center

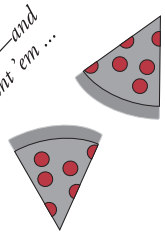
Atlanta, GA 34188

ANDY'S ANIMALS

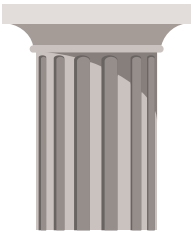
piece-a pizza

As many as you want—and any way you want 'em ...





1456 Lombard Avenue
Des Moines, Iowa



ROME PIZZA

"WE DELIVER, BUT NOT BY CHARIOT!"

12355 WINDOWS BOULEVARD
MINNEAPOLIS, MINNESOTA

Ted's T-Shirts

—No job is too big or too small—

River Bend, WA

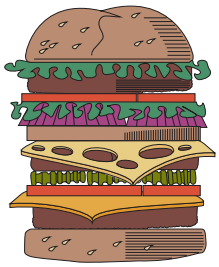
TERRY's SPORTS T-Shirts

We'll find what you want.
We'll make what you want.

5674 Browning
Arcadia, Arkansas

Note: The 2 blank cards are for students' businesses that prefer to make their own cards.

TOO TALL



1342 Elm
What Cheer,
Iowa

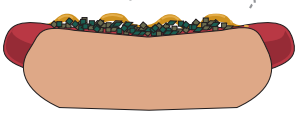
Can you
handle one
of ours?

B U R G E R S

Heavenly Hot Dogs

452 Sunshine Lane
Helena, Montana

A taste from up above

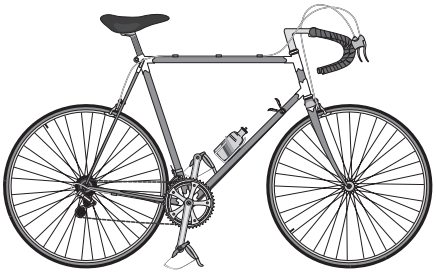


LIGHTNING MOUNTAIN BIKES

• 8877 Mt. Stevenson Drive • Denver, Colorado

Bikes-R-Us

178 Taylor
Omaha,
Nebraska



TEEN PAINT

6753 Brandon Way
Topeka, KS

We're young ...
We're college bound ...
We're bonded ...

Spray Paint

We prepare first ...
We spray second ...

We save you money!

67233 Silver Springs
Salt Lake City, Utah

Note: The 2 blank cards are for students' businesses that prefer to make their own cards.

Incorporated under the laws of the state of _____

No. 5

Signal Publishers, Inc.

_____
# of shares

This certifies that _____ is the record holder of _____ shares of the capital stock of **Signal Publishers, Inc**.

These shares are transferable on the share register of said Corporation in person or by duly authorized Attorney upon surrender of this Certificate properly endorsed or assigned.

Witness the seal of the corporation and the signatures of its duly authorized officers.

Dated: _____ _____ _____

Secretary President

INTRODUCTION

In Unit 3 your students will concentrate on activities built around community and group economic decisions as well as actions in the areas of taxation and regulation.

Goals

At the end of this unit, students should be able to do the following:

- understand the basic vocabulary of taxation and regulation;
- be able to determine the *precise* effect of any normal tax on an individual's income, wealth, and lifestyle;
- understand how the choice of a particular form of a tax or the specific rate structure can affect a person;
- understand the principle of the economic trade-off—that there is no such thing as a "free lunch";
- be able to predict the economic cost of regulation;
- experience the difficulty of making positive choices that will have negative economic effects; and
- acquire some understanding of the task facing public officials who must make these difficult, costly, and often conflicting choices.

To accomplish all of this, first you will need to carry out the teacher preparation found on the next two pages. Then, you should study the Unit Time Chart on page 4 and the Daily Directions that begin on page 5.

Taxation and Government Regulation

TEACHER PREPARATION - 1

As always, good results require solid, traditional instruction in the basics of the subject to be interwoven with the interaction. Any good up-to-date textbook should be a good reference tool. Avoid the dreaded "graph and stat" memorization trap. A student does *not* need to know that exactly 28.75%, or whatever, of our federal taxes go to defense spending. The student *does* need to know the basic vocabulary of taxation, and how these terms apply to people! The student does *not* need to know the full meaning of the endless initials of all the federal and state regulatory agencies. The student does need to know the concept of cost and benefit if we choose to regulate an economic activity. As a minimum, before the activity phase, introduce your students to the following concepts:

In the area of taxation:

- **Purpose.** Where do taxes go? What are they supposed to accomplish?

- **Benefit.** How much good for society can a particular tax achieve?
- **Rate.** What is the difference in these taxes— flat, progressive, and regressive?
- **Base.** Will a tax affect only a few people or a great many?
- **Incentive.** Will a tax help or hinder a person's ambition?
- **Fairness.** Is the tax viewed as reasonable by most people?

In the area of economic regulation:

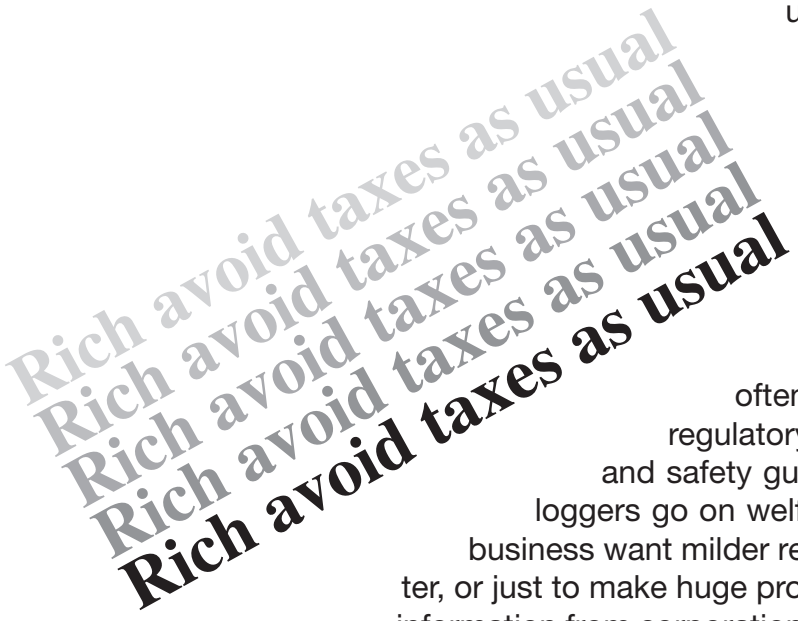
- **Need.** Does our safety and health require that we have this regulation?
- **Cost.** What is the connection between the regulation and the cost of compliance?
- **Time. frame** Is the regulation designed for long term or short term good?

Setup directions

1. **Duplication.** Duplicate the following items, one per student. You can do all of these at once and staple them into a small booklet for each student, or you can hand them out individually as each item is used.
   - UNIT 3: STUDENT INTRODUCTION
   - IDENTITY CHART

- COST VS. BENEFIT CHART
- IDENTITY MAP
- TAX LIST (The list of taxes in use at start of activity.)
- TAX WORKSHEET
- POSSIBLE TAX LIST/GUIDE TO COSTING
- INDUSTRIAL ANNOUNCEMENT
- NEWSPAPER ITEM
- FINAL CRITIQUE

2. **Awareness. material** Bring in local or nearby urban newspapers for tax information. Also, find news magazines for information on regulatory issues. In most of the country we have all seen the local headlines. "School taxes to skyrocket!" "Old people forced out of homes by tax burden!" "Education programs gutted by budget cuts." "Rich avoid taxes as usual!" "Get the cheats and deadbeats now!" Use your local paper, blow up the headlines, tack up the articles, and make the students aware of the tax turmoil that is continuous in the U.S. Make part of your bulletin board space look like "tax-war" information central. In addition, use magazines for examples of the positions, often very extreme, on environmental and regulatory issues. How many warning labels and safety guards do we really need? Will all the loggers go on welfare just to have happy owls? Does business want milder regulation to be able to compete better, or just to make huge profits while we choke on foul air? Use information from corporations, Sierra Club, and local groups. Try for the extreme position whenever possible.



UNIT TIME CHART

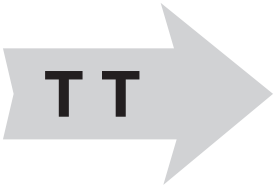
This chart is intended as an example; alter as desired.

Organization Hand out student booklets; students read Unit 3: INTRO Refer to IDENTITY MAP; assign roles and refer to IDENTITY MAP Adjust numbers on map; shift class and announce problems 1	Cycle 1 begins Discuss "reality questions" Have students refer to TAX LIST and TAX WORKSHEET Each student calculates exact tax situation 2	Convert individual numbers to community tax base number Create exact money problem Have students refer to POSSIBLE TAX LIST/ GUIDE TO COSTING Cycle 1 ends 3	Cycle 2 begins Divide class Explain solution process Students begin to solve problem 4	Have groups work on a tax package to create specific solutions Encourage political deals between groups 5
Convene an old-fashioned town meeting Groups present proposals Allow discussion and criticism & prepare to vote on package—do not vote Cycle 2 ends 6	Cycle 3 begins Read the INDUSTRIAL ANNOUNCEMENT Hand out special issue of Clear Water Gazette Regroup students as interest groups 7	Remind class of "no free lunch" concept Have students refer to COST VS. BENEFIT CHART 8	Redefine the process and start solutions Groups create solution packages 9	Reconvene Executive Council Group leaders present solutions Conduct Q/A session Act as representative of B.I.G. Vote on tentative proposal 10
Do cost-effect study Students regroup as tax groups to reconsider tax proposals with new funds needed 11	Groups present final tax proposals Final vote Apply exact results to each individual Cycle 3 ends 12	Have students replay to FINAL CRITIQUE Evaluate, if needed 13	Optional: Have outside speakers Optional: Extra-credit projects Optional: Testing 14	

Day 1

1. Hand out the Student Booklets containing the duplicated materials. Have students read UNIT 3: STUDENT INTRODUCTION.

2. Set up the tax problem. Have students refer to the IDENTITY MAP. Use any system that works for you to decide who has what role. (We just put numbers in a hat and have students draw. If you use this method, you will need 40 slips. Also note: If you have less than 40 students, just drop some occupations that have many examples; for instance, since there are several small business people, drop one; as there are several construction workers, educators, factory workers, jobless, etc., you can delete them until you match class size.)



TEACHING **T**IP

You may wish to appoint key people to insure leadership; but we have found that "leaders" will often arise naturally in crisis situations without having to be "appointed."

3. This unit is constructed to work as a single exercise. Although we believe the full unit is best, we know that time and curriculum demands may require a shorter activity. Instead of the full unit, you could do one of the following short options:
   - ***Option 1.*** Go from Day 1 of the Unit Time Chart to Day 6 and then jump to Day 12. Skip the entire issue of the B.I.G. factory and the regulatory exercise. Then, your class will only address a tax problem.
   - ***Option 2.*** Go to the end of Day 2. Be sure that students realize that a tax crisis looms unless they do something or get lucky and then skip to Day 7 and do the regulatory activities up to Day 11. Then, regroup and consider how this has changed the tax crisis and have some discussions of what might have been the best tax solutions. The tax situation was then used only as a tool to set up a regulatory activity.

4. Have students refer to the IDENTITY MAP and be sure everyone knows where they live.

5. Pause for questions and answers on identity columns. Students may not be clear on Annual Spending column. This is the dollar value of all items they buy, per year, that are subject to sales tax. Other Assets column refers to stocks, bonds, CDs, etc. that may be taxed in many states.

6. Announce the two major tax problems. The state has mandated changes in the school program that will *cost* a great deal, but the money *must* come from the community. The sewer treatment plant does *not* meet EPA (Environmental Protection Agency) standards and must be modernized at great cost. Taxes in this community *must* increase by 25%. The only choice is how, not if, since state

law requires the first, and federal law requires the second.

TEACHING TIP

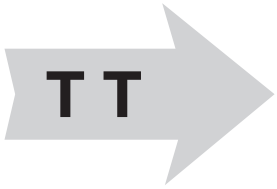
Go over the IDENTITY CHART, TAX LIST, AND TAX WORKSHEET using a sample citizen.

Day 2

1. Begin Cycle 1—the introduction to the reality phase. The students must now understand several things: 1) What is the present tax structure of the community? 2) What is their own personal tax bill? 3) What is the available tax base? 4) What tax options are available for solving the problem? To get everyone into "reality," have students refer to the TAX LIST and TAX WORKSHEET.

2. Provide any needed explanation of the starting tax structure. This has been made simple; keep it that way. This is not the time for a detailed explanation of an intricate income tax or an arcane property tax system. As students do the worksheet, it should all become clear; if not, now is the time to make it clear.

3. Pair your students. All students must calculate their own total tax payment for the year, but they help one another through use of calculators, and whatever else that works to get every person to know what she/he pays. Do not continue until everyone has finished!



TEACHING TIP

Calculators are a must, since few students do basic math well.

Day 3

1. When everyone has an individual total, do some addition on the board. Add up each class of tax so that you get a total of all income taxes paid, all property tax, and all sales tax. Add the three subtotals to get the total tax paid by the community.

2. Now you can apply your problem situation. If your community is now paying $250,000 in total taxes and the crisis requires that you raise taxes by 20%, you now have a concrete problem to solve. You must increase the tax burden on the people by $50,000! You cannot discuss some vague proposal to raise taxes "a lot," have a "sort of" higher tax, or have "some" of the rich pay "more." You have a precise $50,000 problem. At this time, have students refer to the POSSIBLE TAX LIST/GUIDE TO COSTING.

3. Clarify the example, if necessary. This ends Cycle 1.

Day 4

1. Begin Cycle 2: Solving the tax problem. Divide the class into four groups based on income level: Rich (all above $140,000); upper-middle class ($139,000-$35,000); lower-middle class ($34,000-$16,000); and poor (all below $16,000).

2. After groups look over the POSSIBLE TAX LIST/GUIDE TO COSTING, it should become obvious that there are many ways to raise an additional sum of taxes. They can use the new list or modify old taxes. The "costing" or "projecting" section will help them translate an idea into a specific dollar amount. It should also become clear that some taxes hit a particular person hard and others don't bother him/her at all. (Guess which one will now be called a good tax? Which one, a bad tax?)

3. Have each group pick a member to be the group's representative on an Executive Council later, when these proposals have to be considered.

Day 5

1. At this point allow the groups to work on a tax package of at least three items, at least one of which is from the POSSIBLE TAX LIST.

2. Circulate, help out. Remind students that they must have concrete proposals, accurate numbers, and someone to present them to the Executive Council.

TEACHING **T**IP

We set aside a "private" meeting area for this mutual "back-scratching."

3. Encourage political deals between groups if it means that a "package" can be created to solve the problem.

Day 6

1. When packages and spokespersons are ready, convene an old-fashioned town meeting with the four-person executive group in the front.

2. Have volunteers present his/her program; allow discussion and criticism.

3. After anyone who wishes has spoken, and before the Executive Council has cut off discussion and has announced it is ready to vote to solve the problem, interrupt the proceedings with an announcement that you've heard about an important development that all should consider during the next hour.

Day 7

1. Begin Cycle 3: The regulatory problem. Read the INDUSTRIAL ANNOUNCEMENT in the *Clear River Gazette* and give one copy to all of the citizens of the community.

TEACHING **T**IP

You may want to distribute this handout at the end of Day 6.

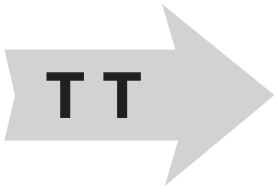
2. Allow a few moments for them to digest the information. Very quickly follow with a distribution of the NEWSPAPER ITEM in the special issue of the *Clear River Gazette.*

3. As soon as possible, restructure the class into interest groups. All go back to the IDENTITY CHARTS, find their assigned interest groups, and form interest group circles.

Note: *Carefully observe this direction. The "obvious" is often overlooked.*

4. Allow a few changes if really needed, and encourage those not assigned to pick a group and join. The goals of most should be obvious, but you may have to remind the historical society that the original settlement site is set to be torn down for access to the factory. The school board may need to be shown that its goals are additional funds for the schools.

Day 8



1. You will now need to remind the class of the TANSTAAFL (There Ain't No Such Thing As A Free Lunch) concept and supply specific tools to make it work. The B.I.G. factory *will* cause problems, and it *will* pay taxes and hire people. This is reality, but there must be a middle ground between pure air and water and pure tax relief!

TEACHING **T**IP

Write TANSTAAFL in big letters on the chalkboard.

2. Hand out the COST VS. BENEFIT CHART.

3. At this point you must redefine the problem. Tell the class:
   - That it has a very specific tax problem;
   - That B.I.G. will build a factory that could erase most of that tax problem;
   - That the *Clear River Gazette* has pointed out that there will be some additional costs (though most can be spread out over several years);

- That there is a need for regulation of B.I.G. to protect the environment, but too much regulation will ruin the entire benefit of B.I.G. being here;
- That B.I.G. has implied that excessive regulation will cause loss of profit and that will cause the company to abandon the project—all of which means the community will be back to step 1!

Day 9

TEACHING **T**IP

Explain to students how we all often belong to different "groups" in a democracy.

1. Redefine the solution process. Each group should try to create a package of proposals for regulations. They must be presented to the community as a whole and voted on.

2. Then, and only then, the original tax groups will reform and produce final tax proposals. Encourage the groups to go to work.

3. Allow sufficient time within the groups to come up with specific proposals designed on the cost-benefit models.

Day 10

1. Reconvene the town meeting with the Executive Council in charge. The council conducts the remainder of the class meeting for an audience of concerned citizens who have come to consider various proposals (and who may speak as individuals, not necessarily as group representatives).

2. Have group leaders present proposals, using the blackboard to provide figures. They should be able to deal with questions from the Executive Council and to defend ideas.

3. After all presentations have been made, call for a discussion on the proposals to get a final package. The cost of the package must then be considered in deferring the new tax needs of the community.

4. Note: Acting as a representative of B.I.G., you have to be the judge of when the list of proposals is so long and so costly that B.I.G. pulls out. Remind the council that it could happen. Acting as legislative counsel to the council (you need to be ready to wear "many hats"), be sure to add any additional sewer, water, or traffic costs to the tax need at this time.

5. If time permits, have the Executive Council vote on a tentative proposal.

Day 11

1. Help the Executive Council do a cost-effect study on the tentative proposal. (Note: Many city/county councils allow 30 days before final adoption.)

