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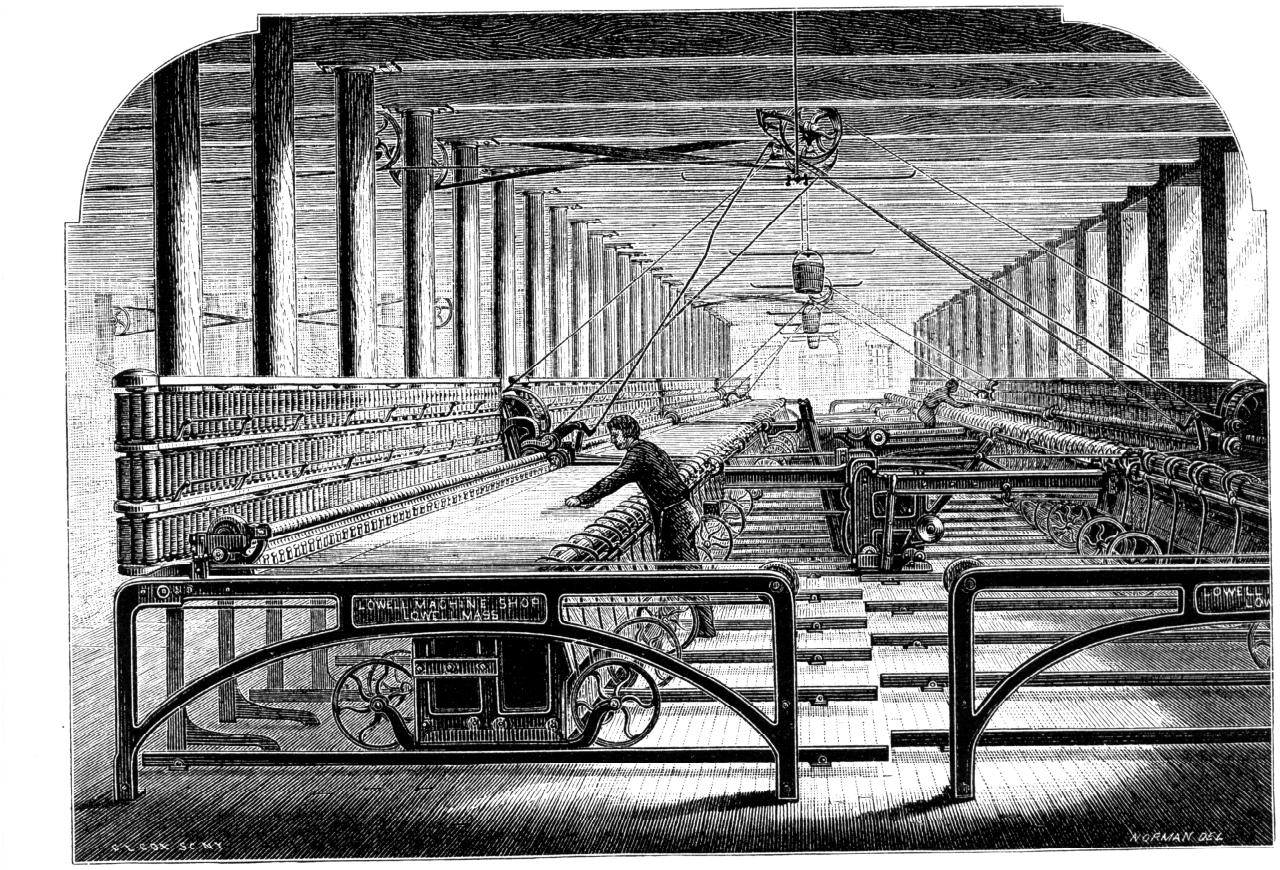
Creative Activities for Teaching World History

The Industrial Revolution to Modern Times



Stevens & Shea Publishers

Creative Activities for Teaching World History

Industrial Revolution to Modern Times

SS124

Contents

Industrial Revolution to Modern Times
by Lawrence Stevens
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Stevens & Shea Publishers, Inc.
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1 What Is It?

This is a two page puzzle in which students must identify items important in the Industrial Revolution. **Answers:** A, blast furnace; D, steam engine without boiler; C, lathe; D, dynamo; E, printing press; F, steam engine; C, electric railway; H, water wheel; I, blast furnace; J, Bessemer converter.

2 Down On The Farm

The students must identify farm implements developed during the Agricultural Revolution. **Answers:** A, thresher; B, harvester; C, hay mower; D, butter churn; E. seed drill; F. pump; G. disc plow; H, plow.

3 Building A Bridge

This is a hands-on problem solving exercise.

4 Scientists and Their Experiments

The lives of Joseph Priestly and Alexander Fleming and easy-to-do experiments that illustrate their discoveries. These experiments can be performed by the students.

5 The Great Race

This is another hands-on problem solving activity. The students must design and produce a self-propelled vehicle. They should conclude that a sail-powered vehicle is the most efficient. The first self-propelled vehicle was driven by sails. It was invented in Holland in the 17th Century. After the race students should be encouraged to discuss what made the fastest vehicle, size, weight, size of wheels, type of axle and how wheels were attached, type of propulsion, etc.

6 The Industrial Exposition

An activity for introducing or concluding a unit of study on the Industrial Revolution. Activities 1 through 5 can be included. This activity also has three other activities that emphasize problem solving. **Junk Box** is a problem solving activity. **Design Contest** is another problem solving activity that uses art as the means of expression. **Library Race** is an activity for using references in the library as students try to find out who invented common items.

7 Spy Game

In this activity students must discover what country will attack and when and where the attack will come. **Answers to secret codes:** 1) Send troops to border of Bosnia. One division. Bosnia may attack. 5 May. 2) 6 May. Bosnia is moving army to our border. 3) 6 May. To: Military HQ. Slavinia has defensive alliance with Bosnia. 4) To: Military Commanders. From: Military HQ. Start Plan Blue May 15.

The evidence indicates that Slobovia may attack Slavinia on May 15.

8 Who's The Greatest?

A valuing activity that is useful in helping students trace the consequences of the actions of world leaders.

9 Post-War Peace

Students make decisions on the fate of Germany. Students should check their textbooks to see what really happened.

10 United Nations

An activity for exploring world problems and devising solutions.

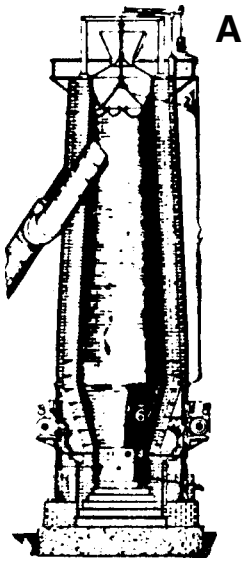
11 Disarmament Conference

An exercise in negotiation. Students will learn the basic problems in nuclear disarmament.

12 Puzzle

Students are to arrange ships in chronological order. **Answers:** H (earliest), C, B, G, D, E, A, and F.