2. Reform the class into the original four economic interest groups to work on revising the tax proposal if they feel it is necessary to reflect the new taxes needed if B.I.G. proceeds to build.

3. Go through the procedure of proposal and discussion, if necessary.

Day 12

1. Have groups present the final tax proposals.

2. Take a final vote on a tax package.

3. Apply the exact results of the vote to each individual.

TEACHING **T**IP

A "tie" vote is considered a "no" vote. You may wish to hold a "referendum" in which all citizens vote to accept or override the council's decision.

Day 13

1. Have students refer to FINAL CRITIQUE. Discuss.

Day 14

1. Optional: Outside speakers. This is the classic opportunity to bring in other people. You now have a class with a high level of awareness of the problems, opinions, alternatives, and possible solutions in the area of taxation and regulation. Bring in a local school board member, a tax collector, a tax protest leader, a businessperson who has to deal with regulation, an OSHA or EPA rep, or an environmentalist. Do it in pairs, or singly; in any case they should have an audience that understands the problem, can ask good informed questions, and will profit from the visit.

2. Optional: Extra-credit projects. Now is the time to capitalize on student interest. A project assigned earlier would have been connected to nothing. At this point, however, you will have students who are *angry* and believe that changes must be made, *bewildered* and believe that they really do need to know more, or frustrated that the group could not see the wisdom of their ideas. The pos-

sibilities for extra-credit projects are endless. Here are some suggestions:

- ***Taxes and education.*** In most communities there is some conflict over school taxes and real benefit. A student could go beyond the rhetoric and use his "costing" experience from the simulation and determine just what specific educational costs mean to the individual taxpayer. If a pool at the high school costs "x" dollars and there are just so many taxpayers, is the cost per taxpayer worth it? If the newspaper says that a new teacher's contract will cost so many "mills," what will that mean in exact dollars per taxpayer? All sorts of costs can be examined. This is a sensitive one!
- ***Taxes and values.*** Interview pairs of people on tax issues. Do retired people react to a school tax increase the same as a young couple with children? Does a businessperson look at income taxes the same as an hourly worker? Enough pairs should indicate opinions based on what is best for the community or pure selfishness. This could be a disappointment to some students!

"Does a businessperson look at income taxes the same as an hourly worker?"

BUSINESSPERSON

TAXES/VALUES

HOURLY WORKER

- ***National comparison.*** Do some research into what we tax most compared to other countries. Is there a best system? How could we do a better job? Propose a model.
- ***Regulation and daily life*** Interview local business people and evaluate specific regulations. Which ones are good, bad, useful, silly, reasonable, or ridiculous in cost? Create a better model!
- ***A specific situation.*** Use a particular local regulated activity—trash could be an example. Who takes it? How is it handled? What is acceptable? How is it disposed of? Is it logical, safe, and cost efficient? If not, build a better regulatory model!

3. **Optional:** Evaluation. If you believe a test of some sort is needed, keep it simple, basic, and applied to these kinds of items: Assessment, base, exemption, rate, cost of collection, progressive, regressive, flat, income, per capita, property, personal property, occupation, "TANSTAAFL," cost-benefit, incentive, EPA, OSHA.

UNIT 3: STUDENT INTRODUCTION

Welcome to Clear River

Clear River is a typical suburban community. (Demographers assure us it is "typical.") You will live in an area with many housing sections—most not too old—green lawns, and even a Little League field! There will also be older sections, industrial and commercial areas, a mall, an amount of open land with environmental interest, and some major highway access. Since the hectic boom period of growth has passed, the steady flow of *new* money from developers' permits and fees to build is no longer providing the extra cushion for your town. The industrial base has shifted, causing some jobs to be lost. Unemployed people are becoming more of a problem. Loss of jobs and unemployment hurt your tax base. In addition, environmental awareness is much greater than it was when the community began, and many regulations now prevent the "just plow-it-up, rip-it-out, and pave-it-over" way that was often used in the past. Here is the bottom line for your community—*You are now about to face some hard choices in taxes and regulation!*

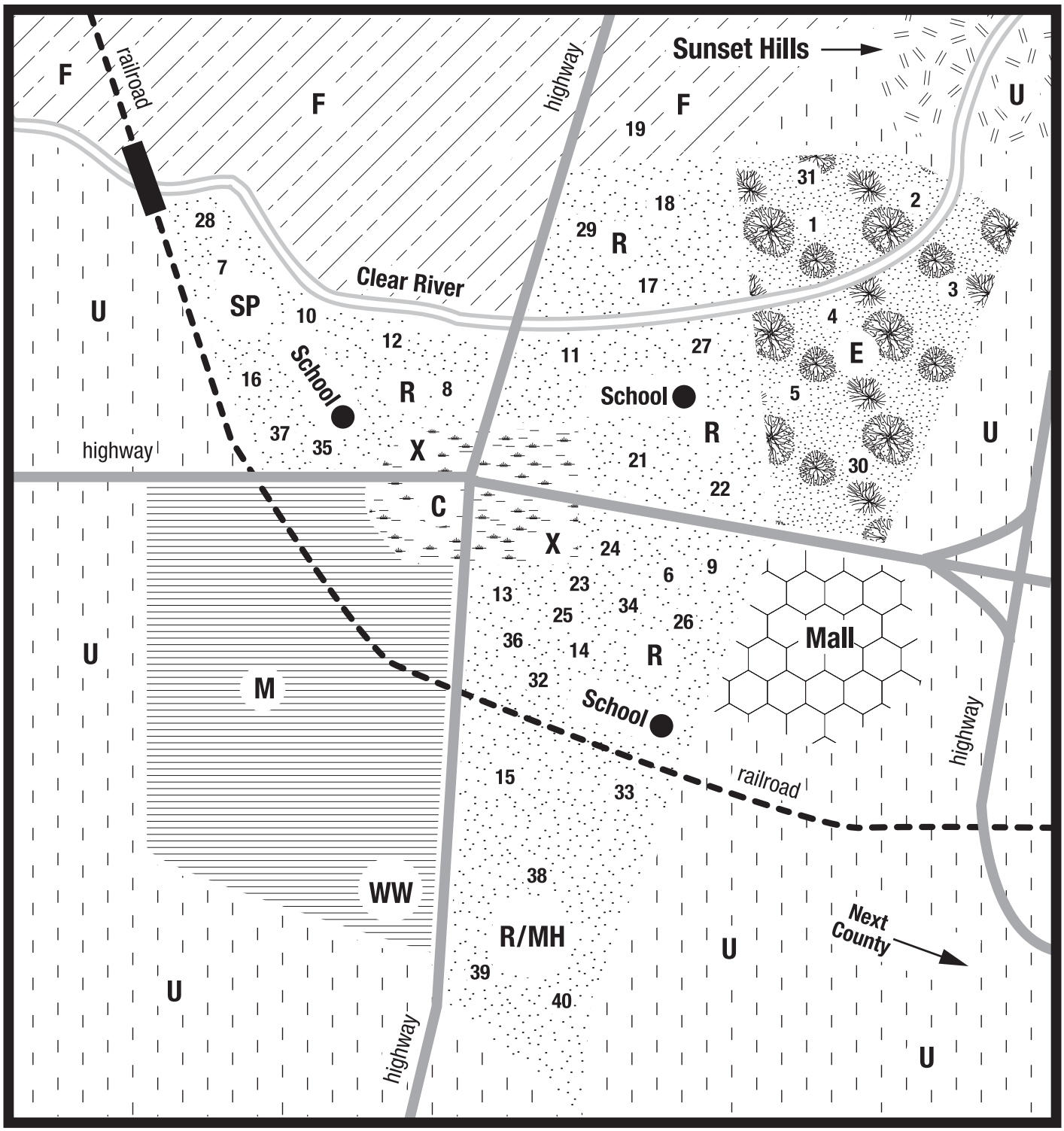
Your first problem will be a genuine tax crisis. Taxes will have to go up—a great deal—and now! You will enter the dog-eat-dog world of tax fights, deals, and power plays. As soon as you think you have the tax situation under control, and, believe me, everyone will *not* be happy, you will have to face the second crisis, the introduction of a major industrial proposal that will create possible gains but, at some time, problems. Who will get regulated? by whom? at what cost?—all these will be challenging dilemmas. Always remember the political term TANSTAAFL (**T**here **A**in't **N**o **S**uch **T**hing **A**s **A** **F**ree **L**unch).

Enough preview. Let's move on to the action phase.

IDENTITY CHART

No.	Family	Occupation	Annual $ salary	Annual $ spending	Property value $	Other $ assets	Interest group
1	4	Doctor	250,000	100,000	500,000	250,000	AIR ENV
2	4	Lawyer	200,000	80,000	500,000	250,000	HIS SB
3	3	Banker	150,000	70,000	400,000	150,000	SB
4	3	Dentist	150,000	60,000	350,000	150,000	W
5	2	Computer sp	100,000	40,000	300,000	100,000	AIR SB
6	5	H.S. principal	75,000	30,000	200,000	50,000	HIS
7	3	H.S. teacher	50,000	25,000	150,000	50,000	F&G HIS
8	4	Elem. teacher	45,000	22,000	150,000	25,000	ENV
9	2	H.S. counselor	45,000	22,000	150,000	25,000	AIR
10	2	Nurse	35,000	18,000	125,000	10,000	W
11	5	Car salesman	70,000	30,000	200,000	50,000	SB
12	3	Appliance sale	40,000	18,000	150,000	25,000	
13	3	Office worker	25,000	15,000	100,000	—0—	ENV
14	4	Typist	25,000	15,000	100,000	—0—	
15	2	Receptionist	25,000	15,000	75,000	—0—	ENV
16	6	Carpenter	40,000	18,000	150,000	25,000	F&G W
17	7	Plumber	45,000	20,000	125,000	15,000	F&G W
18	5	Electrician	45,000	18,000	125,000	15,000	F&G W
19	4	Farmer	35,000	15,000	100,000	—0—	HIS
20	5	Farmer	35,000	15,000	85,000	—0—	AIR
21	6	Steel worker	50,000	22,000	140,000	10,000	LAB F&G
22	6	Assembly wkr.	45,000	20,000	125,000	10,000	LAB
23	4	Assembly wkr.	45,000	20,000	125,000	10,000	LAB
24	3	Machinist	45,000	20,000	125,000	10,000	SB
25	4	Forklift oper.	40,000	18,000	100,000	5,000	LAB
26	5	Franchise op.	50,000	25,000	150,000	—0—	CC
27	3	Theater op	40,000	18,000	100,000	10,000	CC F&G
28	4	Auto shop	50,000	25,000	150,000	20,000	CC
29	4	Conv. store	45,000	20,000	125,000	—0—	CC
30	5	Contractor	100,000	40,000	250,000	100,000	CC
31	3	Insurance agt.	75,000	40,000	200,000	50,000	ENV
32	1	Waitress	20,000	14,000	75,000	—0—	AIR
33	1	Waitress	20,000	14,000	Rent	—0—	ENV
34	4	Auto mechanic	35,000	20,000	100,000	—0—	
35	1	Elderly widow	Pen.15,000	10,000	50,000	—0—	HIS
36	5	Unemployed	Wel. 10,000	9,000	100,000	—0—	LAB
37	4	Unemployed	Wel. 10,000	9,000	86,000	—0—	LAB
38	4	Unemployed	Wel. 10,000	9,000	Rent	—0—	AIR
39	3	Unemployed	Wel. 10,000	9,000	Rent	—0—	
40	1	Unemployed	Wel. 8,000	7,000	Rent	—0—	ENV

Interest group code: AIR = Clean Air Commission; ENV = Environmental Protection Assn.; W = Pure Water Committee; HIS = Historical Society; LAB = Labor Union; CC = Chamber of Commerce; F&G = Fish & Game Club; SB = School Board. Anyone can join any group.



IDENTITY MAP

Community of CLEAR RIVER

Legend

F = farming **U** = undeveloped **M** = manufacturing **R** = residential
E = estates **R/MH** = resident/mobile home **C** = commerical
X = historic **SP** = sewer treatment plant **WW** = water works

TAX LIST

Your community receives *all* of its operating money to provide all of the service to you from three basic taxes.

Income tax

All citizens pay (or should pay) a tax on all salary, wages, and income. The system is a very basic replica of the U.S. income tax. It is progressive and it allows for exemptions and deductions. You will be allowed a $2,000 exemption for *each* member of your family. For each family you will be allowed a basic deduction of $3,000 for things such as interest, charity, medical, moving, etc. The remaining income (i.e., your taxable income) will be taxed at 10% for all income up to $10,000, and 20% for all income more than $10,000. Your worksheet will take you through these steps.

Property tax

This tax is based upon the value of your home. In most of the United States a local government agency will look at your property and give it an "assessed value." This is the number used to calculate your tax. We will use a 25% assessment system, That is, for tax purposes your home is worth one quarter of what is shown on your list. The property tax will then be 10% of that number.

Sales tax

Our sales tax will be a 5% tax on every item purchased. Use the "annual spending" column for this number.

TAX WORKSHEET

Class _____ Name _____

Income tax To determine your income tax, complete these steps:

1. Enter your annual salary as listed on the IDENTITY CHART _____
2. Multiply the number in your family by $2,000 _____
3. Subtract Line 2 from Line 1 _____
4. Enter the basic deduction of $3,000 _____
5 Subtract Line 4 from Line 3 (This is your taxable income.) _____
6. Take all of your taxable income up to $10,000 and multiply by .10 (10%) and enter here _____
   (Ex: If your T.I. was $7,500, your tax would be $750.)
7. Take all of your taxable income *over* $10,000 and multiply by .20 (20%) and enter here _____
   (Ex: If your T.I. was $19,500 you would have entered $1,000 on Line 6; you would now take 20% of $9,500 [$1,900] and enter it on Line 7.)
8. Add Lines 6 & 7 to obtain your tax _____

Property tax To determine your property tax, complete these steps:

1. Enter your property value as listed on the IDENTITY CHART _____
2. All property is assessed at 25%.
   (This is your assessed value.) Multiply Line 1 by .25 _____
3. Your tax rate is 10%.
   (This is the tax on your property.) Multiply Line 2 by .10 _____

Sales tax To determine your sales tax, complete these steps:

1. Go to the annual spending column; enter your number _____
2. Your sales tax rate is 5%.
   (This is your tax per year.) Multiply Line 1 by .05 _____

Totals

Income tax _____

Property tax _____

Sales tax _____

Total* _____

* As soon as you have this number, give it to your instructor so that a tax base can be created!

POSSIBLE TAX LIST/GUIDE TO COSTING

As you try to solve your tax revenue problem, it will be obvious, very quickly, that you have only three options. You must look for a new tax(s), modify an existing tax, or do both. Our society can provide a huge list of taxes to consider, but only a few are realistic in a classroom simulation with limited time. Here are four:

FOUR TAXES

- **Surtax.** Take any existing tax and increase the final figure by a stated percentage. For example, a 10% income tax surtax would mean that persons would go to Line 8 on their income tax worksheet and pay 10% of that number in addition to their income tax.

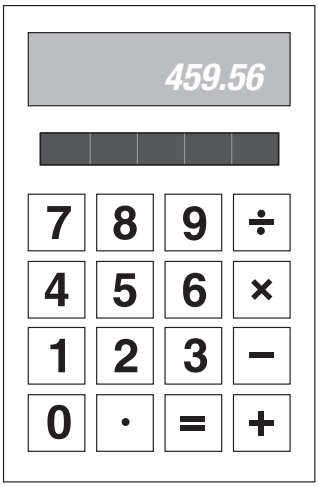
- **Per capita tax.** Every person would pay the same specific dollar amount because all benefit from the uses paid for by the tax.

- **Occupation tax.** Each occupation is given a dollar value (a doctor pays $500, a plumber pays $200, a waitress pays $100, etc.). You pay that tax each year.

- **Personal property tax.** All financial property, other than your home and contents, is taxed. The value of your bank account, CDs, stocks, etc. is now taxed each year. (This amount is listed on your IDENTITY CHART.)

If you go to the existing tax list and make changes, you must learn how to do "costing" or "projecting." As an example, the present sales tax is 5%. Go to the instructor and ask to see the tax base list of all taxes paid by everyone. What is the total sales tax paid by the whole community?

If it is $50,000 and it is a 5% rate, that means that each 1% of sales tax brings in $10,000. Now you can try out partial solutions to your problem. If you move the rate to 8%, an increase of 3%, you will bring in another $30,000 in taxes. You can use this same procedure for the property tax, and if you are careful and watch your brackets, you can use it on the income tax.



The technique is similar for any new tax. If you want to consider a per capita tax, go to the IDENTITY CHART and find the total number of people in your community. Try a number, say $100 per person. A full community of 40 students has 147 people x $100 or revenue from a $100 per capita tax of $14,700. This technique might help solve your problem, but people with large families will surely oppose it!

In every case, you must take paper, pencil, and calculator and determine how each tax or tax change will bring in exactly what dollar amount.

Clear River
GAZETTE
Thursday, August 25, 1994

New factory for Clear River!

Biochemical Innovation Group Inc., **B.I.G.**, whose headquarters are in New York City, announced that it has obtained an option to buy and develop land in the northwest quadrant of Clear River between the highway, river, and railroad.

This is undeveloped land at present with a small stream, woods, and no housing or industry. It is an ideal location with a good water supply and road and rail access. B.I.G. Inc. will begin construction of the factory as soon as necessary permits are secured.

Based on a typical factory assessment system, B.I.G. will pay $50,000 in property taxes. In addition, the corporate tax rate of 20% on a projected net profit of $250,000 per year will bring in another $50,000 to Clear River.

B.I.G. will hire locally and manpower needs should help absorb the present 12-1/2% local unemployment rate. At typical industrial wages, the income tax from these new workers should be at least $25,000.

"The current tax crisis will end, and an era of full employment and security should begin," one council member projects.

Clear River
GAZETTE
Friday, August 26, 1994

Special issue

Meeting called to consider issues

Is it a hoax?

Before we jump at the apparent gift to us from B.I.G. Inc., we should examine all the facts! There are costs; there are hidden problems! Do we really understand what changes this will bring about? Get informed before we change Clear River forever!

Editor

Sewer overload

Our present system does not extend to the northwest area. Someone had better budget another $20,000 to extend it!

Railroad risk

The present rail-highway crossing has no gate. This was fine with little traffic. That will be unsafe now. To buy and install the gate system is another $10,000 job. Is it worth it?

Police chief worried

No one seems to be thinking about the traffic that will be created by this factory. We will need a traffic light, at a cost of about $10,000 or extra police, at extra pay, to control the problem. Who will pay?

Quality costs

All the accountants and wallet watchers are missing the big problem with B.I.G. We are going to have air pollution from the stacks, water pollution from the solvent process, recreation problems when B.I.G. uses our prime fishing, hunting, and recreation area, and problems in the future when the corporation begins to store waste at the site!

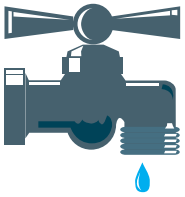
Water woes

A new water line at a cost of $20,000 will have to be laid to the factory. Even if this is paid for over a five-year period, it is still a cost to consider.

Meeting called

A full community meeting will convene at town hall on Tuesday evening to consider all these issues. What we decide now will affect us for years to come. Consequently, all interested parties are urged to speak to their followers to insure that a big turnout will be present.

COST VS. BENEFIT CHART

Area	Proposal	Cost as a % of profit & taxes*	Possible job cost#	Cost as a % of property size+
Air pollution 	Install air scrubbers to reduce most chemical emissions	10		
	Install air scrubbers to reduce chemical and all particulate emission	20		
Water 	Filter all water to pre-use level	5		
	Filter all water to drinking level	10		
	Filter all water to drinking level and pre-use temp	15		
Historical 	Preserve immediate area of historical site	2		
	Preserve total area of historical site	5	1	5
	Move buildings to better area and reconstruct	10		
Environment 	Maintain most of area west of small creek for recreation	15	2	10
	Maintain all wooded area for recreation	30	3	20

* If the added cost means less profit, your community will have less to tax. (A 10% cut in profits equals a $5,000 cut in taxes.)
# If the size of the factory is reduced, the corporation will hire less workers.
+ If the size of the factory is reduced, the corporation will pay less property taxes.

FINAL CRITIQUE

Name _____

1. Did the final tax proposal work to your individual advantage? _____

   How?_____

   _____

2. Did the final proposal help your economic group more or less than others?_____

   Why?_____

   _____

3. Was the final proposal the *best* one for the community? _____

4. If there was a better solution, what was it? _____

   _____

   _____

5. Were the regulations applied to B.I.G. sensible?_____ If not, where were they wr

   ong?_____

   _____

6. Would your community have been better off without B.I.G. at all? _____ Why? _____

   _____

   _____

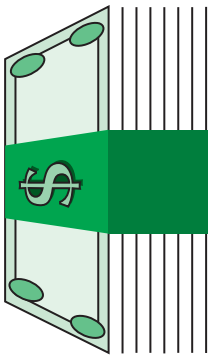
7. Is there some comment(s) you wish to add at this point?_____ If so, do it here. _____

   _____

   _____

   _____

Banking and Money



INTRODUCTION

In Unit 4 your students, acting as economic stereotypical units, will take part in an activity designed to simulate the workings of our banking and money system.

Goals

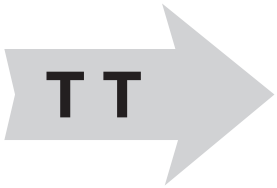
At the conclusion of the action cycles, your students should be able to do the following:

- understand the basic working vocabulary of money and banking;
- understand the basic mechanics of our money system;
- be able to deal with a local bank to open an account and secure a loan;
- appreciate the absolute necessity for the bank to maintain an interest rate spread that is positive;
- be able to deal with the reality that some people or activities are more risky than others and thus will pay more to borrow money;
- understand the workings of the Federal Reserve Board as it sets monetary policy; and
- realize that policy decisions made at the highest levels of the system directly affect decisions made at the bottom levels of the system.

To accomplish all of this, first you will need to carry out the teacher preparation found on the next two pages. Then, you should study the Unit Time Chart on page 4 and the Daily Directions that begin on page 5.

TEACHER PREPARATION - 1

Good, solid, traditional instruction in the basics is always a prerequisite to a good activity. A student must have some background in the *basic* functions of a bank and the *basic* functions of the Federal Reserve System. A student does not need even to know who Keynes is at this point, but he/she should know that if the Federal Reserve Board (commonly, called "the Fed") raises the discount rate to your bank, the bank *will* raise the rate you pay on a loan. It is this sort of cause and effect in our system money flow where students need knowledge. As a minimum, *before free interaction begins,* introduce your students to the following:



TEACHING **T**IP

We have our students keep a vocabulary list in which they write short definitions. We also encourage them to jot down any questions they might have about any of the items. We tell them that if the simulation does not answer these, they should ask again during our debriefing.

- **Money.** What is it, and how does it circulate through the system?
- **Checks.** How are they written? How do we keep track of them?
- **Time deposits & demand deposits.** The difference between them and why it is important to the bank.
- **FDIC.** Who insures what amount for whom?
- **Safe deposit.** What is the basic function?
- **Prime rate.** What it is/ Who pays it?
- **Multiplier effect.** What is it? How does it affect our economy?
- **Tight/Easy money.** What do the terms mean? Whom do they affect?
- **APR.** How this is used to compare "deals."
- **Fed function.** What is the basic result of Fed changes in the Reserve requirement, discount rate, and OMC position?
- **Clearing.** What is this function of the banking system?
- **Spread.** Why must it be positive for a healthy bank?

Setup directions

1. **Duplication** Duplicate the following in the amount in parentheses
   For the bankers
   - BANKER ROLE DESCRIPTION (10)
   - BANK RECORDS (40: for individual units)
   - BANK SUMMARY RECORDS (10: for bank and fed use)
   - RISK FACTORS MEMO (10)

   For the "Fed"
   - FEDERAL RESERVE BOARD/TREASURY (15)
   - FEDERAL RESERVE AND TREASURY FORMS (10)
   - FED. POLICY CHANGES (10)

2. **Student booklet** Duplicate one each of the following and staple together as a student booklet:
   - UNIT 4: STUDENT INTRODUCTION
   - UNIT ROLE DESCRIPTION
   - ECONOMIC UNIT RECORD (40 copies to cover 3 cycles)
   - BLANK CHECK PAGE (40 copies—you may need more later)
   - PROFILE CHART

3. **Overlays** If not already made for Unit 1, create the following:
   - BASIC SUPPLY-DEMAND CURVE
   - KEYNESIAN SUPPLY-DEMAND CURVE

4. **Basic instructional material** As well as a good, readable economics textbook, try to obtain magazine or newspaper articles on interest rates, loans, credit contraction or expansion, inflation pressure on the dollar, Fed policy moves. *Business Week, Wall Street Journal,* and *Barrons* would help.

5. **Awareness item** This is a tough one! Bank loan rates and minor adjustments by the Fed do not make headlines. Television specials do not glamorize the meetings of the Open Market Committee. If you are lucky (or unlucky) enough to be teaching this material in a period of economic crisis, an inflation surge, or a banking or S&L crisis; a presidential campaign; or a city furor over "Red-Lining," you can get headlines, panic comments, or angry charges to use as attention-getting displays. On the other hand, if it is your misfortune to have to teach this in a time of economic and political tranquillity, you may not be able to get the kind of colorful, controversial headline items that make for an attention-getting bulletin board.

UNIT TIME CHART

This chart is intended as an example; alter as desired.

Organization Hand out student booklets Select students for roles Setup room Allow time to look over material 1	Cycle 1 begins Have students follow directions in UNIT 4 STUDENT INTRODUCTION Open all accounts; obtain loans; get safe deposit box; complete all records 2	Fed audits Question and answer session Correct any errors Bankers review RISK FACTOR MEMO Begin Cycle 2 3	Continue Day 3 Help as needed Work with Fed for Cycle 3 problems 4	Complete Cycle 2 Balance books and records Conduct audit Critique: Who was hurt? Why? 5
Cycle 3 begins Help as needed Complete cycle; use option 6	Balance and record and audit Cycle 3 ends 7	Critique: Was Fed policy correct? Extra-credit projects Evaluation 8	Other views Outside speakers 9	

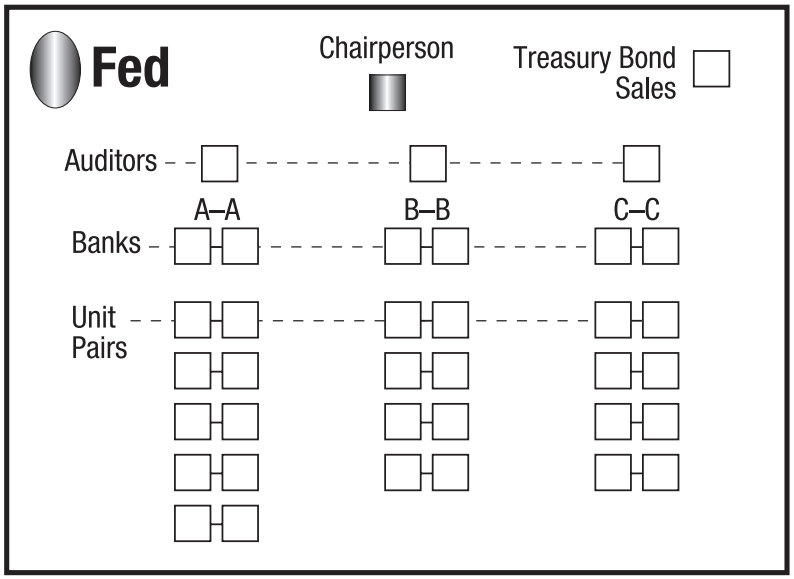
Day 1: Introduction

1. Hand out student booklets. Have students read UNIT 4: STUDENT INTRODUCTION.

Note: *Pick your best math students to be bankers and the Fed. The bankers can help one another if necessary, as can members of the Fed. All other students should be paired, if possible, to represent various "units."*

2. Study the UNIT ROLE DESCRIPTION before picking students for these roles. If your class is less than 37, reduce Fed from five to three. If you need more reduction, make some of the Basic Units, single persons. Banks could also be run by single persons. Try to use people who are not often absent. Hand out all role descriptions and records. Make sure everyone understands they represent an economic group as a "unit."

Classroom Arrangement



3. Set up the room as shown in the diagram at left. Those units having Bank A sit in front of A; B, in front of B; C, in front of C. (See PROFILE CHART.)

4. When everyone has a role, a description, and a location, have everyone move to their appropriate spot; then allow the class some time to look over the material.

5. Make it clear that Cycle 1 is mechanical-procedural-no problems allowed. All must get loans, open accounts, keep records. Students have no choice of bank; the bank has no choice but to deal with each type. The only mission at this point is to get the system "up and running." If time, use one student as an example for the activities coming the next hour.

T T

TEACHING **T**IP

Go through this cycle several times using the PROFILE CHART. Then have each unit go to its banker. While one unit is talking to the banker, other units should work on their vocabulary lists using their textbooks.

Day 2: Cycle 1

1. Have students set up and complete Cycle 1 as per directions on the UNIT ROLE DESCRIPTION handout. Bankers post their interest rates behind them on the chalkboard. Each pair goes to see its banker and sits in the empty desks to open their accounts. These activities will take most of the hour. Check on units to see that all ECONOMIC UNIT RECORDS are complete and accurate.

Help the bankers, if necessary, to complete their records. Remind students this is a "demonstration cycle" only. Indicate they should pay close attention because in Cycle 2 they will do all these things on their own.

2. Using Overlay 1, explain how the Federal Reserve System "creates money." Again, warn students they are on their own to make this system work to their benefit.

Day 3: Cycle 2

1. Have the Fed unit audit the bankers. Allow some time for questions and answers on procedures or problems that come up. Take time here to be sure that everyone is clear on the system and its function.

2. Explain to the entire class that Cycle 2 is a fresh start. Everyone will begin with all clear forms and no accounts or debts. This may confuse some. Clarify now! If you are Unit 10, Carpenter, you as a person are not going to buy another truck; but since you "carpenters" in general buy trucks every year somewhere in the United States, you must take out a loan to buy a truck.

TEACHING TIP

Now is a good time to use the BASIC SUPPLY/DEMAND CURVE overlay. Explain that due to strong demand for all goods and services, most economists believe we are headed up on the curve toward a Boom period. If any unit can double its loan amount, it will increase its profits (net income) by 50%. Use one unit as an example. Then allow interaction to begin.

3. Explain to the 13 units that they are now free to deal with any bank in any combination. They may save at one bank and borrow at another (although some banks may require the borrower to keep an account with them). They *must* get a savings account, a checking account, and get a loan, but it can be anywhere. You are now introducing competition and choice. But, the bankers will also have freedom of choice, and some of the units are not good risks. This will introduce the concepts of *rate differential* and outright economic *rejection.* Let them think about this while you prep bankers in reference to the risk factor.

4. Tell bankers to review the RISK FACTOR MEMO in their materials. Be sure they know they can use different rates for different customers, and they must have some loan interest coming in to stay profitable. Allow them some time to consider their policy/policies.

5. Let Cycle 2 begin; you may have discord, anger, confusion, and name-calling when bankers refuse to give loans to units or raise interest rates. Each unit gets only five minutes to plead its case with any one banker. Some units may have to go to all these banks in an attempt to get loans. Have units who have completed acquiring their loans write a three-paragraph description of the Multiplier Effect getting data from their texts. Tell all units they

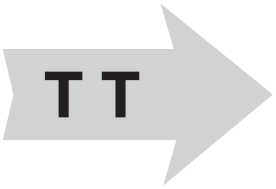
must compute this description by next class hour.

Day 4: Cycle 2 continues

1. Continue Day 3's activities.

2. While Cycle 2 operates, meet with the Fed to develop its role for Cycle 3. When you have these students working on policy, go back to keep peace among the others as they engage in the Cycle 2 activities.

Day 5: Cycle 2 ends



TEACHING **T**IP

You can use "chance" here if you like by having units draw slips from a hat. Most slips are blank, but a few have an "X," meaning the unit cannot pay its loan.

1. You have a Wild Card option at this point. You could arbitrarily announce, *just before* all business is wrapped up, that two or three borrowers are in default and will not pay interest on their loans. If your class is handling the job well up to this point, it makes a nice end to Cycle 2. To choice, risk, competition, and rejection, you can now add "default." If your class is struggling to make things work and you have had enough chaos, ignore this. In either case, end the cycle, balance the books, and audit the banks.

2. Conducting a critique at this point is crucial. You must take time to answer questions such as, "Why did I pay twice as much interest as she did? That stinks!" Or, "Why did that bank make so much money and I almost failed? That isn't fair!" Your task will be to make understanding emerge from a lot of emotion. Go back to basics. What were the risks? Did the rates match? Who made smart choices? Who made mistakes? How much luck (as in real life) was involved?

Note: *Sometime in this sequence you will want to demonstrate two things: 1) how local bank policy affects the local economy; for example, if banks set their rates too high, or they refuse to loan money except to low-risk customers, the economy will "shrink" and 2) how actions of the Fed determine how much money banks will have to loan.*

Day 6: Cycle 3 or discussion circle

1. At this point you can get set to run a full Cycle 3 *or* you can use a discussion substitute. If you choose not to use Cycle 3, follow instruction #2 below; if you choose to use Cycle 3, skip #2 and go to #3 and continue.

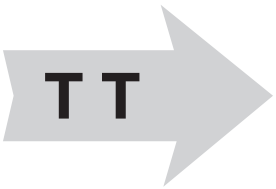
2. If your time and curriculum demands do not allow for the running of a full third cycle, move the students into a seating arrangement that will allow full discussion and have the Fed explain how they *would have* applied their policy. Bankers can quickly explain steps they *would have* taken because of the Fed. Individual units can then react to how that would have affected them. You can then go to the same kinds of questions that are explained in #6.

3. If you choose to run a complete cycle, be sure that all have fresh forms for records; all know that all actions starts from zero again, and that all banks and customers are free to choose each other in their best interests. (There will be no arbitrary failures this time.)

4. Have the Fed announce all the policy changes, post them on the chalkboard, allow the bankers a few minutes to adjust their rate structure and run Cycle 3 as you did Cycle 2. Units' homework (which they begin while waiting on if their banking is finished) is to write a two-paragraph evaluation of the Fed's action (or inaction).

5. When the cycle is complete, balance books, check records, and audit.

6. Run your final critique. Did the Fed and Treasury act with good sense? Did they cool the system and not collapse it? If there were problems, now is the time to discuss them and assign blame or praise and know why.



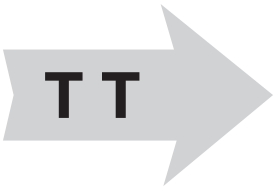
TEACHING **T**IP

Here again, you can use your SUPPLY-DEMAND CURVE overlay to now show how a downward move in demand causes more units to lose money and some to fail. You may also wish to bring in Keynesian theory at this point by displaying and explaining the Keynesian curve overlay.

Day 7 (Optional speakers)

1. Your students awareness level and working background knowledge will never be higher. Any outside speaker you can bring in now will not be met with a blank what-is-he-talking-about stare. Consider a loan officer from a local bank who can explain exactly how he determines who shall borrow money and at what price and with what security. Someone who could explain the FDIC might help. You will still have students who believe that the FDIC protects the bank and its stockholders, too. If you live near a Federal Reserve Bank city, good speakers who will go out to schools and present the Fed's view are available. There are people who can come in and explain wire transfer and computer to computer connections, all the new techniques that eliminate the paper, and even much of the plastic cards. Another option is have a politician or an economist come in and discuss proposed reforms in the system.

Day 8 (Optional research papers)



TEACHING **T**IP

These are just a few ideas for research papers. If your area has a specific economic problem, feel free to include it as possible research material.

1. Consider the following research projects for extra credit:
   - ***Critical essay.*** At this point you will have some students who believe that our system is "out-of-kilter," or that your simulation is. An essay on what is wrong with the system is valid. An essay finding fault with the simulation will help you the next time you run it. Either is valid.
   - ***Pure history.*** Consider a research project on bank crises and problems in the past. There were several in the 19th century, one in 1907, and, of course, 1933. Is/Was there a pattern? Have we corrected it?
   - ***Interview.*** Start with a basic question, such as: Does the present money and banking system of the U.S. work well enough? If not, how would you improve it? Ask a local banker, a local businessperson with a small business, a local businessperson with a large business, an economist or academic at a local college, an accountant, an ordinary person, etc.
   - ***Model.*** Work with the "I could do better than that" reaction of some students and let them start from scratch and propose a better model system to provide loans, keep money in circulation, and control inflation, i.e., describe a better way.