A



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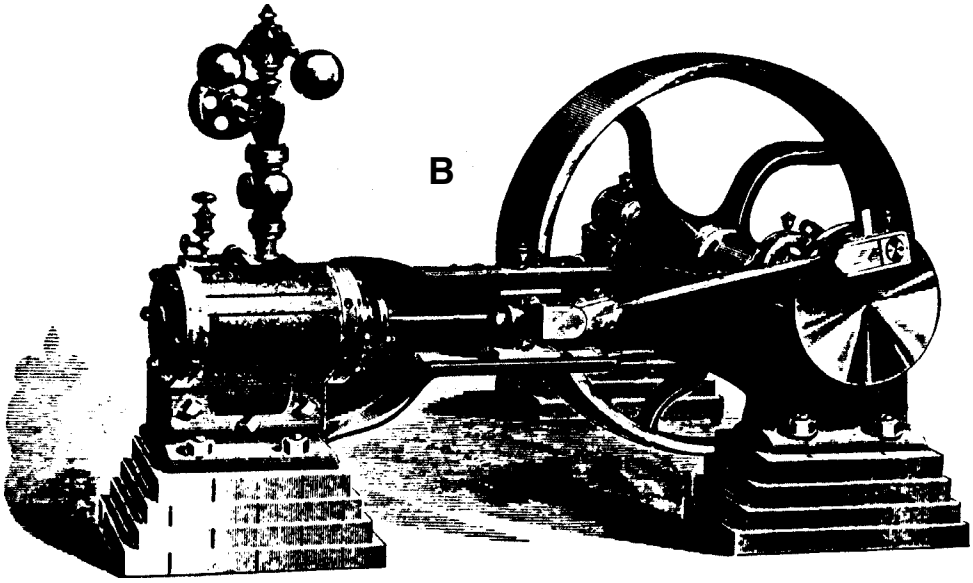

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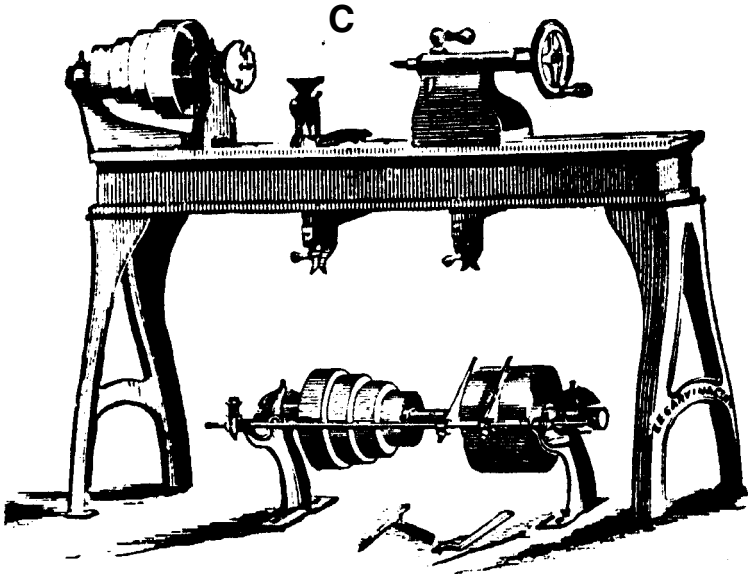

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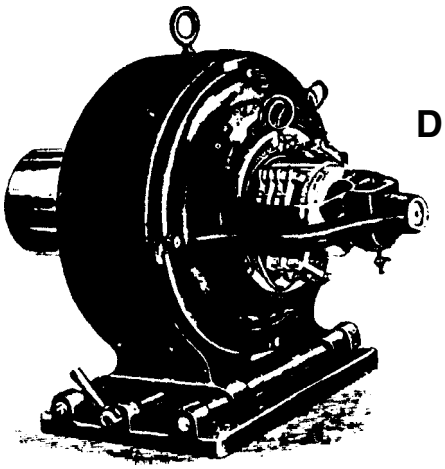

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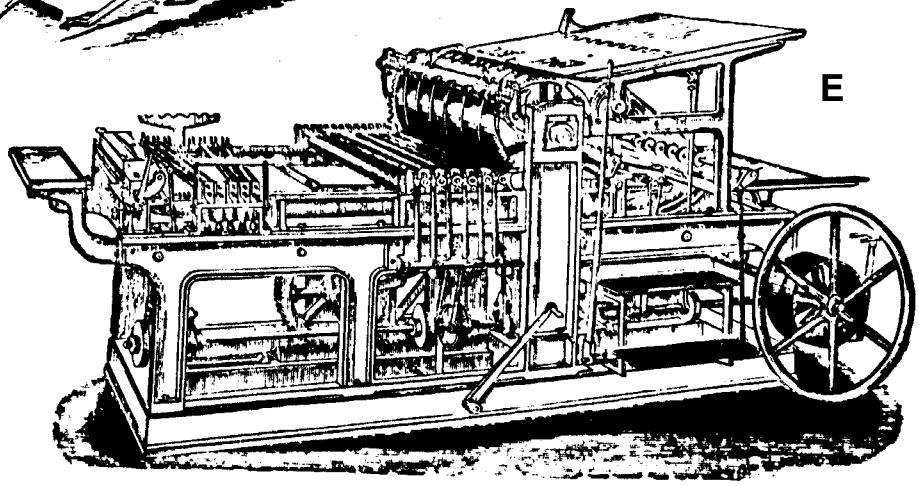
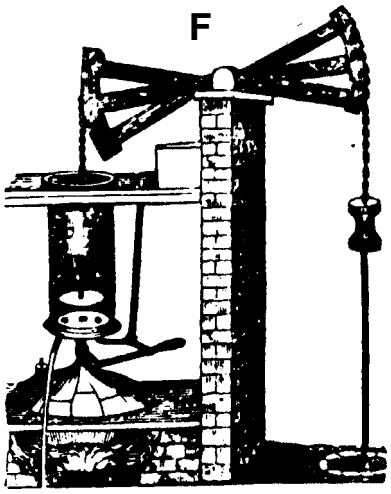


Can you identify these objects? What are they? What did they do?

F



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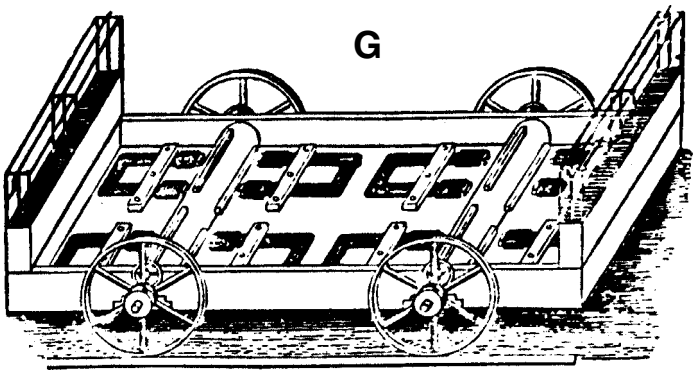
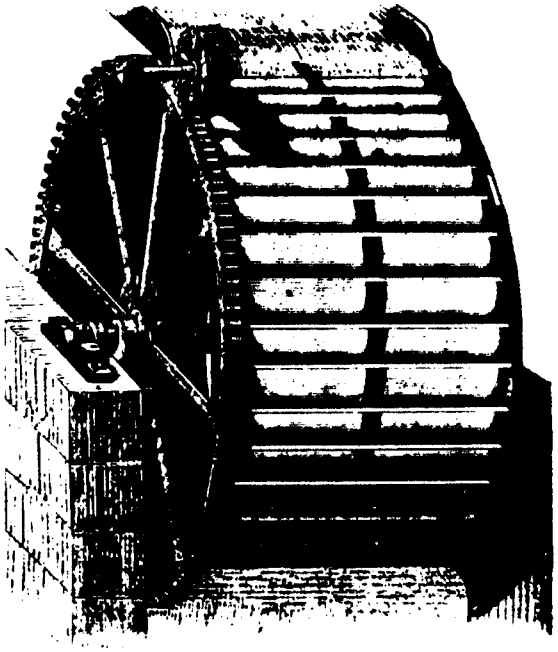


Can you identify these objects? What are they? What did they do?