2. If you feel that some sort of evaluation, in formal written form, is needed, try to limit it to clear basic questions on the basic terms learned. Stay with interest, discount rate, OMC, check clearing, spread, default, Fed, prime, APR, time and demand, easy and tight money, safe deposit, risk level.

UNIT 4: STUDENT INTRODUCTION

Welcome to the wonderful world of our banking system. We could have given it some cozy title like "you and our friendly local bank," or even "you and the friendly Federal Reserve System." But, that is *not* the way it is!

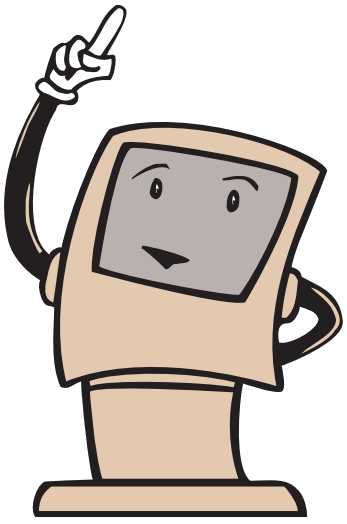
Roles in past units

If your class is doing all the units in this series, your first role was that of an individual, concerned with your job, your mortgage, and your budget. Then you moved to a unit where you had to become part of a business group and make decisions and act upon what was best for the business. Then you studied how taxes and government regulations affect you as an individual, but you learned that problems associated with these areas are solved (or at least addressed) on the state or national level by groups.

You and banking forces

In this unit you will have to accept the reality that the individual "you" element is even less important to the people and forces that operate our banking system. Monetary policy is never decided on the basis of what is best for Joe Smith, the carpenter. It is always decided on what is best for the "economy," a part of which is "construction," which has a part called "carpenters," and, in turn, perhaps one carpenter named Joe Smith. Don't feel inconsequential; just face the fact that this is the way the system works. Learn to understand it and deal with it as you role-play being a particular "economic unit." Then when you understand how the Fed and money works in our economy, you can make suggestions for improvement. Good luck!

"... Don't feel inconsequential ... as you role-play being a particular 'economic unit.'"



UNIT ROLE DESCRIPTION - 1

Economic type _____

Congratulations, you and your partner are an example of a basic kind of unit in our economic system. If you do your job well you will end this simulation with a much clearer understanding of how our banking system really works.

1. In Cycle 1, you must open a ***savings account*** at the bank (A, B, or, C) indicated on the PROFILE CHART. In this cycle only, you have no choice of bank, and they have no chance to turn you down. The chart tells you how much to save. Do it, and keep full record of it on the record forms.

2. Open a ***checking account***, get a few blank checks (you may not need them yet), and keep a complete record on the ECONOMIC UNIT RECORD form. (Note: If you are in a unit that has two persons, use only one form.)

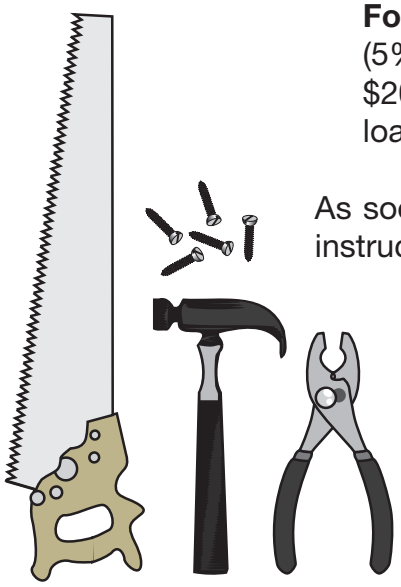
3. Take out a loan from your unit's bank in the amount shown in column 2 of the PROFILE CHART. You will not bargain over rates in Cycle 1; they are all fixed at this point. Keep complete records of your loan. The loan will be in check form from the bank. You will handle it in one of three ways:
   - If the check is to your unit, deposit it in the unit's account and then write a check to the "seller."
   - If the check is made out to the seller, and the seller is present, just give it to him/her and he/she can then deposit it in their unit's account. If the seller is not present, give the check to the seller's bank.
   - Take the check made out to you and endorse it to the seller. Make sure you get a receipt.

   In all cases the check should go from your bank, through you to the seller, and into the seller's account. *All checks must be deposited.*

Note: If you are unit 1, 3, or 4, you do not have a logical place to go with your check. However, since Bank C has an account for a steel company, number 1's loan goes into that account. Since Bank B has an account for a brokerage firm, number 3's check goes there. Number 4's check goes into an oil company account in Bank C. For all other people, the seller should be obvious from the chart. Sellers, or banks of sellers, are given in column 3.

Well, that seems simple enough. (In the actual U.S. economy there are far more checks used, but this is a limited simulation, not a replica of the entire economy.) However, your job is not quite that simple. Each cycle is intended to represent a year. If you have looked at your records, you may notice that you have contracted to pay the bank

some interest on a loan, and they have contracted to pay you interest on savings. The one rate is far greater than the other. This rate difference is called the "spread." A bank *must* charge you more to borrow than it pays you to save, or it will go bankrupt! You will really learn this in Cycle 2 and Cycle 3, but for now, just settle your account. Go to your bank and get credit for your savings interest and change your account to match. Then pay your loan interest now by writing the bank a check for it.



For example: The carpenter will get savings interest of $500 (5% of $10,000). But he will owe loan interest of $2,000 (10% of $20,000). He must pay $2,000 to the bank that gave him/her the loan.

As soon as your system is set and all are clear on functions, your instructor will start the action for Cycle 1.

PROFILE CHART

Unit type	Loan amount	Purpose of loan	Seller	Cycle income	Business/ living expenses	Savings	Cycle 1 Bank	Credit risk rating	Comments
1. Plans builder corporation	2,000,000	Purchase steel plates	Inland Steel Bank C	3,000,000	2,950,000	500,000	A	Low	1. Loan interest rates for all loans is set at 7% for low risk; 10% for medium risk; 15% for high risk. After Cycle 1, banks may charge whatever interest rate they wish. 2. Bankers must write checks for loans to borrowers. 3. Borrowers then write checks equaling the loan amount to sellers and give these to sellers directly or to sellers' bank. 4. Sellers then deposit these checks in their banks.
2. Airline corporation	2,000,000	Purchase airplanes	Plane builder #1	2,500,000	2,000,000	500,000	B	Med./ high	
3. Investor/ speculator	200,000	Purchase stock	Broker Bank B	200,000	180,000	50,000	C	High	
4. District fuel wholesaler	100,000	Purchase fuel	Oil co. Bank C	150,000	125,000	25,000	A	Low	
5. Used heavy equipment dealer	100,000	Purchase bulldozer	Road Const. Bank A	200,000	180,000	20,000	B	Med.	
6. Automobile dealer	100,000	Purchase cars/trucks	Ford Motor Bank B	150,000	140,000	10,000	C	Med.	
7. Builder, homes/ com. buildings	50,000	Purchase bulldozer	Dealer in #5	75,000	65,000	10,000	A	Low/ med.	
8. Medical doctor	50,000	Remodel office	Builder in #7	100,000	75,000	25,000	B	Low	
9. School teacher	20,000	Purchase automobile	Dealer in #6	40,000	35,000	6,000	C	Low/ med.	
10. Skilled carpenter	20,000	Purchase truck	Dealer in #6	50,000	40,000	10,000	A	Low	
11. Semi-skilled assembly line	20,000	Build addition to home	Builder in #7	30,000	28,000	2,000	B	Med./ high	
12. Trash collector	10,000	Purchase used truck	Dealer in #6	20,000	20,000	—0—	C	High	
13. Welfare family	5,000	Repair roof	Builder in #7	10,000	12,000	-2,000	A	Very high	

ECONOMIC UNIT RECORD

Unit name _____ Cycle # _____

Individual's name: _____ Unit's bank _____

Savings account

Deposits: _____

_____

1. Sub-total: _____

x Int. rate ____% _____

Int. earned _____

2. Sub-total: _____

Acct. balance (1+2) _____

Checking account: Beginning bal. _____

Checks to	Check amt.
_____	_____
_____	_____
_____	_____
_____	_____

Total <_____>

Ending bal. _____

Loan record at bank

Amt. borrowed _____

x Interest rate ____% _____

Interest paid _____

Net wealth

Savings balance _____

Checking balance _____

Interest paid <_____>

Total _____

Unit name _____ Cycle # _____

Individual's name: _____ Unit's bank _____

Savings account

Deposits: _____

_____

1. Sub-total: _____

x Int. rate ____% _____

Int. earned _____

2. Sub-total: _____

Acct. balance (1+2) _____

Checking account: Beginning bal. _____

Checks to	Check amt.
_____	_____
_____	_____
_____	_____
_____	_____

Total <_____>

Ending bal. _____

Loan record at bank

Amt. borrowed _____

x Interest rate ____% _____

Interest paid _____

Net wealth

Savings balance _____

Checking balance _____

Interest paid <_____>

Total _____

BANKER ROLE DESCRIPTION - 1

Congratulations, you and your partners have just become a bank. In the next few days you may make some friends, you will make some enemies, but you must keep our money system operating.

Directions:

Open savings accounts at 3%.

1. Open savings accounts for all those assigned to your bank for Cycle 1. The amount that can be deposited in each account is shown in the savings column in the PROFILE CHART. Keep a record of the name, the number, the amount, and the interest to be paid in your BANK RECORD. Cycle 1's rate will be 3% APR on all savings accounts. Also, take an amount equal to the total of this account now, and put it into the Federal Reserve Account for your bank. Keep a record of this, also, on your BANK SUMMARY RECORD. Compute your reserve requirement using the record sheet.

Open checking accounts.

2. Open checking accounts for all those assigned to you. These people can deposit money from their savings *or* checks they get paid in their business transactions. Keep a record of the name, the number, any amounts deposited, and any checks written on these accounts. Give the customer blank checks as they need them and be sure your records show the amount on each check. Also, take an amount equal to the total deposits and put it into the Federal Reserve Account for your bank. Keep a record of this on your BANK RECORD SHEET. Also, compute your reserve requirement.

Open your account with the Fed. Compute loan amount available.

3. Go to the Federal Reserve Board and borrow the total amount available. You will pay 5% interest on this loan up front. This is called a discounted loan—a basic Fed function. Keep a record of this amount and interest for the final settlement of accounts.

   Warning. Before you go any further, learn Rule 1: You may *never* lend out money you do not have, in hand, at that moment. Never, never, never! As the poet said, "He who lends what isn't his'n, will directly go to prison."

Loan money to customers, putting the loan money in their checking accounts.

4. Now you can lend money, the full amount shown on the PROFILE CHART, to those people assigned to you. Keep a record of the name, the number, the amount, and the interest rate. In Cycle 1 the loan rate to borrowers will be 7% to "low risk," 10% to "medium risk," 15% to "high risk," and 20% to "very high risk."

   Warning. Before you go any further, learn Rule 2. You must always charge a higher rate to people who borrow from you and pay a lower rate to those who deposit money with you. This is called "the spread." As the poet said, "He who borrows at ten and lends at five, will see his bank take a fatal dive!"

BANKER ROLE DESCRIPTION - 2

Buy bonds with excess money not loaned.

5. Prepare for a situation that may occur in Cycle 1, but most likely will wait until Cycle 2 or Cycle 3. You may find that you have lots of deposits, but not much money loaned out. To put it another way, you will be paying interest to lots of people, but not taking in much interest. This can ruin your bank. You may take these excess deposits and buy U.S. Treasury Notes from the Treasury Department. Until the treasury decides otherwise, they will pay 7% to you. This will keep your "spread" and follow Rule 2, although it will have the effect of shrinking the local economy (and making your local businesspersons angry).

Settle up with all parties.

6. Your job in Cycle 1 is to learn the basic functions of the bank with *no* problems. You should have opened three to five savings and checking accounts, made three to five loans, and borrowed from the Fed. Now, settle up with all parties. Take one customer at a time and determine how much interest you owe this individual and he/she owes your bank. Add to or subtract from accounts as needed. Keep a record and *show a profit!*

"Keep a record and *show a profit!*"

You are now ready to make this system work with stress, problems, and some serious value choices during Cycle 2.

BANK RECORD

Unit name _____

Savings account # _____

Deposits: _____

_____

_____

_____

1. Total: _____

x Int. rate ____% _____

2. Int. paid _____

Acct. balance (1+2) _____

Checking account # _____

Deposit amt:.	Check amt.	Written to
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Totals: 1. _____ 2. _____

Acct. balance (1 less 2) _____

Loan record

Cycle	Loan amt.	% Interest	Amt. interest	Paid/open
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Unit name _____

Savings account # _____

Deposits: _____

_____

_____

_____

1. Total: _____

x Int. rate ____% _____

2. Int. paid _____

Acct. balance (1+2) _____

Checking account # _____

Deposit amt:.	Check amt.	Written to
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Totals: 1. _____ 2. _____

Acct. balance (1 less 2) _____

Loan record

Cycle	Loan amt.	% Interest	Amt. interest	Paid/open
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

BANK SUMMARY RECORD

(For internal use and federal audits)

I. Savings account balances of units

#1	_____	#6	_____
#2	_____	#7	_____
#3	_____	#8	_____
#4	_____	#9	_____
#5	_____	#10	_____

Total _____

Fed Reserve (x 20%) <_____>

Total savings value _____ [1]

II. Checking account balances of units

#1	_____	#6	_____
#2	_____	#7	_____
#3	_____	#8	_____
#4	_____	#9	_____
#5	_____	#10	_____

Total _____

Fed Reserve (x 20%) <_____>

Total checking value _____ [2]

III. Loans from Federal Reserve System Cycle _____

- Amount of "cash" in account (total savings + checking) = _____
- Reserve required by Fed (20%) x .20
  <minus> =<_____>
- Balance basis for loans = _____
- Discount rate (x 5%) x .05
- Loan cost <minus> =<_____>
- Discounted balance available for loan basis: = _____
- Total funds available to loan on "demand" (x5) x 5
  = _____ [3]

IV. Loans given out

To:	Amount:	Interest rate	Interest col.
_____	_____	x_____	_____
_____	_____	x_____	_____
_____	_____	x_____	_____
_____	_____	x_____	_____
_____	_____	x_____	_____

Total loans: _____ [4] Total interest _____

V. Summary of

[1] Savings total: _____

[2] Checking total: _____

[3] Fed. Reserve Loan funds available: _____

[4] Minus loans made: <_____>

Total _____

VI. U.S. Bond Purchase

1. Total amount available—See III. You can buy bonds as option to giving loans.
2. Amount purchased (in $1,000 lots at ___% interest) _____
3. Balance available for loans _____

VII. Loan summary

1. Interest pd. on savings accounts:

   Total savings

   x interest

   x rate ____ =

   Total costs

   _____
2. Interest paid on Fed Reserve loan _____
3. Interest collected for loans _____
4. Interest collected from U.S. bonds _____
5. Totals
   (1) Interest collected: _____

   (2) Interest paid: <_____>

   (3) Profit/loss: _____

CHECK PAGE

Name _____ Number _____

Unit _____

_____ 20 ___

Pay to _____ $ _____

_____ dollars

DESERT SAVINGS
34098 Sunshine Way
El Cajon, CA 92040

Memo _____ _____

⑈:2458150 7:⑈ [ ]

Name _____ Number _____

Unit _____

_____ 20 ___

Pay to _____ $ _____

_____ dollars

DESERT SAVINGS
34098 Sunshine Way
El Cajon, CA 92040

Memo _____ _____

⑈:2458150 7:⑈ [ ]

Name _____ Number _____

Unit _____

_____ 20 ___

Pay to _____ $ _____

_____ dollars

DESERT SAVINGS
34098 Sunshine Way
El Cajon, CA 92040

Memo _____ _____

⑈:2458150 7:⑈ [ ]

CHECK PAGE - 2

Name _____ Number _____

Unit _____

_____ 20 ___

Pay to _____ $ _____

_____ dollars

MOUNTAIN SAVINGS
10954 Olympus Drive
Cascade, Colorado

Memo _____

⑈245815078⑈ [ ]

Name _____ Number _____

Unit _____

_____ 20 ___

Pay to _____ $ _____

_____ dollars

MOUNTAIN SAVINGS
10954 Olympus Drive
Cascade, Colorado

Memo _____

⑈245815078⑈ [ ]