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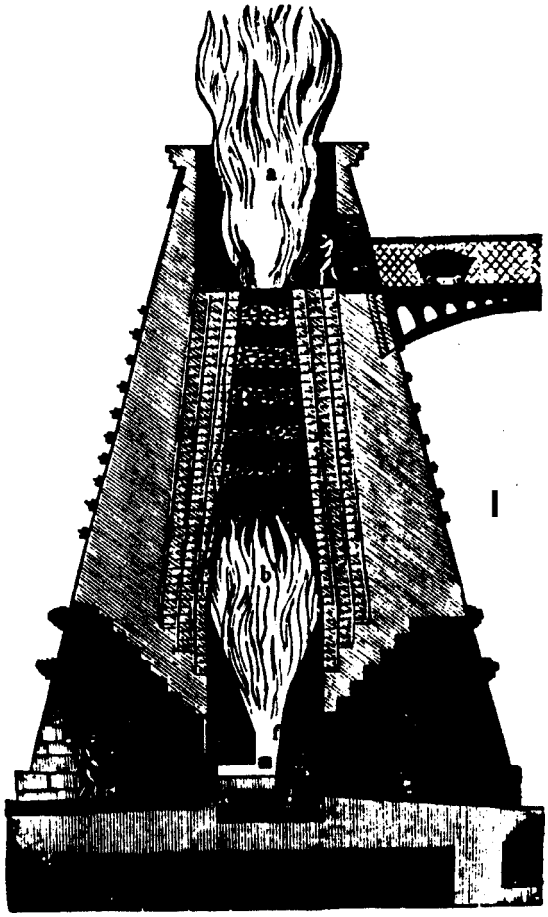

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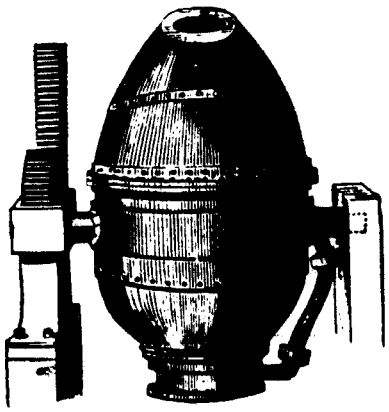

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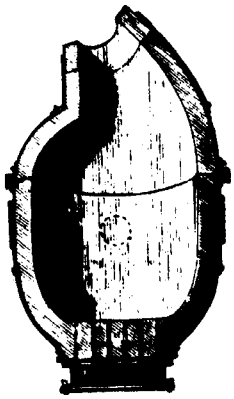
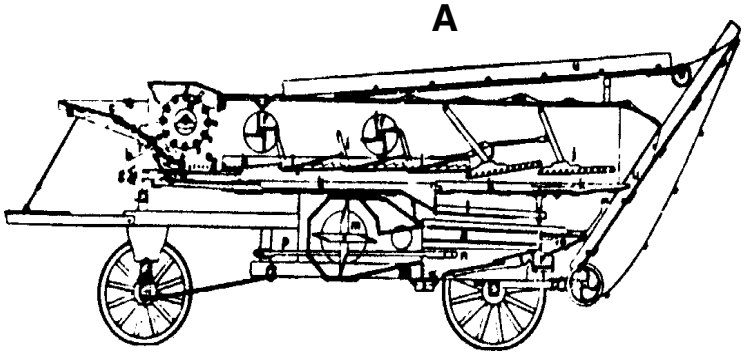
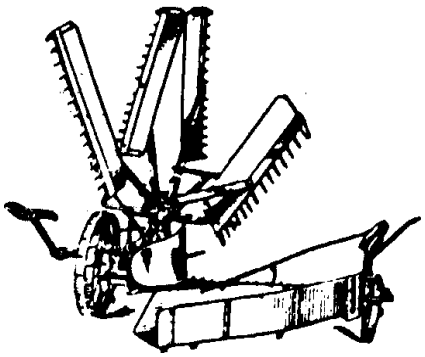


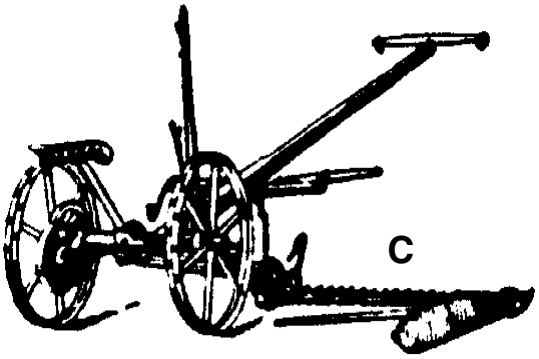
A





B

Can you identify these old farm implements?
What was the purpose of each?



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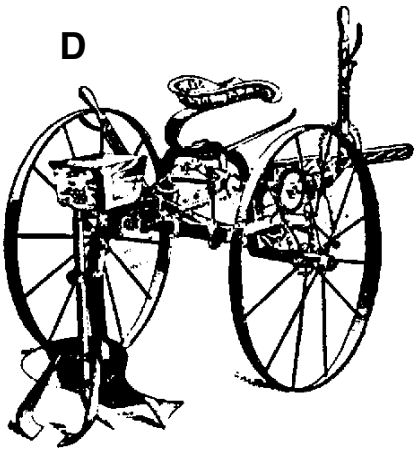
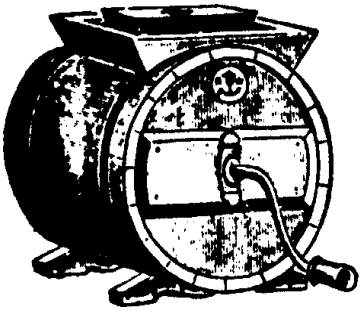
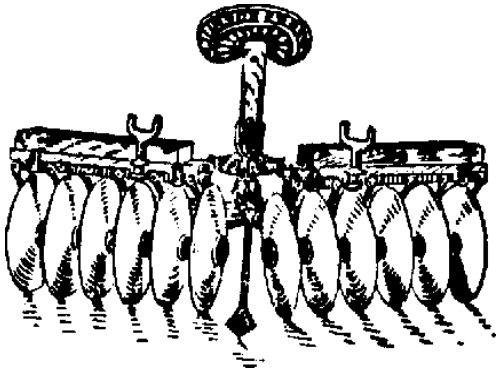




E

F



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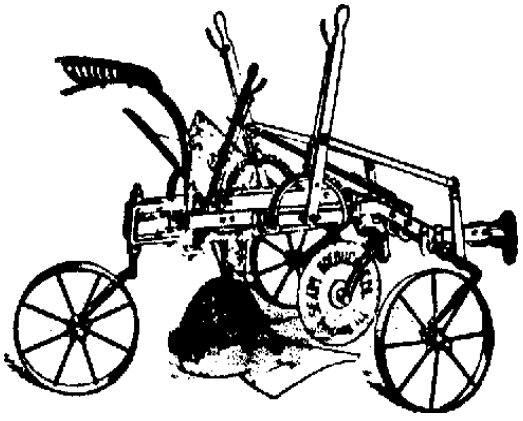


H

TEACHER DIRECTIONS

This activity is an exercise in problem solving. The problem is a challenging one that gives the students a chance to experiment with different forms and shapes.

THE PROBLEM

The students must build a bridge 8 inches long and 3 inches wide from three sheets of binder paper. Only tape and glue may be used. The bridge must be strong enough to support the weight of a 12 inch wooden ruler.