Name _____ Number _____

Unit _____

_____ 20 ___

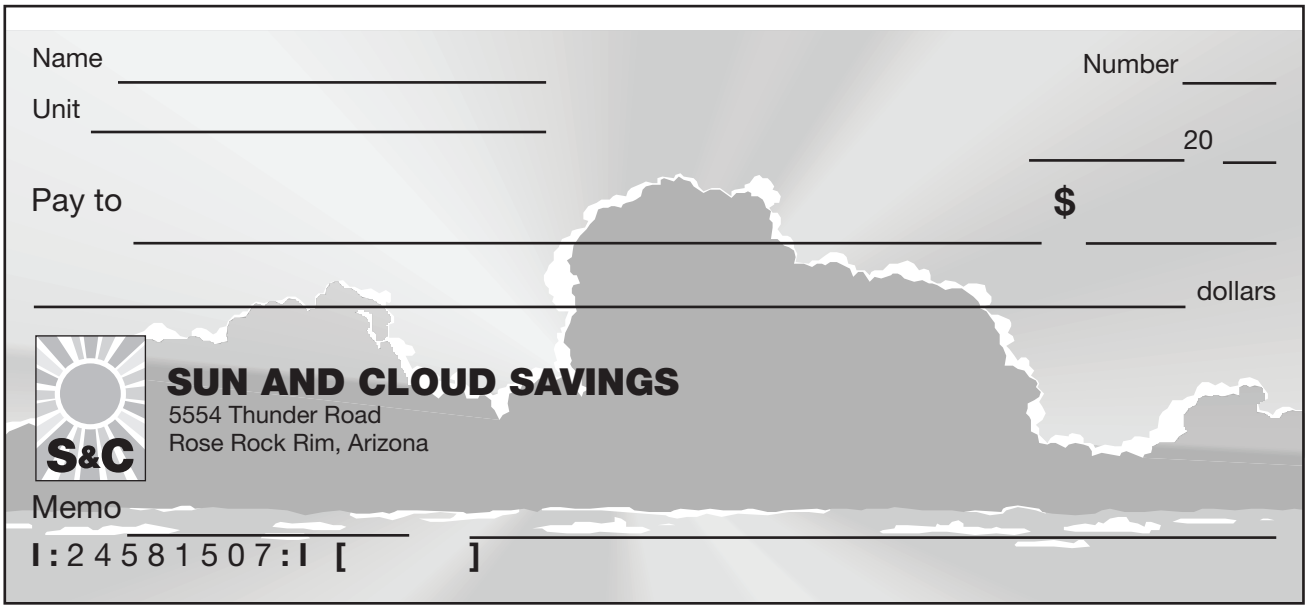
Pay to _____ $ _____

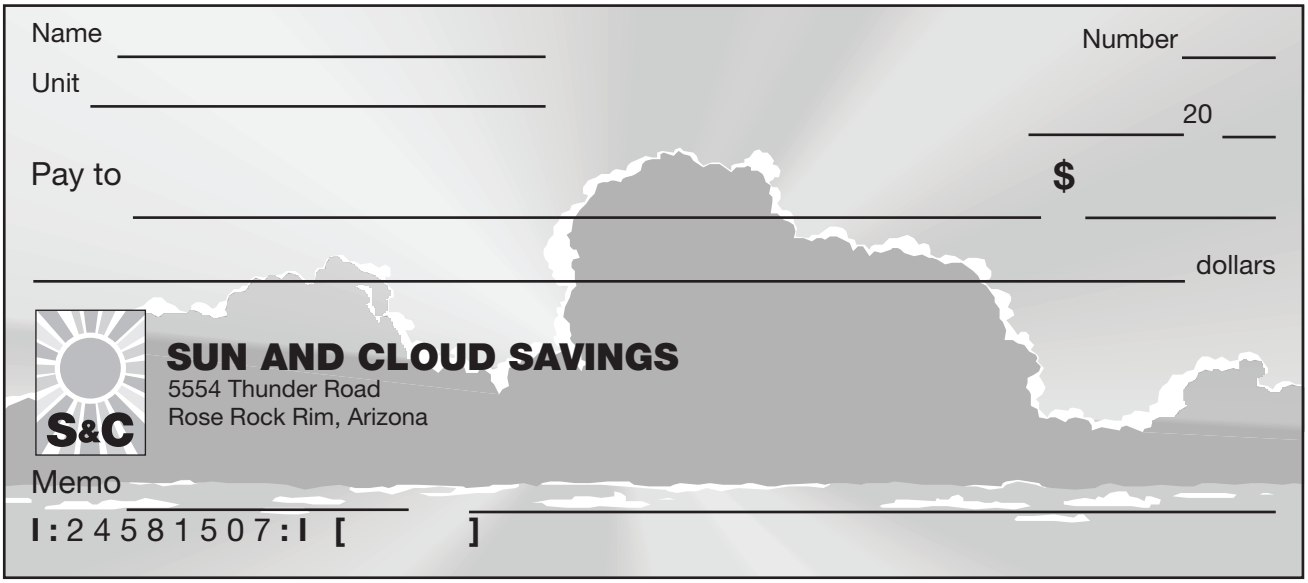
_____ dollars

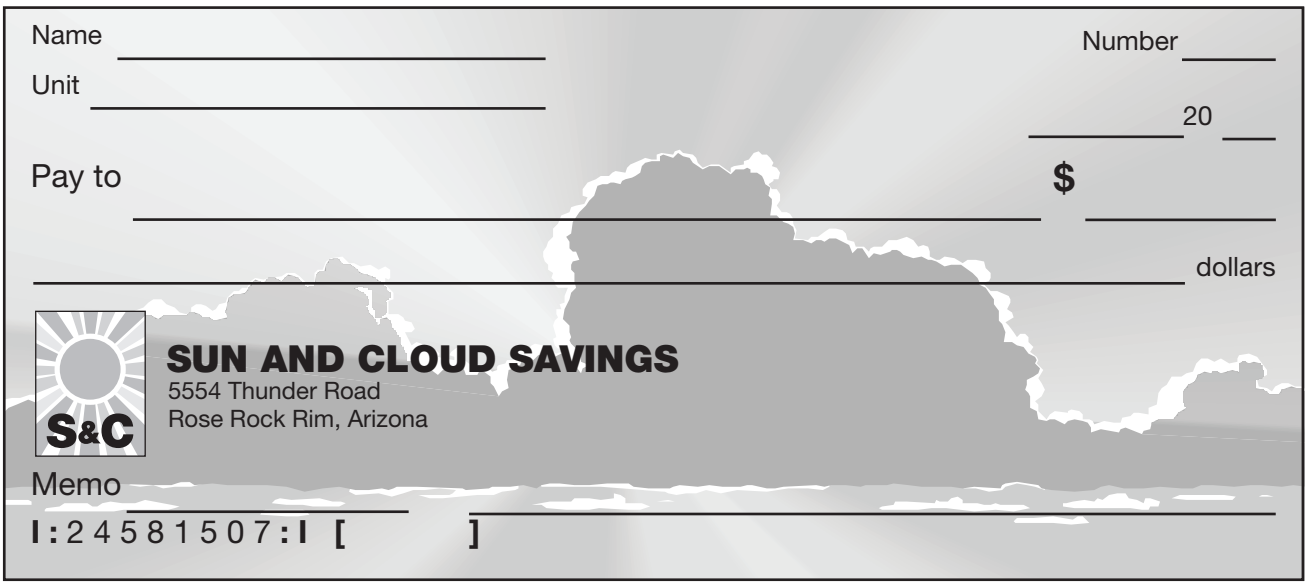
MOUNTAIN SAVINGS
10954 Olympus Drive
Cascade, Colorado

Memo _____

⑈245815078⑈ [ ]


Name
Number
Unit
20
Pay to
$
dollars
S&C
SUN AND CLOUD SAVINGS
5554 Thunder Road
Rose Rock Rim, Arizona
Memo
I:24581507:I [ ]


Name
Number
Unit
20
Pay to
$
dollars
S&C
SUN AND CLOUD SAVINGS
5554 Thunder Road
Rose Rock Rim, Arizona
Memo
I:24581507:I [ ]


Name
Number
Unit
20
Pay to
$
dollars
S&C
SUN AND CLOUD SAVINGS
5554 Thunder Road
Rose Rock Rim, Arizona
Memo
I:24581507:I [ ]

RISK FACTOR MEMO

Before you make any loans in Cycle 2, consider your role. You *cannot* make a profit on loan interest that is *not* paid. Do you know who might do that to you? Get a copy of the PROFILE CHART and study it now! Remember that all banking is a delicate balance of risk and reward.

Consider risks:

Which potential borrowers have good reliable income?

Which have a good savings position to cover interest?

Which has property that might make good collateral?

Consider rewards:

You may charge any interest rate from 5% to 25%. You should get a higher return from a greater risk. List the kinds you would give a rate of:

- **5%**
- **10%**
- **15%**
- **20%**
- **25%**

Note:
This memo is for banker use only. Do ***not*** *let it become public information.*

Consider competition:

If you refuse a loan or demand too high a rate, the borrower can walk out and deal with another bank. If you are paying interest to savers, but not getting interest from borrowers, you have a negative "spread" and you fail!

FEDERAL RESERVE BOARD/TREASURY - 1

Congratulations, you and your partners have just become the Federal Reserve Board with one of you acting as the agent of the U.S. Treasury. You will exert tremendous control over the banking and money system; if you do your job poorly, we will have chaos and a depression.

Directions:

See Part I of your record form.

1. Open a Reserve Account for each bank. Banks must keep at least 20% of all savings and checking balances with you. This is to provide a safety cushion for the future, and is the "Reserve" in Federal Reserve System. Keep a record on your FEDERAL RESERVE RECORD sheet.

See Part II of your record form.

2. The banks will not have enough money at first to met all the loan demand, but it can borrow money from you by creating "demand deposits" equaling 5 x 80% of its total deposits with you.

See Part III of your record form.

3. Although the Federal Reserve Board and the U.S. Treasury Department are separate entities, one of your team should act as the U.S. Treasury. Sell Treasury Notes to banks *if* the banks ask to buy them. Record the amount of notes sold, the money you receive, and the interest you will pay, 7%, at the end of the cycle. Be sure that the banker subtracts that money from his/her bank accounts and records the change. You may also sell bonds to individuals through their banks.

See Part IV of your record form.

4. Clear all checks that must go between banks. For example, if Bank A gets a check to deposit that came from Bank B, it must enter the amount in the proper account, but then send the actual check to you. You will show it as a deposit in the Federal Account of Bank A and a withdrawal from Bank B. Then cancel the check and return it to Bank B. In reality this is a process involving thousands of banks, 12 regional federal banks, and millions of checks. In this simulation we will just do a few to go through the correct motions.

See Part V of your record form.

5. Act as auditors for the three banks at the end of the cycle. You *must* be sure that no bank has loaned more money than it has on hand.

FEDERAL RESERVE BOARD/TREASURY - 2

Policy guidelines

As you can see, your job in Cycle 1 is pretty easy. But, the Federal Reserve Board is not just a bunch of bookkeepers. They also set policy! When other problems hit the class in Cycle 2, you must get prepared for your role in Cycle 3. You will have four techniques to chose from. Your objective will be to prevent inflation and cool down an economy.

- ***Reserve requirement.*** You can raise this amount (now 20%) to 25%, thus draining money from the banks to the Fed.
- ***Open Market Committee.*** As members of this committee, you can sell bonds to the public. As citizens buy, money goes from their account to the Fed. Less money is available for the banks to lend, but the government has more money to spend.
- ***Discount rate.*** You can raise the discount bank loan rate from 5% to 10% or 15% or more. This forces the banks to charge more (to maintain their spread) and should discourage borrowing.
- ***Treasury notes.*** To maintain foreign confidence in U.S. bonds, you could raise the Treasury bond rate to 10% or higher. This may cause banks to buy bonds instead of lending to individuals and, thereby, "shrink" the economy. The power will be in your hands to either slow inflation and cool off the economy, perhaps even devastate it, or to stimulate it by making money easier to borrow (assuming banks are willing to assume more risk). Plan now and be careful!

Note: *Historically, this discount rate has normally been changed gradually, up or down, but if the Fed believes rapid escalation is necessary to control inflation, it has the power to do so without congressional approval.*

Reserve requirement

Open Market Committee

Discount rate

Treasury notes

FEDERAL RESERVE RECORD

Bank _____

Cycle _____ Date _____

I. Reserve requirement (20%)

Total savings: _____

Total checking: _____

Total account = _____

Reserve required (x .20) = _____

Total reserve = _____

II. Balance basis for loan:
(80% of account balance) _____

Less discount rate
(5%) x .05

Less loan cost to bank = <_____>

Loan basis amount = _____

Loan potential for bank
(x 5) = _____

III. Bonds (T-Bills) purchased by bank

Face amount: _____

Times interest rate (7%) x .07

Equals interest earned: = _____

IV. Bonds (T-Bills) purchased by individual unit depositors

Face amount: _____

Times interest rate (7%) x .07

Equals interest earned = _____

V. Bank "clearing house" check record [4]

Deposit to account		Withdrawal from account	
From bank	Amount	To bank	Amount

VII. Reserve account

Savings total _____

Checking total _____

Total _____

Reserve (20%) _____

Reserve amount required _____

*Once check is recorded, cancel it by writing initials across the face. At end of cycle return all canceled checks to bank of origin.

FED POLICY CHANGES

1. Review the policy guidelines part of your original job description. Your job is quite simple. At the beginning of Cycle 3, announce any changes in Fed policy that you decide upon. Your goal should be to slow down and to cool off—not to kill—the economy.

2. Consider these possible results of your actions:

   - A change in the reserve requirement will have only a *small* effect on loan volume.

     Is it worth it? _____

   - A move by the OMC to sell securities will move *some* money out of banks.

     Will it matter? _____

   - A change in the discount rate upward will not directly affect loan volume, but it will make every loan cost more if the banks borrow from you. This *may* slow down loan demand and it may also force out some marginal borrowers.

     How high is enough to do the job? _____

   - A sale of Treasury notes with high interest on them will make foreign investors like our dollar, but it will pull money from banks and thus shut off loans.

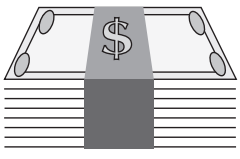
     Can you keep this flow under control? _____

Remember: *Keep things calm. Do not create havoc!*

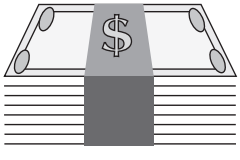
> Your goal should be to slow down and to cool off—**not to kill**—the economy.

How the Federal Reserve System "creates" money

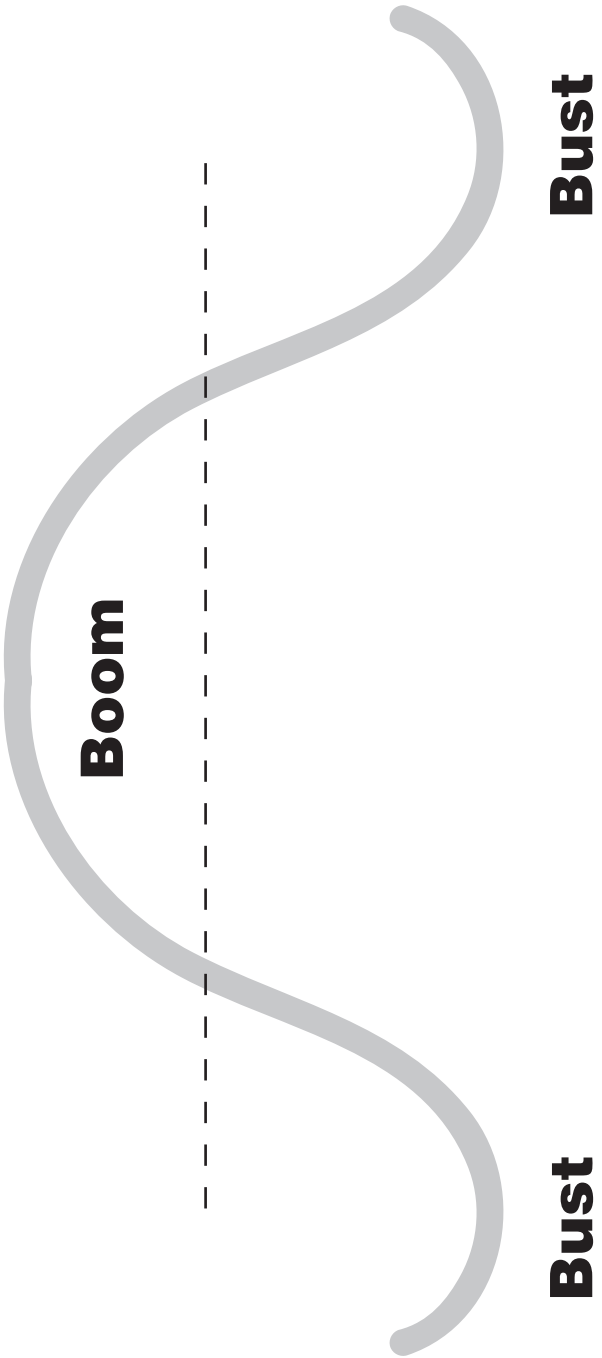
1.	Member banks set up an account in the Federal Reserve Bank equaling the total of their savings and checking accounts	100,000.00
2.	Fed requires a certain percent (at present, 20%) to be kept on reserve.	x .20
3.	Reserve required	20,000.00
4.	Balance basis for loans	80,000.00
5.	Fed sets its own loan interest rate (now 5%). This is called the "discount rate."	x .05
6.	Loan cost to member bank	4,000.00
7.	"Discounted" amount basis for loans	76,000.00
8.	Total amount is "multiplied" 5 times because bank can create through loans, demand deposits equaling $5 for each $1 it adds to its reserve.	x 5
9.	Total amount available to loan	380,000.00



Overlay 1

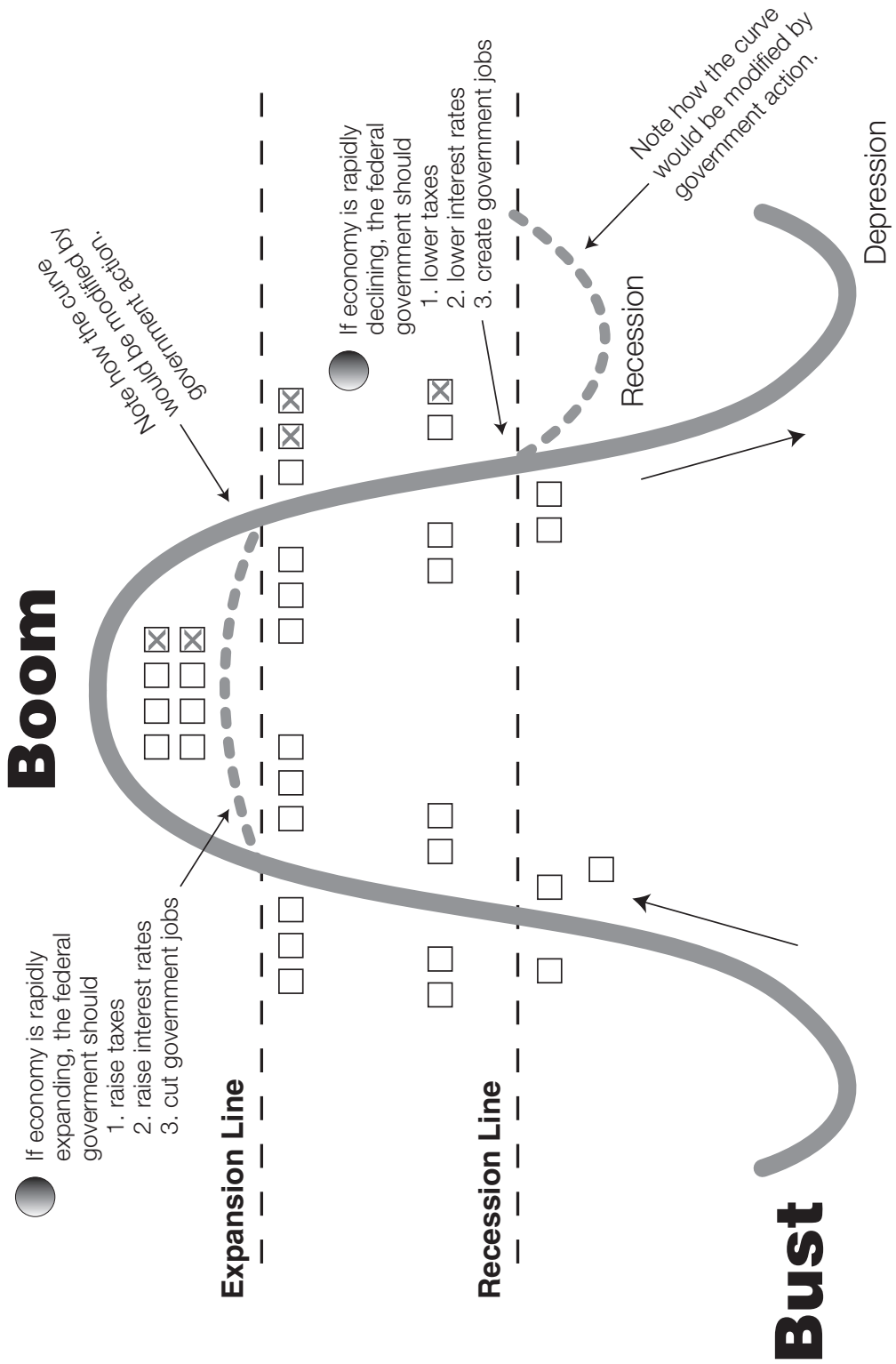


BASIC SUPPLY/DEMAND CURVE



Overlay 2

KEYNESIAN SUPPLY/DEMAND CURVE



Overlay 3

INTRODUCTION

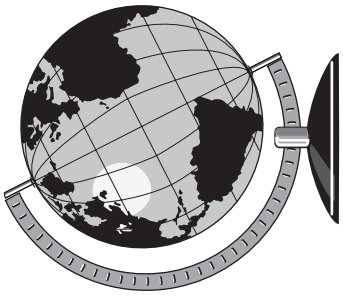
World Trade

In this unit of the series, students will act as nations and take part in a simulation of foreign trade throughout the entire world.

Goals

At the conclusion of the action cycles, most of your students should:

- know the basic terminology of world trade;
- understand that the fundamental need of all nations, over a period of time, is to achieve some sort of trade balance with other nations;
- appreciate the negative effects of a chronic trade deficit on a nation's economy and currency;
- understand the techniques, positive and destructive, used by nations to promote their trade positions.
- appreciate the risks for all in "trade wars" and retaliation;
- be able to deal with the mathematics of exchange rates and currency values; and
- appreciate the economic logic of free and open trade between nations.



To accomplish all of this, first you will need to carry out the teacher preparation found on the next two pages. Then, you should study the Unit Time Chart on page 4 and the Daily Directions that begin on page 5.

TEACHER PREPARATION - 1

Using a textbook for this unit can be difficult. Textbook treatment of world trade can be good, but it can also be elementary or full of technical overkill. In your preliminary teaching, try for a balance. Enter the activity with students who have a working knowledge of these terms:

- **Balance of payments.** Be sure they know that it does *not* have to be in balance for *each* nation we trade with. Over time it must be in general balance or we will only buy and never sell: that is a recipe for national bankruptcy.
- **Balance of trade.** Same understanding as in balance of payments.
- **Boycott.** What is it? Why use it? What is the intended result?
- **Cartel** Who forms one? What is the purpose? Does it work?
- **Currency exchange rate.** What is it? Why does it fluctuate so much? How can it distort physical world trade?
- **Dumping.** What is it? Is it a nasty action or just smart business?
- **GDP/GNP.** How is it affected by world trade?
- **Inflation.** What is the effect of trade and currency changes on it?
- **Quota.** What is it? What is the purpose? Who is helped and who is hurt by it?
- **Tariff.** See quota.

TEACHING **T**IP

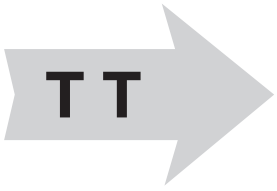
Have students continue keeping their vocabulary lists in their notebooks.

Setup directions

1. **Duplication.** Based on a class size of 40, you should duplicate the amount in parentheses.
   - UNIT 5: STUDENT INTRODUCTION (40)
   - NATIONAL DESCRIPTIONS (40)
   - RULES AND TASKS (40)
   - WORLD TRADE BALANCE SHEET (10: two for each nation)
   - PENALTY LIST (10: two for each nation)
   - TECHNIQUE LIST (10: two for each nation).
   - WORLD TRADE PATTERNS (10: two for each nation)
   - WORLD TRADE RECORD FORMS (30: six per nation; 18 per nation when cut apart))
   - NATIONAL TRADE RECORD FORM (30)
   - CURRENCY (See #4 on page 4.)

2. **Basic instructional material.** Try to obtain a good textbook with material on world trade, currency, political actions affecting the trade, and a decent glossary of terms. Use articles from *Time, Newsweek, U.S. News, Wall Street Journal,* etc., as a source of detailed examination of specific current problems. They often have detailed proposals for actions they feel should be taken. These can be quite useful in Cycle 2 and Cycle 3 as references.

3. **Awareness items.** This should not be difficult. Colorful advertisements for cars, televisions, fashions, perfume, and wine can be all over the bulletin board *with* clear indication of nation of origin. Balance it with pictures of U.S. items for export: Boeing 747s, boats full of wheat, Coca-Cola, etc. Also, scare headlines and threats abound. "Soon Japan will sell all the cars." "Jobs lost in Detroit." "McDonalds is everywhere—stop the Yankee Invasion!" There are usually a few bombastic political speeches designed to grab headlines. A few sample labels from clothing or from local produce bins would help. With these aids your students will have no excuse for being *unaware* of world trade!



TEACHING **T**IP

Use a different color of paper for each of the five nations' currencies. Doing so will make it easier to recognize the money.

4. **Currency.** Money should be run off, cut, and bundled before Day 5. Duplicate an equal amount of each currency to use during de-valuation. Use this breakdown for each nation's units (in millions):
   - NAR: 5-25s, 15-10s, 25-1s
   - WER: 5-25s, 15-10s, 25-1s
   - FER: 10-25s, 30-10s, 50-1s
   - EER: 15-25s, 40-10s, 25-1s
   - RA: 20-25s, 65-10s, 50-1s

5. **Time restraints.** We are aware that time and curriculum restraints may not allow you to use enough class periods to run the entire simulation. You can use a shorter option by using the full action of Cycle 1 and Cycle 2 and then a class discussion of the "what if" possibilities of the kind of problem built into Cycle 3, *or* you can do the complete Cycle 3. Either way will work.

UNIT TIME CHART

This chart is intended as an example; alter as desired.

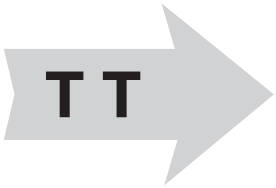
Organization Pick students Organize nations Hand out all materials for Cycle 1 Allow students time to study 1	Cycle 1 begins Announce problem Conduct question and answer session End action 2	Cycle 1 ends Balance books Auditors check on others Determine winners and losers 3	Cycle 2 begins Hand out clean forms at zero Hand out RULES AND TASKS and TECHNIQUE LIST Do plot and scheme ... and discuss winning/ losing ... and then critique 4	Cycle 3 begins Hand out money; explain rates; discuss tactics; allow “plot” time Trading begins 5
Devaluation Currency/ discussion 6	Cycle 3 ends Auditors check on others Determine winners and losers Discuss lessons learned 7	Option: Outside speakers 8	Option: Test 9	Option: Research projects 10

Day 1: Introduction

1. Pick students for each of the five nations, with the numbers being not that crucial although a large class will seem to have surplus labor for Cycle 1. (This problem will take care of itself in Cycle 2 and Cycle 3.) Have students form desks into five national circles.

2. Tell each nation it is to create a flag within the next day or two.

3. Hand out these materials students will need during Cycle 1:
   - UNIT 5: STUDENT INTRODUCTION
   - NATIONAL DESCRIPTIONS
   - RULES AND TASKS
   - WORLD TRADE BALANCE SHEET
   - WORLD TRADE PATTERNS
   - PENALTY LIST
   - TRADE RECORD FORM
   - NATIONAL TRADE RECORD FORM



4. Allow time for students to read material, organize nations by picking a leader and an auditor (who will audit the other teams' records) and ask questions.

TEACHING **T**IP

Refer to the student handouts.

Day 2: Begin Cycle 1

1. Review tasks of each role for each nation. Be sure that all nations know how much of what item needs to be bought and sold. Clarify again, if necessary, the use of items from the far right column of the balance sheet. There are penalties if these are used.

2. Announce the "problem" that is a part of Cycle 1:

Read or tell.

"The Republic of Arabia will cut oil production by half, and sell only 100 units to the entire world. They will sell 25 to the NAR, 50 to the FER, and 25 to the WER. The price per unit will be tripled."

3. Establish a ground rule for this cycle. There will be **no price bargaining** in this cycle. Each nation's only objective is to buy or produce enough of the needed items to achieve a physical trade balance. This cycle is kept overly simple to get some practice in the system and dealing with a problem. Cycle 2 is more wide open. (You must also decide, now, if you wish to allow EER to raise its oil price—this would seem realistic—your choice.)

4. Answer questions as needed and then begin the action. All nations buy, sell, record transactions, do totals for the nations in the cycle.

5. Complete the action and stop.

Day 3: Complete Cycle 1

TEACHING **T**IP

Particularly have auditors check use of "surplus" items which carry a price penalty.

1. Allow auditors from each nation to check on the others. Students will sometimes "forget" that they were short some oil or "make a mistake" and not show the extra cost of using a right column item.

2. When you are sure that you have an honest world, determine who "won" or "lost" in Cycle 1. *Do not make a big thing of this;* the cycle was rigged to create a particular problem and nations had little flexibility to deal with it. Remember your Cycle 1 objectives: teaching students to learn the system and deal with a problem.

3. When you are satisfied that all know what happened, why, and what their jobs are, set up for Cycle 2.

Day 4: Cycle 2

1. All nations start with clean forms and the trade balances they had back at the original point. Hand out RULES AND TASKS and TECHNIQUE LIST. Allow some time to read and study.

2. Clarify any problems with the new roles, rules, and actions. Make it clear that in this cycle *all prices* can be negotiated, all deals or techniques from the list can be tried. They must not forget the primary objective: buy all that you need and sell all that you must and try to balance the trade!

3. If time now, or at the beginning of the next hour, allow some "plot and scheme" time. It works best to do this in two stages. For the first "x" minutes the nations should meet and develop whatever strategies they think will work. If still in Day 3, stop at this point.

4. If students have had time for a "plot and scheme" period, set up another block of "x" minutes to allow representatives from the nations to circulate and make deals and treaties etc. *Do not* let them carry forms and make buying and selling deals at this point. This is the diplomatic phase.

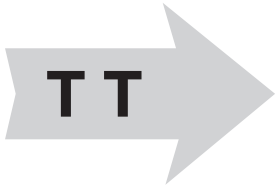
5. When these two activities are complete, allow Cycle 2's actual buying and selling to take place. It will be hectic. You must be the arbiter of all disputes and settle them quickly. It will be chaotic; the world is chaotic! You will have to set a fixed time to end trading, or it will go on and on.

6. Stop the cycle, allow nations a few minutes to total the numbers, and permit the auditors to move from nation to nation to check the results. You may have disputes, but if you made everyone keep track of trades, on the forms, with date and time, you will have a complete paper trail that will allow you to settle disputes fairly.

7. Take sufficient time to determine the winners and losers (not very important) and why they won or lost (very important).

8. A good critique here is crucial; this is where the lessons are learned.
   - What made this "world" act as it did?
   - Who has natural advantages?
   - Who has more clever traders or diplomats?
   - Were some actions unfair or just tough?
   - How much of these could be realistically used by actual nations?
   - What did you learn?

Day 5: Begin Cycle 3



TEACHING **T**IP

You may want to point out that while there is no "world" federal reserve system, there is a World Bank supported by rich countries to make loans to poor "third-world" countries.

1. Distribute the following amount of currency to each nation. Each nation gets enough to cover all they need to buy plus extra for making change. NAR gets 300 million dollars, WER gets 250 million marks, EER gets 800 million rubles, AR gets 1,200 million petros, and FER gets 600 million yen. You should be holding an equal amount of each currency to use as the extra cash for the nation(s) that might devalue during the cycle.

2. Explain that all nations "create" their own currency in various ways: selling bonds, using World Bank loans, or simply printing more bills.

3. Explain the exchange rate that will be in place when the cycle starts. Try to clarify the situation in regard to the value of one currency compared with another. Although in the short run, there is little connection between the numerical exchange and the importance or strength of a nation; in the long run, a nation should balance its imports and exports to stabilize its currency and maintain (or

obtain) world confidence in it. Put the exchange table below on the chalkboard; it should help.

If you have	It would be worth:			
10 Dollars	10M	20Y	40R	40P
10 Marks	10D	20Y	40R	40P
10 Yen	5D	5M	20R	20P
10 Rubles	2.5D	2.5M	5Y	10P
10 Petros	2.5D	2.5M	5Y	10R

(Note: D = Dollar; M = Mark; Y = Yen; R = Ruble; P = Petro)

4. Explain that this rate exchange can change during the trading that will be during this cycle.

5. Begin trade planning for Cycle 3. It will begin from the Trade Balances as of the end of Cycle 2. This will ensure that you will have some nations in an already weak position.

6. Remind students that the TRADE FORMS have only a blank monetary entry, so they will have to insert the correct currency symbols as needed.

7. Hint that some nations may have problems that could affect the value of their currency(s). You may get worried questions about how to handle that problem and not get stuck with "bad money." Let students find the answers. Turn the questions back on them and force them to consider these tactics:
   - Don't trade with a weak nation (but is that realistic if you need the product?)
   - Trade, but don't accept that currency (but does that allow them any realistic way to trade?)
   - Demand more of that currency than the exchange rate calls for (but how much is fair and workable?)

8. Allow some time for national meetings. Remind them that it will be a bit more complex to determine the correct balance at the end of the cycle, so tell them not to lose track of all the various kinds of money they will end with.

9. If time, start the trading action.

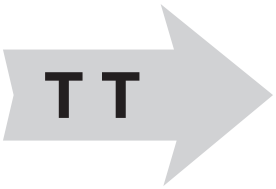
TT

TEACHING **T**IP

*As a general rule, the value of a nation's currency is determined by the law of supply and demand. Therefore, an **increase** in a country's **imports** means it must supply more of its currency to the world. If this increase is heavy, it will lower the price (that is, the rate of exchange) in relationship to another nation's currency. Conversely, if a nation has a heavy **increase** in **exports**, a strong demand for its currency is created and raises its currency's rate of exchange. (To use the United States as an example, if we increase imports over exports, we "weaken" the dollar (or rate of exchange). On the other hand, if we increase exports, we "strengthen" the dollar. The same, of course, is true with all nations, since all demand that their goods be paid for in their currency. Hence, when the U.S. buys Japanese goods, it must pay for them with "yen" for which America exchanged dollars.)*

Day 6: Continue Cycle 3

1. Continue the action for Cycle 3 with a reminder that their chief goal is to sell all their products and buy all their needs.



TEACHING **T**IP

Make certain students understand the relationship of an items real value to its "currency" value. Also, show them that devaluation is, at best, a temporary cure since a nation's "real" wealth is not its currency, but the goods and services it produces that others want.

2. Observe the trading and do A or B:
   A. If it is clear that one or two nations are becoming suspect and others hesitate to take their money, step in and halt all trading and announce that these nation(s) have decided to devalue their currency by 50%. Give them an additional full amount of currency and let trading resume. Change the "official" exchange rate on the board, but tell them supply and demand will actually create the new rate.

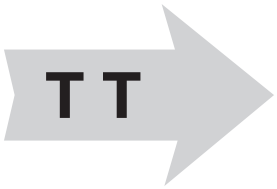
   B. If there is no obvious weak nation(s), trade is smooth, and the "official" rate is holding, step in. Halt trading, and announce a devaluation(s) as in A. Pick the nation(s) that would be the most logical to do so. Explain that this action is arbitrary on your part, but is done as a needed part of the learning process, and is not a reflection on the way a group of students have run their country up to this point. Hand out the needed currency and let trading continue.

3. Allow enough time to trade, then halt it. Your settlement of accounts will be more complex than in Cycle 1 and Cycle 2. You *must* get agreement on what is the final exchange rate picture, put it on the board and *make it* the final word. Then all can determine their real money balances. Have an audit if time.

Day 7: Choose options

1. Have teams conduct an audit for Cycle 3, if not already done. Then conduct a final debriefing. The possibilities are almost endless:
   - Did nations win or lose because they were, in fact, a nation weak in natural advantages?
   - Did they win or lose because they made mistakes? If so, were they trade mistakes, diplomatic mistakes, currency mistakes?
   - Was anyone really lucky?
   - Will the experience let them comprehend world trade news better?
   - Were there lessons that we could apply to the U.S. now?
   - What are they?

2. When the critique is complete, move on to the explanation of Research and Extra Credit reports, if you are using this option. (See projects at the end of these directions.)



TEACHING **T**IP

Make sure you allow for a question and answer period for your students.

Day 8 (Optional outside speakers)

1. Now is the time to bring in the experts who can add to the students' understanding either by providing depth or controversy. A broker who has traded currency futures or precious metals can really introduce your class to the speed, risk, and volatility of that world trade area. A union leader could represent the protectionist viewpoint while a Toyota dealer would have an opposite view. A debate forum would be great for the class; you may not have agreeable participants. A customs agent could touch on the area of those who try to beat the system. A retailer could explain the pressure to go worldwide for the lowest price or lose the customer.

Day 9

1. You may wish to tie all of these activities together with a test of some kind. We have found an essay exam with several options to be the best kind at this point.

Day 10

1. Consider the following research projects for extra credit:
   - ***Interviews*** Any of the people listed in Day 8 as optional outside speakers would be good candidates for an in-depth interview on their experience, attitudes, problems, and solutions dealing with world trade.
   - ***Label check*** Take a common mechanical item, cars are best, and determine the percentage of parts that come from where, which nation's labor is used, who are the stockholders (which nation), where does the profit go. These results can be very educational.
   - ***Pure research*** Take any one of the Technique List items and study it as used in recent experience. For example, take OPEC oil *boycott.* What was the purpose? Who benefited and how much? Who was hurt and how? How well did it work and would it work again? What is the best defense against it? You could apply these questions to the *quota* on Japanese cars, the limits on microchip imports, and the van and truck *tariff.* A student could try to project the effect of the European Common Market.
   - ***Winner hunt*** There has been so much publicity given to situations where a U.S. producer is hurt by foreign competition that many students are unaware that the U.S. still does many things better than others. Look for these U.S. producers and find out why they succeed in world trade.