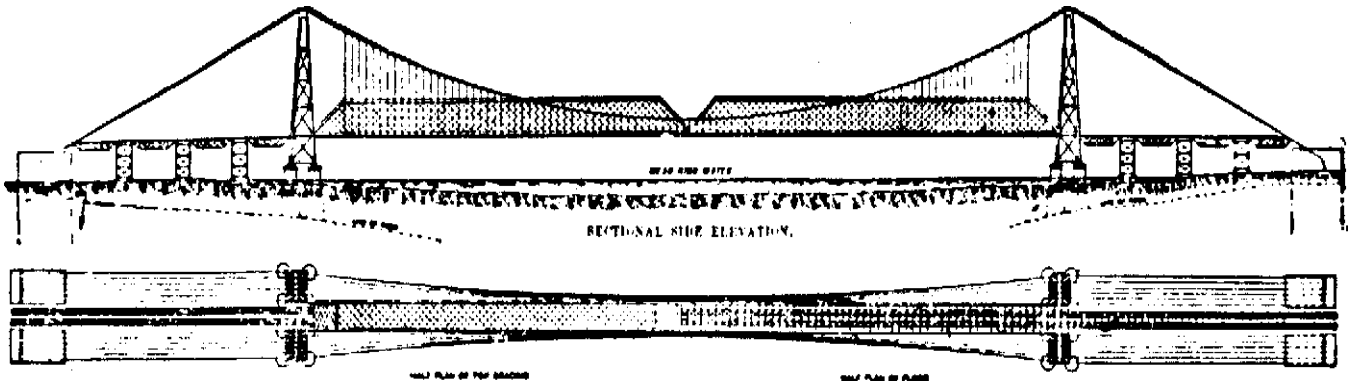
THE OBJECTIVES

*To provide a concrete problem solving experience.
*To learn certain engineering principles involved in construction.
*To learn the importance of bridges in economic development.
*To experience the cooperative approach to problem solving.

THE PROCEDURES

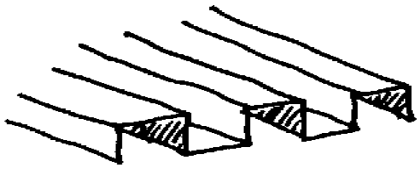
The process the students use in solving this problem is as important as the finished product.

l. Students should work in teams of 3 or 4.
2. Tape or glue, scissors and paper should be distributed.
3. The problem is presented to the students. The bridge can be supported at each end by textbooks.
4. Students should be encouraged to analyze the problem before they begin. They should carefully examine the student handouts.
5. The students may want to experiment with some of the forms before they construct the bridge.
6. They list all of their options before they decide which they will try.
7. Students should be encouraged to make their bridges as strong and rigid as possible.



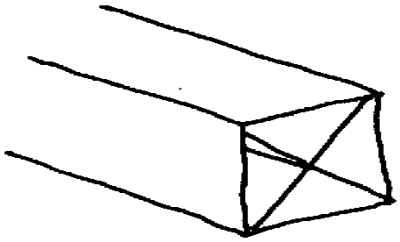
THE PROBLEM AND SOME CLUES

You are to build a bridge. In doing this problem you will learn something about how to solve problems and about the problems engineers had in building the real thing. In your case, you will have some rules to follow in solving this problem.



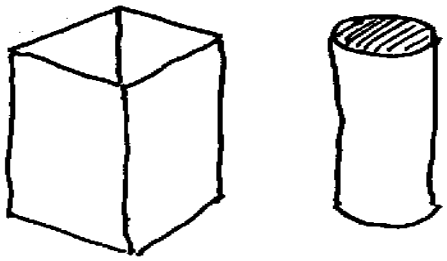
RULES

1. The bridge must be constructed of no more than 3 sheets of ordinary paper. Binder paper will do.



2. The bridge must be 3 inches wide and 8 inches long. It must be self-supporting when placed between two books on a desk. The bridge must rest on top of the books.

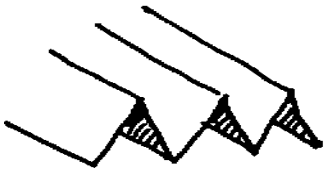
3. The bridge must have an unobstructed area underneath it to allow an object 1 inch high and 3 inches wide to pass beneath it.



4. The bridge must be strong enough to support a 12 inch wooden ruler and the bridge must be held together by glue or tape.

SOME CLUES

1. Paper can be made stronger by folding it into a geometric shape such as a girder or a box.

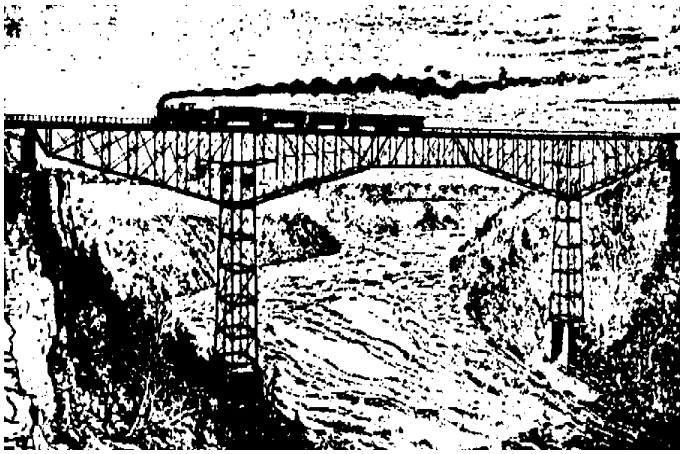


2. A pylon may be used to support the bridge in the middle.

3. The strength of paper may be increased by increasing its thickness.

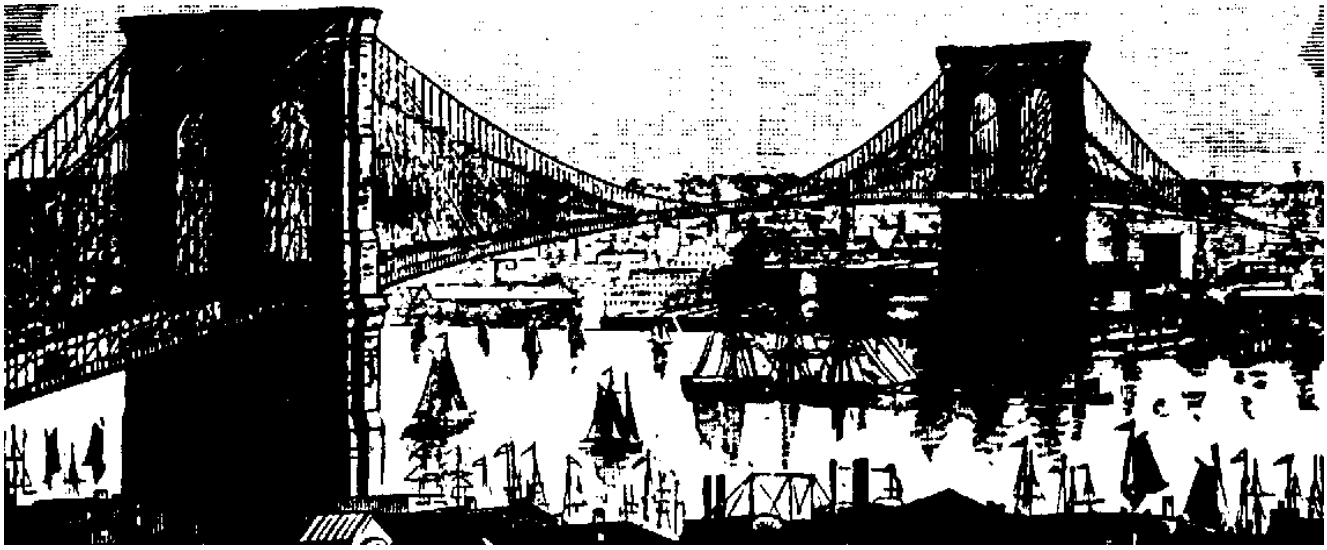
YOUR GOAL

You should produce a bridge that will carry the heaviest weight possible. At the minimum your bridge must support the weight of a ruler. This is not very difficult, but you should remember you are competing with other teams to build a bridge that will support the heaviest weight.



There are many different kinds of bridges. On this page and the next are some examples.