UNIT 5: STUDENT INTRODUCTION

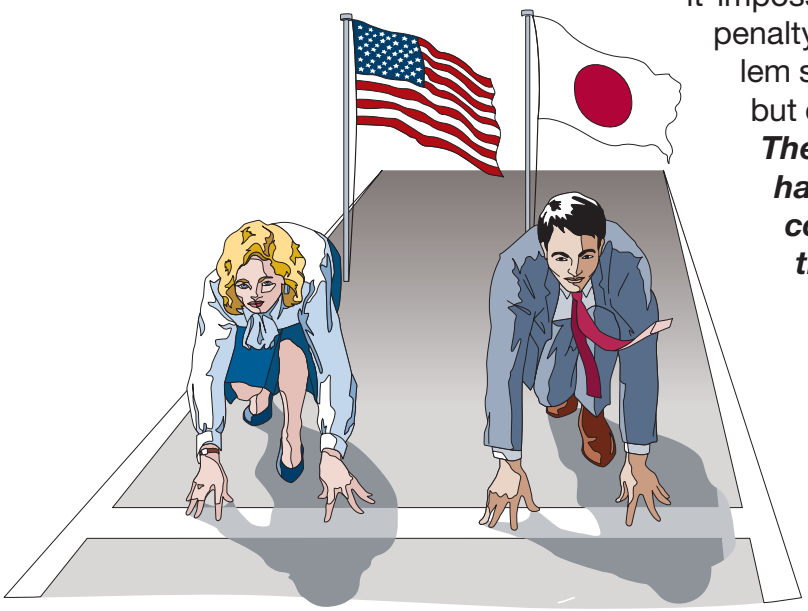
You are about to take part in a classroom simulation of world trade. You will work in teams and function as the leaders of a nation. Your nation will *need* to sell products; it will also *need* to buy other products. It is a very simple idea, but few people really understand it very well. We will start with a single problem in Cycle 1, give you a chance to get comfortable in your role, and then make the "world" more complex for you in later cycles.

Never lose sight of your basic objectives, even as things get more complex. Look around you. Since we *cannot* run this nation without the automobile, we *have* to import oil, regardless of whether we want to. We *cannot* grow bales and bales of cotton and then sit and look at them; we *need* to sell them to someone, so we *must* do it. Really nasty things will happen to our economic system if we ignore this reality!

The world is full of people, however, who wish to go beyond the logical exchange of goods and services. It might be just a desire to make more money, or it could be part of a political or even military objective, or it could be the idealistic goal of an environmental group. The open trading of goods can become a nasty battleground. Such nastiness will probably surface in your classroom very shortly.

As the simulation is being set up, you will get a description of your country, its trade balance, charts showing the trade flow, and forms to record your trading during the cycle. You will also get a guide to scoring and penalties. In Cycle 1 do not worry about your "score." *This is not a test!* Events supplied by your teacher may actually make it impossible for some nations to avoid a penalty; this situation is part of the problem sequence. Do not worry if you lose, but do learn something from your loss. ***The object of the simulation is not to have you win or lose, but to have you concerned about learning some of the economics of world trade.***

Move on to your nation's description, your job or role, and your tasks in Cycle 1 and after.



"Are we going to have a fair race?"

NATIONAL DESCRIPTIONS

North American Republic (NAR) This country is a model of a large manufacturing nation with a good agricultural base. It is rich in natural resources and has a large population. It is a large-scale importer and exporter, and its currency is used as the basic trade and price unit for the world. It is the prime producer of some key raw products, imports and exports machine products, and is a major oil importer. This is probably the major weakness in an otherwise balanced picture. Go to the WORLD TRADE BALANCE SHEET and review the numbers. You must try to maintain this picture or suffer the penalties.

Republic of Arabia (RA) With limited population and economic development, this model of a small nation does, however, have control of a key item—oil—which is needed by many other nations. This item is its obvious strength; its weakness is that the nation does not produce enough food or manufactured goods to meet its needs now or in the near future. Go to the WORLD TRADE BALANCE SHEET and review the numbers. You must try to maintain this picture or suffer the penalties.

Far East Republic (FER) This nation is a model of an efficient producer of hi-tech electronics and machinery, but it has no energy supply source at home. This deficit makes the FER a major industrial competitor with very efficient manufacturing, but it is also a nation with a vulnerable energy situation. Go to the WORLD TRADE BALANCE SHEET and review the numbers. You must try to maintain this picture or suffer the penalties.

West European Republic (WER) A model of an older industrial nation that is still an efficient producer of most machine products and food stuffs, this country is still able to produce most of its own energy needs—but at a high cost. A potential weakness is its large trade dependency on East Europe, which still has a weak economy. Go to the WORLD TRADE BALANCE SHEET and review the numbers. You must try to maintain this picture or suffer the penalties.

East European Republic (EER) This nation is a model of the nations emerging from the reorganization of the former Soviet system. It has energy to move west, it could produce more, and it might produce more food, but it has no chance to compete with the West in the area of manufactured goods since its factories have not been rebuilt or modernized since World War II. It is the weakest of the mature nations. Go to the WORLD TRADE BALANCE SHEET and review the numbers. You must try to maintain this picture or suffer the penalties.

As soon as you have faced the reality of your nation, and read the other descriptions to get some idea of your potential friends and partners (or enemies) read the RULES AND TASKS handout.

RULES & TASKS

Cycle 1

1. Get your group together and pick a president or prime minister. Someone must be in charge of your country.
2. The president or prime minister will assign responsibilities. This person will need:
   a. ***Sellers*** One or two people to be based in your home nation to sell your products. Other nations' buyers will come to you. Keep records of every deal. (Use TRADE RECORD FORM.)
   b. ***Buyers*** One or two people to go to other nations and buy all the items you need. Keep records of every deal. (Use TRADE RECORD FORM.)
   c. ***Secretary of the Treasury/Finance Minister*** This person will use the NATIONAL TRADE RECORD FORM to keep track of all the numbers from your buyers and sellers.
   d. ***Auditor*** This person will go to other nations (this is their "right") and check that the nations are actually making and recording the correct trades and announce any discrepancy.
3. When all roles have been filled, you are ready to begin Cycle 1. Your instructor will announce a single, limited "problem." There will be *no* price changes in this cycle other than the one which is part of the problem. One other nation *may* be allowed to change a price *if* the instructor states that policy at the time. You will move into action and attempt to buy all you need and sell all you need to sell. The problem will cause some nations to get penalties in the form of inflation up, GNP down, or trade deficit up.

Cycle 2

1. Regroup after Cycle 1 action and critique and assign two new roles.
   a. ***Congressional leader(s)*** This person(s) will use the TECHNIQUE LIST to study, and possible use, legal moves to help your trade position or block actions of others. If your nation has a small population, the President can also take this role.
   b. ***Diplomat(s)*** This person(s) will use the TECHNIQUE LIST to study, and possibly use, international arrangements to help your trade position or block actions of others.
2. When the new roles are set, your instructor will allow you time to develop a strategy(s) for Cycle 2. *The rules are changed!* You are free to bargain on the price of any item. (Always remember that your primary need is to sell "x" units of some items and buy "x" units of others. The amounts remain as before). You are free to make and use any policy or deal on the TECHNIQUE LIST.
3. When all nations have prepared their trade strategies, Cycle 2 will begin

Cycle 3

1. Take good notes as your teacher explains currency "Rate of Exchange." This cycle will require that you pay for imports in the currency of the nation exporting and require exports to be paid for in your currency.

2. Trading will take place in a manner similar to Cycle 2 and begin at the point Cycle 2 ended.

3. Your country may also experience "devaluation." Make sure you understand how this economic act could affect you.

4. Participate in the debriefing and ask questions.

WORLD TRADE BALANCE SHEET

1. All amounts are shown in units. It could be a super tanker full of oil or a string of 10 tankers; it only represents a large amount of that item. It will have an equal value in dollars; all trade will be conducted in dollar amounts as we begin. (Most world trade is priced and conducted this way, anyway.)
2. The initial trade picture is not intended to be statistically accurate for a particular year. It is a proportional starting point only.
3. All of our trading starts with the assumption that it is economically rational, that is, the most efficient producers are exporting what they make best and cheapest. It is always possible for some nations to produce an excess of some products for political reasons that does not make economic sense in normal times. These items are shown in the last column. Please note these units cannot be used without creating inflation. (See the Penalty List under inflation for effects.)

North American Republic (starts with a 25-unit/$mil. trade imbalance)

Exports	Units/$mil	Imports	Units/$mil	Surplus units/$mi	
Cotton	50	Oil	50	Oil	25
Wheat	75	Electronics	50	Cars	100
Indus. machinery	75	Cars	100	Electrical	25
		Indus. machinery	25	Indus. mach.	25
Total	200		225		

Republic of Arabia (starts with a 25-unit/$mil. trade imbalance)

Exports	Units/$mil	Imports	Units/$mil	Surplus units/$mi
Oil	200	Wheat	25	
		Indus. Machinery	100	
		Electronics	25	
		Cars	25	
Total	200		175	

Far East Republic (starts with a trade balance)

Exports	Units/$mil	Imports	Units/$mil	Surplus units/$mi	
Electronics	100	Cotton	25	Indus. mach.	25
Cars	125	Wheat	25	Cars	25
		Oil	175		
Total	225		225		

West European Republic (starts with a trade balance)

Exports	Units/$mil	Imports	Units/$mil	Surplus units/$mi	
Cars	50	Cotton	25	Wheat	25
Indus. machinery	125	Indus. machinery	25	Oil	25
		Oil	50	Electrical	25
		Electronics	25		
		Cars	25		
		Natural gas	25		
Total	175		175		

East European Republic (starts with a trade balance)

Exports	Units/$mil	Imports	Units/$mil	Surplus units/$mi	
Natural gas	25	Indus. Machinery	50	Oil	25
Oil	75	Wheat	25	Wheat	25
		Cars	25		
Total	100		100		

Penalties

Inflation

If you use 25 units of higher cost production for political reasons at home to make up for an import loss, *increase* your nation's inflation rate by 10% for every 25 units. All units now used for export must reflect this inflation in their price. Hence, if a nation uses 3 blocks of 25 surplus units, its inflation rate of 30% would increase its export unit's price from $1,000,000 to $1,300,000 for the next cycle.

Trade balance

If you import any items at a higher unit cost you must accept a trade balance penalty. For example, if you used to import 25 units of oil at $25 million and now you pay $75 billion for the same oil, your deficit is up by $50 million.

Gross National Product (GNP)

If you cannot obtain needed raw materials, or cannot sell items you have already manufactured, you must take a GNP decline penalty of 1% for each 25 units. For example, if you just can't buy 25 units of oil (at any price) and 25 units of cotton, your GNP declines by 2%.

Inflation rate

- If you can hold your inflation below 10% you are okay.
- If you go beyond 10%, you could be in trouble.
- If you get to 20% or more, you have a political crisis.

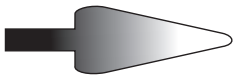
Trade deficit

- A trade deficit of $25 million is okay.
- A trade deficit of $50-$75 million is trouble.
- A trade deficit of $100 million or more is a political crisis.

GNP

- A GNP decline of 1% is okay.
- A GNP decline of 3% is trouble.
- A GNP decline of 5% or more is a national recession and, therefore, a political crisis.

Remember, you are not trying to beat the world! Your objective is to attempt to sell your products, obtain your raw materials, avoid trade wars and cut-throat competition, and not go broke. That in itself is a winning position in our world.



"Remember, you are not trying to beat the world!"

Techniques

Instructions

In Cycle 1 you only have to be sure you complete all of your normal trade and somehow adjust to a single problem with price and supply of energy. In Cycle 2 you can use any or all of the basic strategies listed below to secure your trade needs and try to protect your people and economy from negative economic forces. All actions can have good and bad effects; there is rarely a free ride.

General purpose tactics

1. **Barter** You can make a direct swap of goods (25 oil for 25 cars) with another nation and exchange *no* money. This can be a help if you have a currency problem later. No real risk; no penalty.
2. **Credit** You can sell your products to another nation and get no money at the moment. This will allow you to keep your trade numbers in balance, but it will not give you any income for this item. Your risk is that the other nation will never pay you and you will have a permanent loss. This will be a trade deficit penalty. (See PENALTY LIST.)
3. **Cartel** You can form a cartel of producers of a product and force others to accept your price and number of items. Your risk is that others will retaliate with other trade policies designed to hurt you. There are possible penalties here.
4. **Common Market** You can form a combination of nations that will give preference in price or numbers to members of the Common Market. This may protect you from some hostile policies and give you some strength in numbers when you have to deal with others outside your state. There is no clear risk here.
5. **Treaty** You can sign a single-nation or multiple-nation agreement on one or more items. There are lots of possibilities, very few risks that can be predicted.

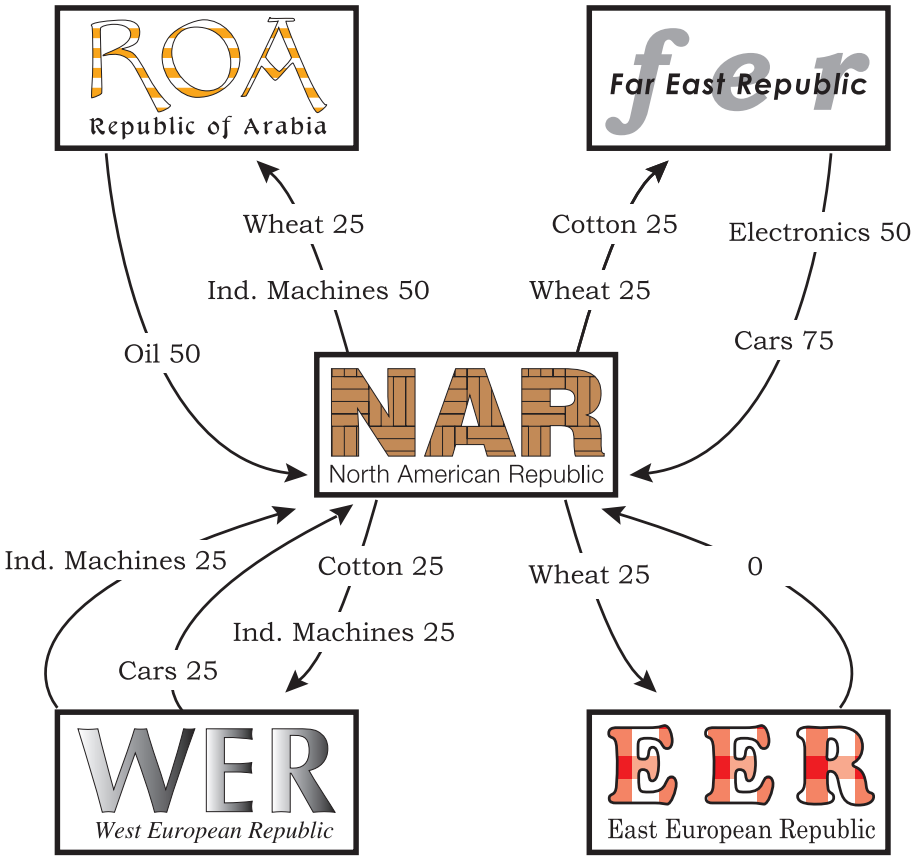
Specific tactics

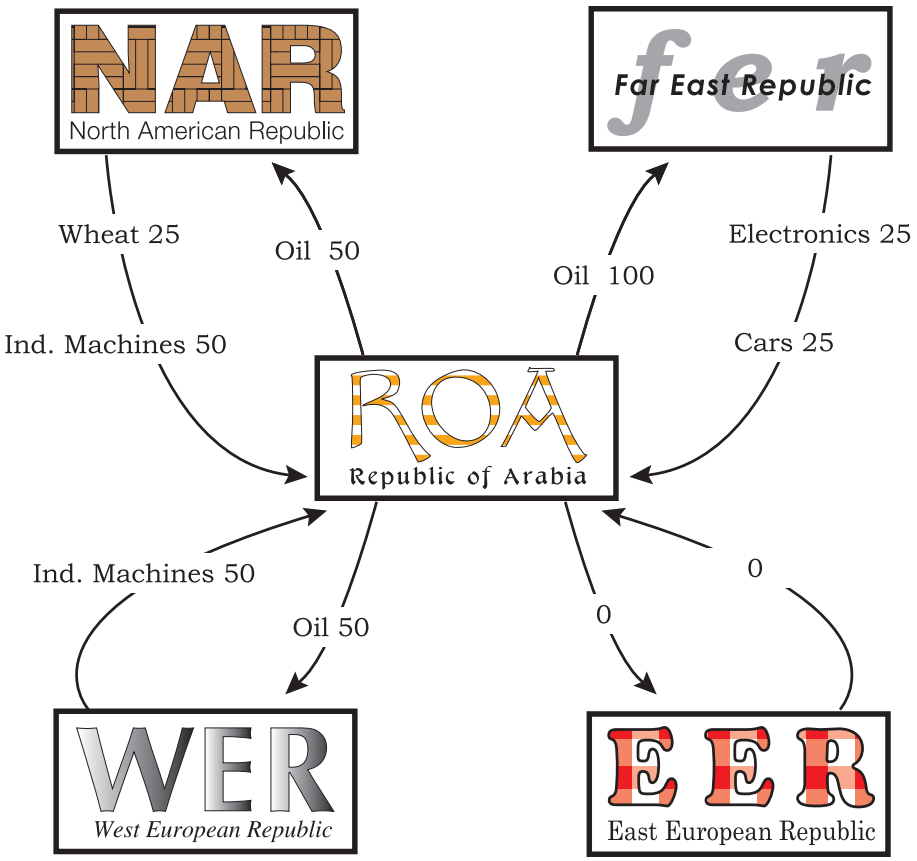
1. **Boycott** You may boycott specific items or specific nations; you will refuse to accept their products. Do it in amounts of 25, 50, 75, or 100. If, for example, you boycott 50 units of item “A” and *cannot* obtain it from anywhere else, you risk both GNP and trade balance penalties. (See PENALTY LIST.) If you boycott, and then make up the difference with high-cost items internally, you risk an inflation penalty. (See PENALTY LIST.) If you boycott, but can still get the goods elsewhere at a normal price, you have no penalty.
2. **Dumping** You may try to get rid of items you need to sell but cannot, by selling them at one-half the usual price. This will allow you to sell all your goods and avoid a GNP penalty, but you will not take in enough money and so you will have a trade balance penalty.