To the left is a cantilever bridge. It is made of steel girders that stretch out from pylons that support the bridge structure.

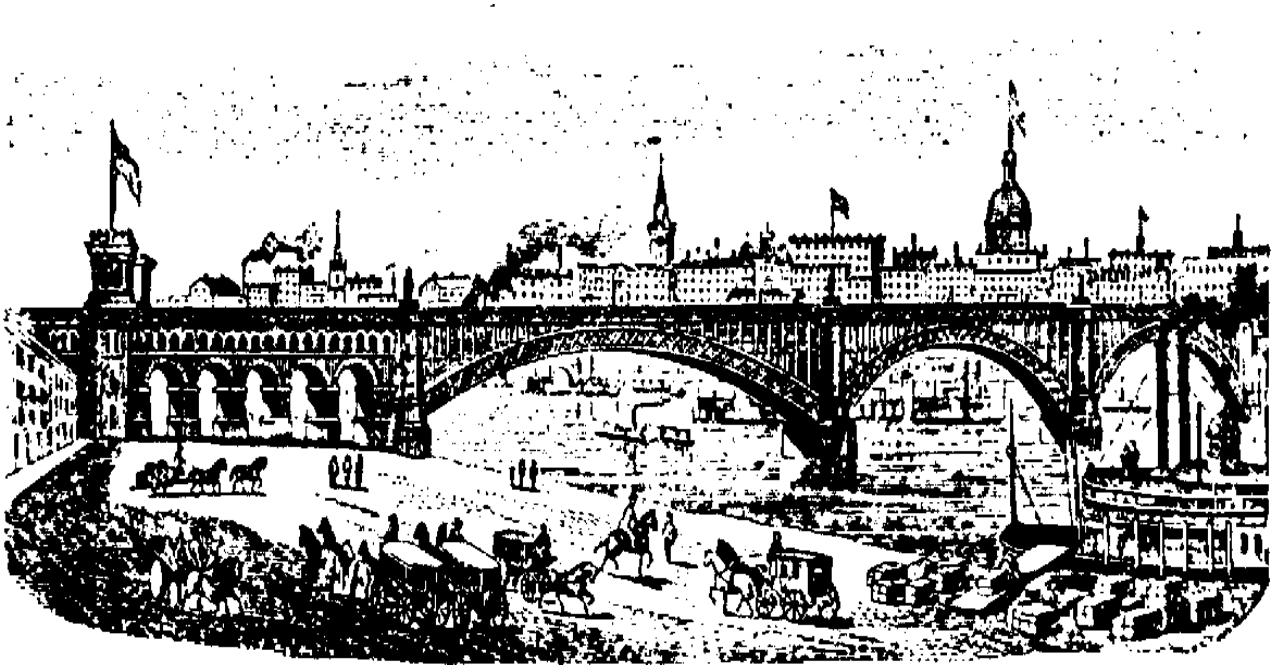


Above is a suspension bridge. The towers in this case are built of stone and brick. They could also be built of cement or steel. The bridge is supported by steel cables that hang from the towers. This type of bridge is useful in locations were ships must pass underneath.

At left is a Roman stone arch bridge. Notice that many columns have to be used to support the bridge structure.

This is an example of an arched bridge which uses steel girders to support the bridge. The girders are anchored in stone columns. Notice the arches are longer because steel has more strength than stone. This allows for boats to pass easily underneath.

Smaller bridges can be constructed of simple steel girders or of concrete arches.



Joseph Priestly

Joseph Priestly was a stutterer. However, he overcame the handicap to learn French, Italian, Dutch, Latin, Greek and Hebrew.

He was a minister and, for awhile, lived next to a brewery. He became interested in gases. He experimented with different types of gases, or "airs" as he called them, that he collected in the brewery. He filled glass jars with the "airs" and put spiders in the jars to see if they could live.

He compared other "airs'' with common air. One day be burned mercury oxide. He put a candle in the jar in which he burned the oxide and noticed that it burned brighter. He burned more and put a mouse in the jar. The mouse lived longer.

From these experiments he developed the phlogiston theory. He believed that there was a substance called phlogiston which was discharged into the air when something was burned. He was wrong. A French scientist, encouraged by Priestly's efforts, went on to discover oxygen which was the substance that made the candle burn brighter and the mouse live longer. Priestly continued to believe in phlogiston. Even though he was wrong, his experiments helped another, Antoine Lavoisier, make the discovery of oxygen. Priestly believed in freedom of thought, not only in science, but in social and political beliefs. He lived at the time of the American and French Revolutions when people's ideas were threatening commonly held religious beliefs.

The people of Birmingham, England, where Priestly lived thought he was strange. They thought it was wrong to conduct scientific experiments and to speak out against the king and the Church of England. They felt threatened by Priestly and his ideas.

On the 14th of July in 1791, a mob attacked Priestly's house. He barely escaped with his life. Priestly decided it was time for him to leave England. He went to America where there was greater toleration for his ideas. Priestly became good friends with the great American inventor, Ben Franklin.

Joseph Priestly experimented with air. You can also conduct simple experiments with air.

EXPERIMENT #1

For this experiment you will need:
a drinking glass
a piece of paper folded down the middle
a piece of cardboard to cover the glass
some vinegar
a little baking soda.
a candle

Pour the vinegar into the glass. You will need 1/2 of a cup. Add 1 tablespoon of baking soda and cover the glass with the cardboard. Light the candle. Hold the glass above the candle. Hold the folded paper so that it forms a trough from the lip of the glass to the flame of the candle. The trough should be at a slightly downward angle. Be sure not to catch the paper on fire. While you're doing this you should keep the glass covered with the cardboard. Now, remove the cardboard from the glass. A gas has been formed inside the glass. You cannot see it, but it is there. Pour the gas down the trough. What happens to the flame? Why do you think it happens?

EXPERIMENT #2

For this experiment you will need:
a candle
something with which to hold the candle
a bowl
a bottle big enough to cover the candle and holder.

Fill the bowl with water. Place the candle in the holder and put it in the bowl. Light the candle. Place the bottle over the lighted candle until the lip of the bottle is well covered by water and the bottle rests on the bottom of the bowl. What happens to the water in the bowl? Why do you think it happens?

Alexander Fleming

Alexander Fleming was a doctor. During World War I he went to France to treat the wounded. He saw many men die from infections caused by wounds. The disinfectant they used to treat the wounds often made the infections worse.

After the war, Fleming began to research cures for disease and infections. One day he had a cold and discovered that nasal drip dissolved germs. He isolated the chemical in the nasal drip that killed germs. It was called lysozyme. He discovered it in other body secretions as well. He was willing to try any substance to find a cure for infection. Visitors to his laboratory were given lemons so that they would cry. He took the tears to see whether or not they would kill germs. They did.

He did not cure human disease but discovered that lysozyme did destroy some germs harmful to animals.

In 1928, he was appointed professor of Bacteriology at the University of London. He continued his experiments. He spread staphlococci on hundreds of shallow petri dishes in his lab. He experimented with hundreds of different things to kill the staph germs which produced boils, pneumonia and food poisoning. One day, in a petri dish by an open window, he discovered the staph germs were dead and a mold was growing in the dish.

He realized that the mold blew in through the open window and killed the staph germs. There are many different types of mold. He observed its shape then he looked through books that had pictures of mold to identify it. He discovered that it was a mold called penicillin. He also discovered that penicillin killed typhoid fever and the flu. He introduced it to the medical profession in 1929.

The first human on whom penicillin was used was an Oxford policeman who was covered with abscesses. Fleming began to treat the man. In twenty-four hours he was well on his way to recovery. Then Fleming ran out of penicillin. The man died. The problem with penicillin was that it was hard to produce. As World War II approached, penicillin was brought to America just in case Germany defeated Great Britain. Penicillin was first manufactured in great quantities in Peoria, Illinois. It saved many lives during the war. Today, many doctors depend upon penicillin to kill infections.