3. **Quota** You can limit another nation to selling only a part of its usual exports to you. Do it in blocks of 25 only. You risk a GNP penalty and if you make it up with high-cost local items you risk an inflation penalty.
4. **Tariff** You can add a tariff cost on any item. You must use a 100% tariff and apply it to the entire amount of that item from that nation. You could "get even" with another nation and then make up for lost business with your own (high cost!) items. Either way you pay, but it is a common form of retaliation.

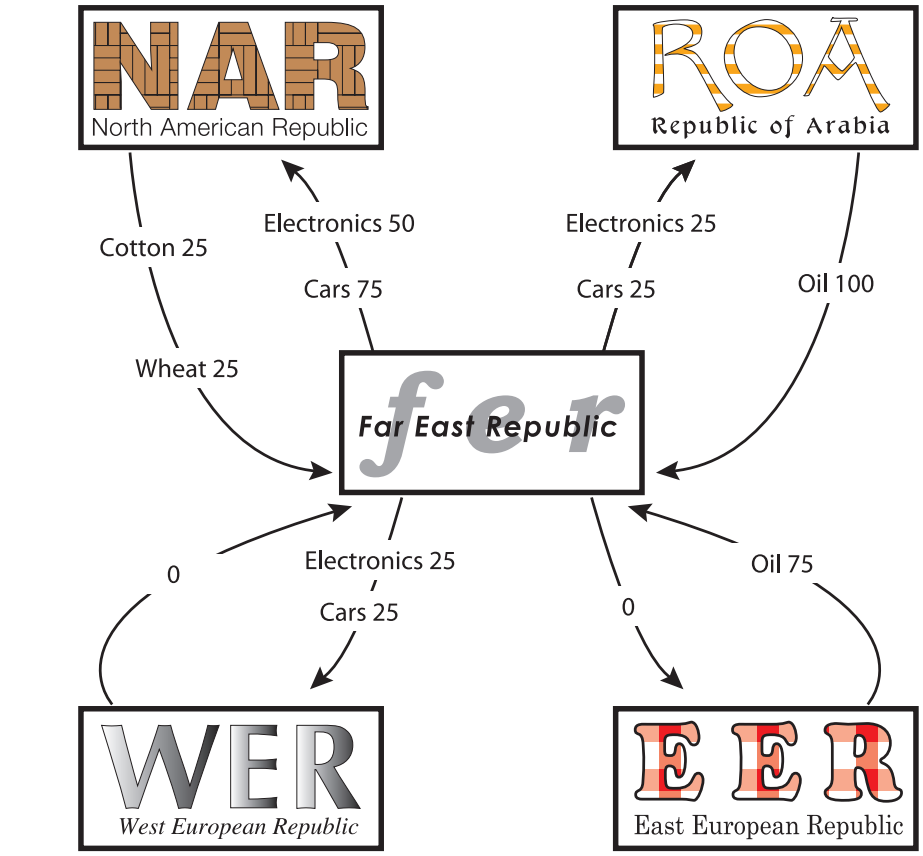
Remember that you will be free to enter into any treaty, deal, combination, or understanding using any one or all of these tactics. Take time to create a rational policy, because when the cycle ends you still need to have sold your goods, bought in your needs, and did it all at a sane price. Good luck!

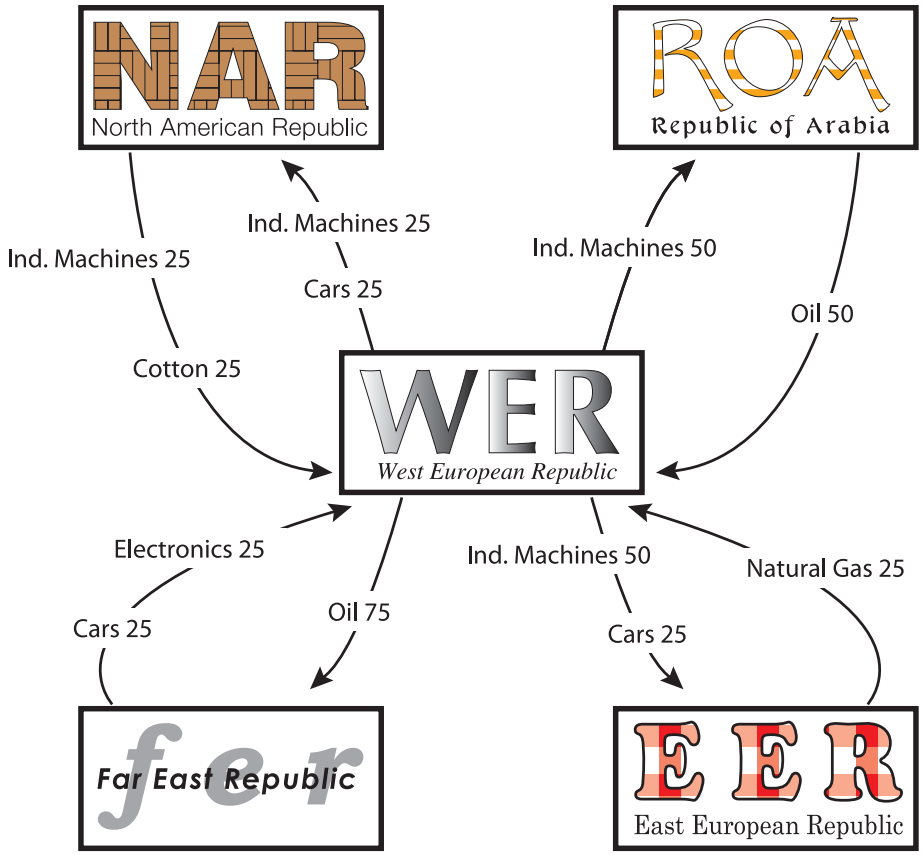
WORLD TRADE PATTERNS - 1



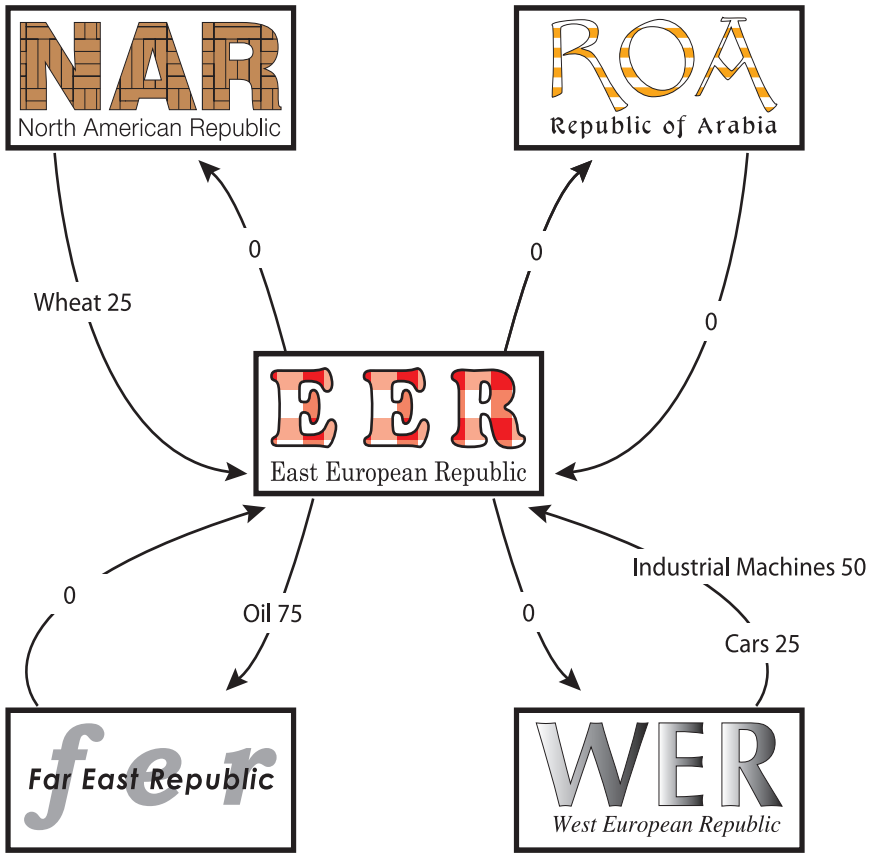


WORLD TRADE PATTERNS - 2

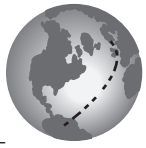




WORLD TRADE PATTERNS - 3



World Trade Form



Your nation: _____ Cycle: ___ Date: _____ Exact time: _____

Seller's signature: _____ Buyer's signature: _____

	Item	Units in 25 M blocks only	Dollar Value	To ... or ... From
Selling				
Buying				

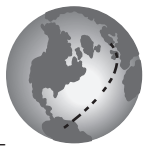
World Trade Form

Your nation: _____ Cycle: ___ Date: _____ Exact time: _____

Seller's signature: _____ Buyer's signature: _____

	Item	Units in 25 M blocks only	Dollar Value	To ... or ... From
Selling				
Buying				

World Trade Form



Your nation: _____ Cycle: ___ Date: _____ Exact time: _____

Seller's signature: _____ Buyer's signature: _____

	Item	Units in 25 M blocks only	Dollar Value	To ... or ... From
Selling				
Buying				

National Trade Form

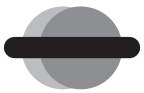
Your nation: _____ Cycle: ___

	Item	Units	Dollar Value	To ... or ... From
Sold				
Bought				
Added				

Total units sold _____ Total dollar value _____

Total units bought _____ Total dollar value _____

Total units added _____ Total dollar value _____



For this cycle

we have a trade surplus of _____ ; and

we have a trade deficit of _____ .

NAR MONEY

Note: *Use a different color of paper for each nation's currency. Doing so will make it easier to recognize the money.*

NAR North American Republic **25 million**	NAR North American Republic **25 million**	NAR North American Republic **10 million**
NAR North American Republic **10 million**	NAR North American Republic **10 million**	NAR North American Republic **10 million**
NAR North American Republic **10 million**	NAR North American Republic **1 million**	NAR North American Republic **1 million**
NAR North American Republic **1 million**	NAR North American Republic **1 million**	NAR North American Republic **1 million**
NAR North American Republic **1 million**	NAR North American Republic **1 million**	NAR North American Republic **1 million**
NAR North American Republic **1 million**	NAR North American Republic **1 million**	NAR North American Republic **1 million**

WER MONEY

Note: *Use a different color of paper for each nation's currency. Doing so will make it easier to recognize the money.*

WER *West European Republic* **25 million**	WER *West European Republic* **25 million**	WER *West European Republic* **10 million**
WER *West European Republic* **10 million**	WER *West European Republic* **10 million**	WER *West European Republic* **10 million**
WER *West European Republic* **10 million**	WER *West European Republic* **1 million**	WER *West European Republic* **1 million**
WER *West European Republic* **1 million**	WER *West European Republic* **1 million**	WER *West European Republic* **1 million**
WER *West European Republic* **1 million**	WER *West European Republic* **1 million**	WER *West European Republic* **1 million**
WER *West European Republic* **1 million**	WER *West European Republic* **1 million**	WER *West European Republic* **1 million**

FER MONEY

Note: *Use a different color of paper for each nation's currency. Doing so will make it easier to recognize the money.*

fer Far East Republic **25 million**	fer Far East Republic **25 million**	fer Far East Republic **25 million**
fer Far East Republic **25 million**	fer Far East Republic **10 million**	fer Far East Republic **10 million**
fer Far East Republic **10 million**	fer Far East Republic **10 million**	fer Far East Republic **10 million**
fer Far East Republic **1 million**	fer Far East Republic **1 million**	fer Far East Republic **1 million**
fer Far East Republic **1 million**	fer Far East Republic **1 million**	fer Far East Republic **1 million**
fer Far East Republic **1 million**	fer Far East Republic **1 million**	fer Far East Republic **1 million**

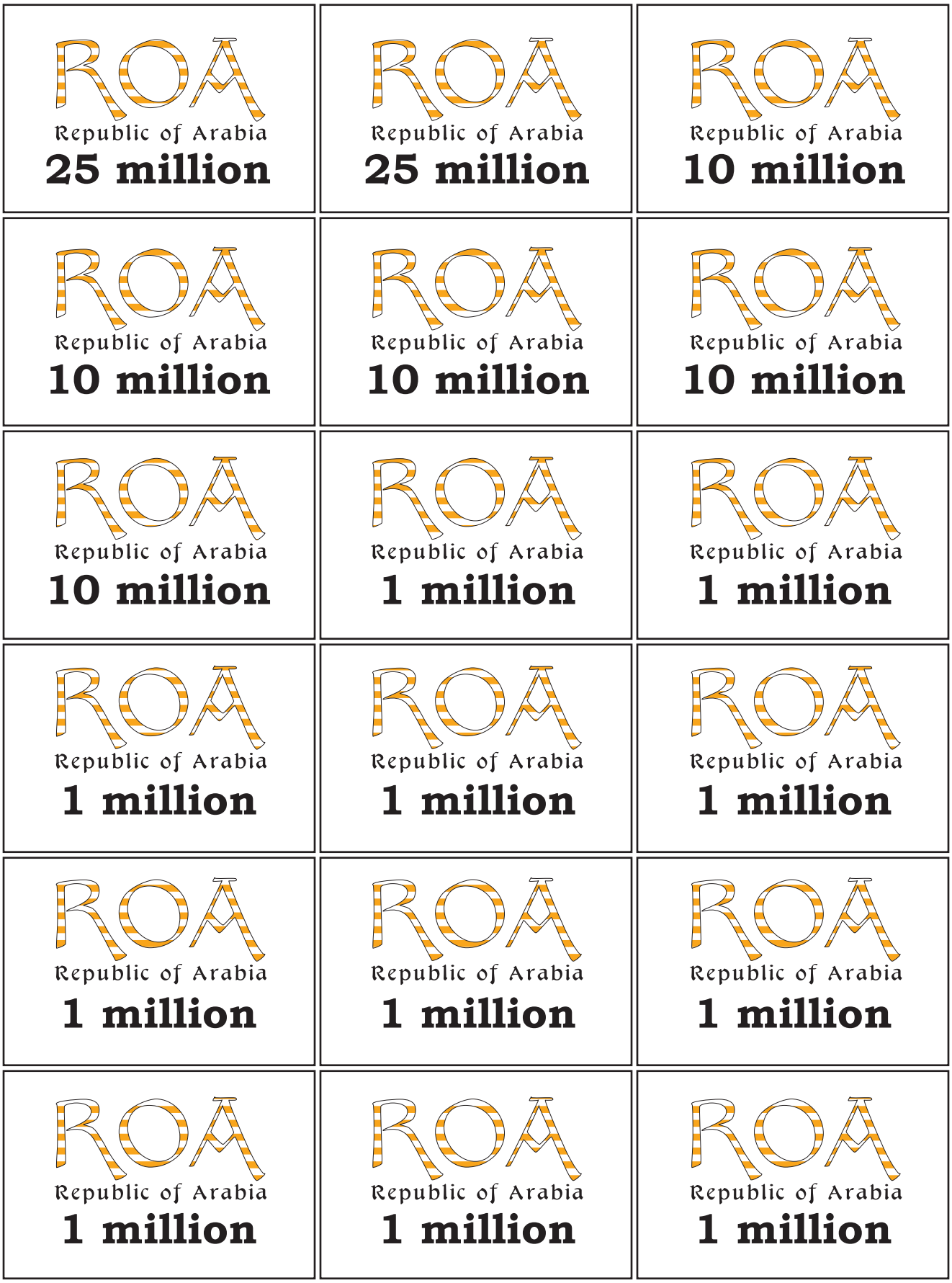
EER MONEY

Note: *Use a different color of paper for each nation's currency. Doing so will make it easier to recognize the money.*

EER East European Republic **25 million**	EER East European Republic **25 million**	EER East European Republic **25 million**
EER East European Republic **25 million**	EER East European Republic **10 million**	EER East European Republic **10 million**
EER East European Republic **10 million**	EER East European Republic **10 million**	EER East European Republic **10 million**
EER East European Republic **1 million**	EER East European Republic **1 million**	EER East European Republic **1 million**
EER East European Republic **1 million**	EER East European Republic **1 million**	EER East European Republic **1 million**
EER East European Republic **1 million**	EER East European Republic **1 million**	EER East European Republic **1 million**

ROA MONEY

Note: *Use a different color of paper for each nation's currency. Doing so will make it easier to recognize the money.*



Teacher Feedback Form

At Interact, we constantly strive to make our units the best they can be. We always appreciate feedback from you—our customer—to facilitate this process. With your input, we can continue to provide high-quality, interactive, and meaningful instructional materials to enhance your curriculum and engage your students. Please take a few moments to complete this feedback form and drop it in the mail. Address it to:

Interact • Attn: Editorial
10200 Jefferson Blvd. • P.O. Box 802
Culver City, CA 90232-0802

or fax it to us at **(800) 944-5432**

or e-mail it to us at **access@teachinteract.com**

We enjoy receiving photos or videos of our units in action!
Please use the release form on the following page.

Your Name: _____

Address: _____

_____

E-mail: _____

Interact Unit: _____

Comments: _____

_____

_____

_____

_____

_____

_____

_____

_____

Release Form for Photographic Images

To Teachers:

To help illustrate to others the experiential activities involved and to promote the use of simulations, we like to get photographs and videos of classes participating in the simulation. Please send photos of students actively engaged so we can publish them in our promotional material. Be aware that we can only use images of students for whom a release form has been submitted.

To Parents:

I give permission for photographs or videos of my child to appear in catalogs of educational materials published by Interact.

Name of Student: _____ (print)

Age of Student: _____ (print)

Parent or Guardian: _____ (print)

Signature: _____ Date: _____

Address:

_____

_____

_____

_____

Phone: _____

Interact
10200 Jefferson Blvd.
Culver City, CA 90232-0802
310-839-2436