Alexander Fleming experimented with molds. You can make your own experiments in growing molds. There are many different kinds of molds. Not all are as useful as penicillin and some can be harmful. Below are two simple experiments you can do with molds.

EXPERIMENT #1

For this experiment you will need:
several pieces of bread
shallow dishes or small jars

Place a piece of bread in each dish or jar .Moisten one piece lightly with water and place in a dark corner. Place a piece of dry bread on a plate and put it in a dark corner. Take two other plates, one with moistened bread and one with dry bread, and place both in the refrigerator. After three days, examine all the bread samples. What conclusions would you draw about where mold grows best?

EXPERIMENT #2

For this experiment you wil need:
two pint or quart sized jars with lids
two white potatoes
boiling water
tongs
a potato peeler

Sterilize the jars and lids in boiling water. Have two different people with dirty hands each peel a white potato. Place the potatoes in the jars and place the jars in a warm dark place. After three days compare the two potatoes. What conclusions would you draw about the potatoes?

This is a concrete problem solving situation. Students must design and construct a self-propelled vehicle. The activity can also be used to stimulate a discussion of the development of the car and the consequences of the auto in our society. If students are asked who invented the car, they will often respond “Henry Ford”. Actually, the first gasoline powered vehicle was developed by Benz in Germany in 1870. The gasoline powered vehicle was the last step in a long evolution of efforts to devise an efficient self-propelled vehicle. The first self-propelled vehicle was built by a Dutchman in the l7th Century. It was powered by wind.

RULES FOR THE GREAT RACE

Purpose: Students are to design and build a self-propelled vehicle.
1. Size-limit: The vehicle can be no longer or wider than a half-gallon milk carton.
2. Power: The vehicle may not be powered by any means such as motor, electricity, gas, etc.
3. Movement: The vehicle must have wheels. There are no restrictions on the size or the material to be used in the wheels.

TEACHER DIRECTIONS

This is an exercise in problem solving that involves the students in the design, construction and racing of a self-propelled vehicle.

PROCEDURES

1. Divide students into teams of two to four students.

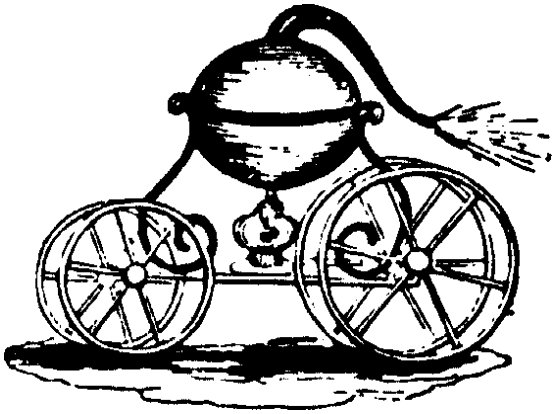
2. The problem and the rules should be explained to the students.

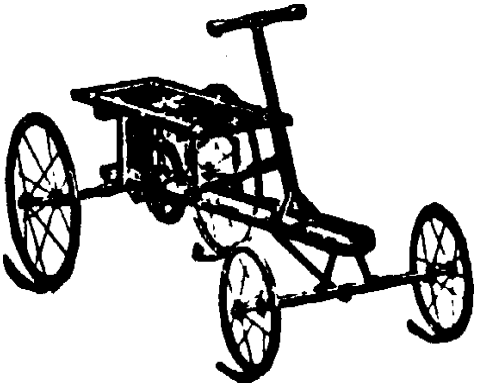
3. Some suggestions should be made about construction – cardboard, milk cartons, wood, styrofoam, etc.

4. Some suggestions could be made about power – wind (students can blow on a sail), rubber bands, etc.

5. Students should be encouraged to sketch their design and draw a two dimensional preliminary plan.

6. The race course should be laid out – the length of the classroom or a section of the hallway.

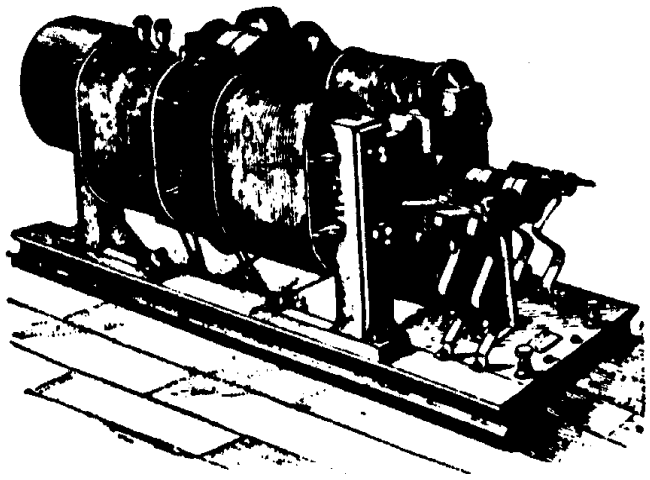




An Industrial Exposition is a perfect way to conclude or introduce a unit on the Industrial Revolution. Industrial expositions were the forerunners of world fairs and were a way of showing off the latest inventions and the industrial might of a country.

An Industrial Exposition is a way of involving all of the students in a class, appealing to different talents and engaging the students in some serious problem solving.

Other activities in this manual can be included in the exposition.



ORGANIZATION

The class should be organized into teams of 6 to 8 students. To add a spirit of competition, points can be awarded in each activity.

POSSIBLE ACTIVITIES

THE GREAT RACE

Teams must use problem solving and construction skills to build a self-propelled vehicle. The team with the fastest vehicle – or, depending on the class, the vehicle that works – will be the winner.

BRIDGE BUILDING

Teams again must use problem solving and construction techniques. The team building the strongest bridge will be the winner.

LIBRARY RACE

The teams can use the resources of the library to find out who invented important items. The teams that come up with the most correct answers in a period will be the winners.

WHAT IS IT?

Teams will receive points for figuring out what various l9th Century tools are for.

DOWN ON THE FARM

Teams will receive points for identifying the names and functions of various 19th Century farm implements.

DESIGN CONTEST

Students are to design a solution to a current problem and graphically draw their solution. Points can be awarded for the best designs. Let a judging team from another class select the best designs.

JUNK BOX

Several activities using junk can be included.

The Library Race

Below is a list of inventions that are commonly used items. Not only are they commonly used, but they have had a tremendous effect upon how we live our lives.

CAUTION: Some of these items did not have a single inventor. They evolved gradually with a number of people contributing to the final product, or they were developed by a scientific team. What you want to find are the names of the people who contributed to the development of each item, as well as the name(s) of the people who developed the first useful application.

Television _____

Nylon _____

Frozen food _____

Canned food _____

Plastic _____

Computer _____

Refrigeration _____

Radio _____

Transistor _____

Jet airplane _____

Design Contest

You will design a solution to a current problem. You are to work with several other students in producing a solution to a problem that you think is worth solving. Below are some suggested problems, but you may choose your own. You have to draw your solution on a piece of paper large enough for display. If possible, you should use color in the drawing of your design.

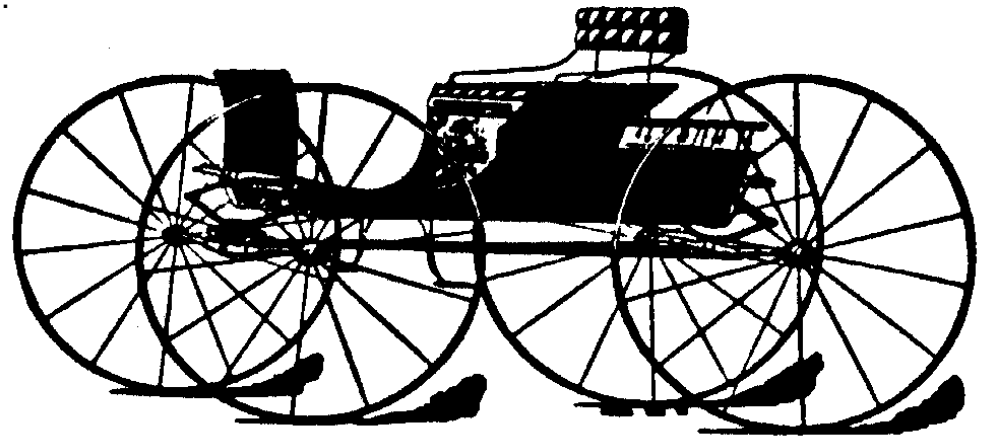
SOME POSSIBLE PROBLEMS

* A pollution free transport system that doesn't involve cars.

* A method of recycling all of our garbage.

* A method of improving mail delivery.

* A space station habitat for 1,000 people that is self-contained.



STEPS IN CREATING A DESIGN

After you and the members of your team agree on a problem you should follow the steps below in arriving at a solution.

*** ANALYZE:** Take a careful look at the problem. Break it down into its parts. For example, what would be needed to make a space station self-sufficient? Obviously food and water, but what else?

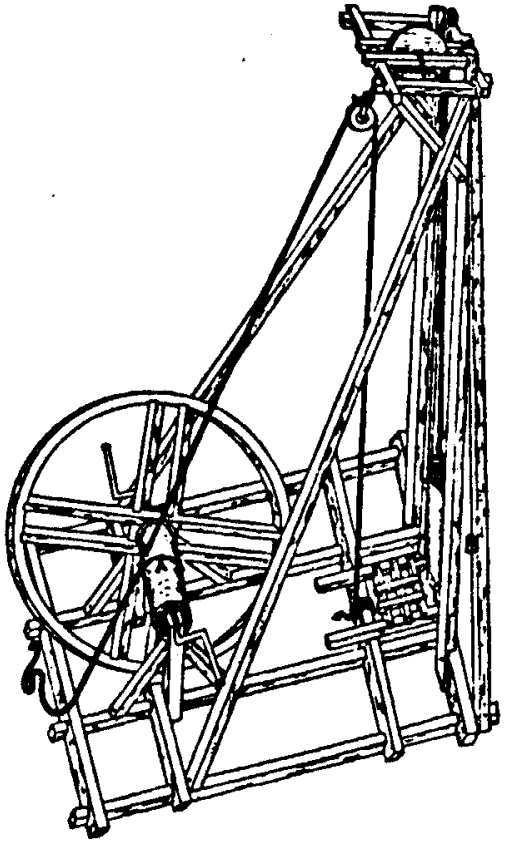
*** SOLUTIONS:** Think of as many solutions to the problem as you can. Don't stop with the first solution someone thinks of. Try to come up with several solutions.

*** EVALUATION:** Think of criteria to evaluate each solution. The same criteria should be used for each solution.

*** DECIDING:** Decide which solution best meets your criteria. This is the one you want to draw on your paper.

The Junk Box

Junk boxes can be very useful learning tools. There are a number of activities that can be done with them. Have the students put extraneous junk that they have lying around the house in a Kleenex or shoe box. The junk can be bits of string, rubber bands, broken toys, small containers, parts of appliances, etc.



ACTIVITIES

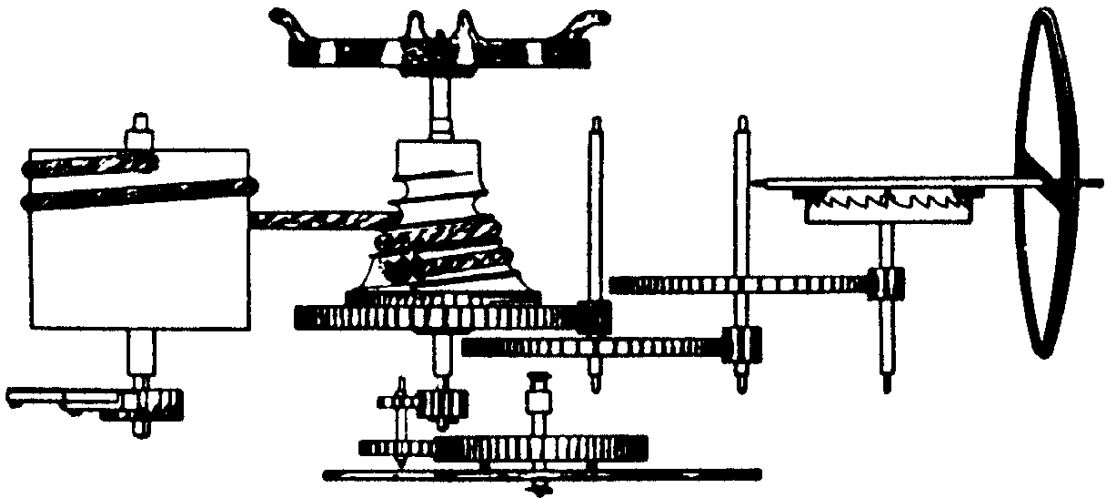
*Have the students make a useful object by combining two or more objects in the box.

*Have the students devise as many useful objects as possible from things in the box.

*Select one object from one of the boxes and have the teams of students think of as many possible uses for the object as they can. This can also be done by teams. Each team selects an object, the others think of as many uses as possible. Each team takes a turn.

OBJECTIVES

These activities can be used to develop fluency in generating ideas and to encourage creativity.



STUDENT DIRECTIONS

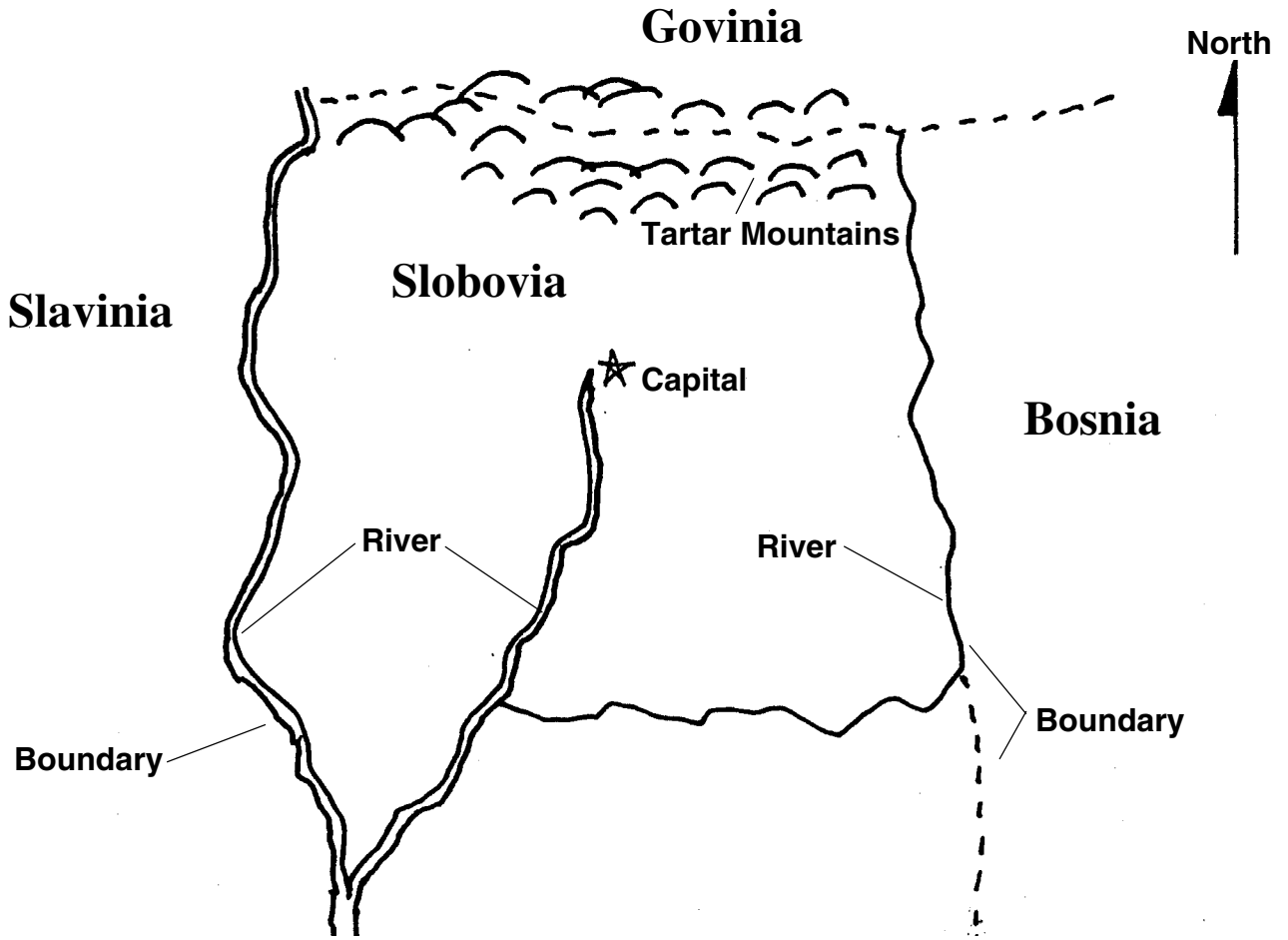
Countries have always spied on one another. The purpose of spying is to find out what others are doing and are going to do. Spies use a variety of skills to do their work. Spies tend to be scholarly, intellectual types rather than the super-hero type as portrayed in the movies.

This is a spy game. You have to find out what another country is planning to do. Are they planning to attack your country? 0r, are they peaceful? And if they do plan to attack, who is it, where will they attack and with how many troops?

You must try to figure this out by doing the following:
1. Cracking a secret code.
2. Making careful observations inside the country.
3. Doing research in reports and newspapers published inside the country.

YOUR ROLE

The country you are spying on is called Slobovia. The neighboring countries are Bosnia, Govinia and Slavinia. They do not like one another, except Slobovians and Slavinians have ethnic ties and the same language. They have been on friendly terms in the past.



THE SECRET CODE

You have intercepted these four secret messages. Try to decode them.

SECRET MESSAGE #1

You overheard this message while eavesdropping on the military radio band.

To: Military HQ
From: Military G2
HVMW GILLKH GL YLIWVI LU YLHMRZ. LMV WRERHRLM. YLHMRZ NZB ZGGZXP. 5 NZB.

SECRET MESSAGE #2

You intercepted this coded message from Slobovia's most famous spy, Mini Moto.

6 YAM
To: IILMTRAY QH
AINSOB SI GNIVOM STI YMRA 0T RUO REDROB.

SECRET MESSAGE #3

Mini Moto has goofed again. This message from her also falls into your hands. This, however, is in a different code.

6-13, 1,25

To: 13,9, 12,9,20, 1, 18,25-8, 17

19 , 12 , l, 22 , 9 , 14, 9 , 1-8, 1, 19-4, 5 , 6 , 5 ,14, 19 , 9 , 22 , 5-20 , 18 , 5 , 1 , 20 , 25-23 , 9 , 20 , 8-2 ,15, 19, 14 , 9 , l.

SECRET MESSAGE #4

This is another message you overheard on the military radio.

To: NJMJUBSZ DEPNNBOEFST
From: NJMJUBSZ IR

TODSU QMBO CMVF NBZ 15.

A SPY'S DIARY

Spies also make observations. You have been carefully observing the sights and sounds of the capital city of Slobovia. Here are your notes for one day, May 7. Spies are also human. They, like Mini Moto, make mistakes. You lost your notes for the days prior to this one. Too bad!

5 A.M.

Army trucks pull up to farmer's market. They load large quantities of beets and potatoes.

9 A.M.

No men in uniform are seen on the street. Usually there are some soldiers on leave wearing their uniforms.

10 A.M.

Shop for bread in store. Price has increased by 25%. Shoppers' carts are fuller than usual. There is tension in the air. The people think something is going on. They talk about an attack from Govinia.

11 A.M.

See five army trucks loaded with soldiers heading east out of town. There are about 25 soldiers in each truck.

12 A.M.

Talk to housewife whose son is in the army. She says his leave has been cancelled and he had to return to his army base.

1 P.M.

Shopkeeper tells me a load of apples that he is expecting from the eastern part of the country has not arrived. He said the trucking company told him that the army stopped the truck.

2 P.M.

Fill up the car. Notice that gas prices have increased again.

3 P.M.

Go to the docks. Heard talk about a delivery of a dangerous cargo. A special crew was picked to unload it. It came in round containers. Crew said it was an easy job. The containers were light. Might be a gas.

4 P.M.

Hang around docks. Army trucks come to pick up the dangerous cargo. Follow them. They drive west out of city.

5 P.M.

Return home for dinner. Neighbors complain that gas was stolen from their car. They complain about high gas prices.

A SPY'S READING

Spies collect a lot of information by reading newspapers and magazines. They try to learn what is going on just like anyone else. Unlike most people, they try to see what patterns or trends are developing. In Slobovia there are no radios, TV or magazines, just newspapers. You have been busy the last few days and you decide to catch up on your reading. Here is a digest of the most important stories.

April 15
SLOBOVIA BUILDS NEW FORT ON BOSNIAN BORDER. The government of Slobovia announced plans to build a new fort to protect its border with Bosnia. The fort is to replace one that is badly in need of repair.
April 16
BOSNIA PROTESTS FORT. The government of Bosnia issued a strong protest against the new fort being built by Slobovia. They called it a dangerous act of provocation and announced they were calling up their army reserves.
April 17
NEW OIL DISCOVERY IN SLAVINIA. A huge oil field was discovered in Slavinia. Government officials are predicting an economic boom.
April 19
SLOBOVIAN PRIME MINISTER DENOUNCES GOVINIANS. Prime Minister Shalom Wetter-whistle called Govinians nothing more than goat herders and horse stealers. Recently there have been raids from Govinia on Slobovian flocks of sheep grazing in the Tartar Mountains.
April 20
GOVINIA THREATENS WAR WITH SLOBOVIA. The government of Govinia today claimed that Slobovians were raiding Govinian farms. If such acts continue, they said, military action will be taken.
April 20
NEW GAS HIKE. The economic ministry announced a new increase in gasoline prices.
April 25
SLOBOVIAN RESERVES MOBILIZED. The Prime Minister announced that army reserves were being called up because of war-like gestures from Bosnia and Govinia.
April 27
BOSNIA MARKS RECORD HARVEST. Bosnia announced a huge wheat crop today. Biggest in history.
April 30
BIG STORM EXPECTED. A big wind storm is expected to sweep in from the east in the middle of May. Farmers are encouraged to get their winter crops harvested before it hits.
May 1
GOVERNMENT CONSIDERS TAX HIKE. New taxes are planned to meet increasing government expenditures.

A SPY'S RESEARCH

Spies collect their information from a variety of sources. Libraries, garbage cans (yes, garbage cans!), government employees and the like.

IN THE LIBRARY

You find a report on the Slobovian economy. The report is summarized below.

*The Slobovian economy is in trouble: unemployment and prices are increasing.

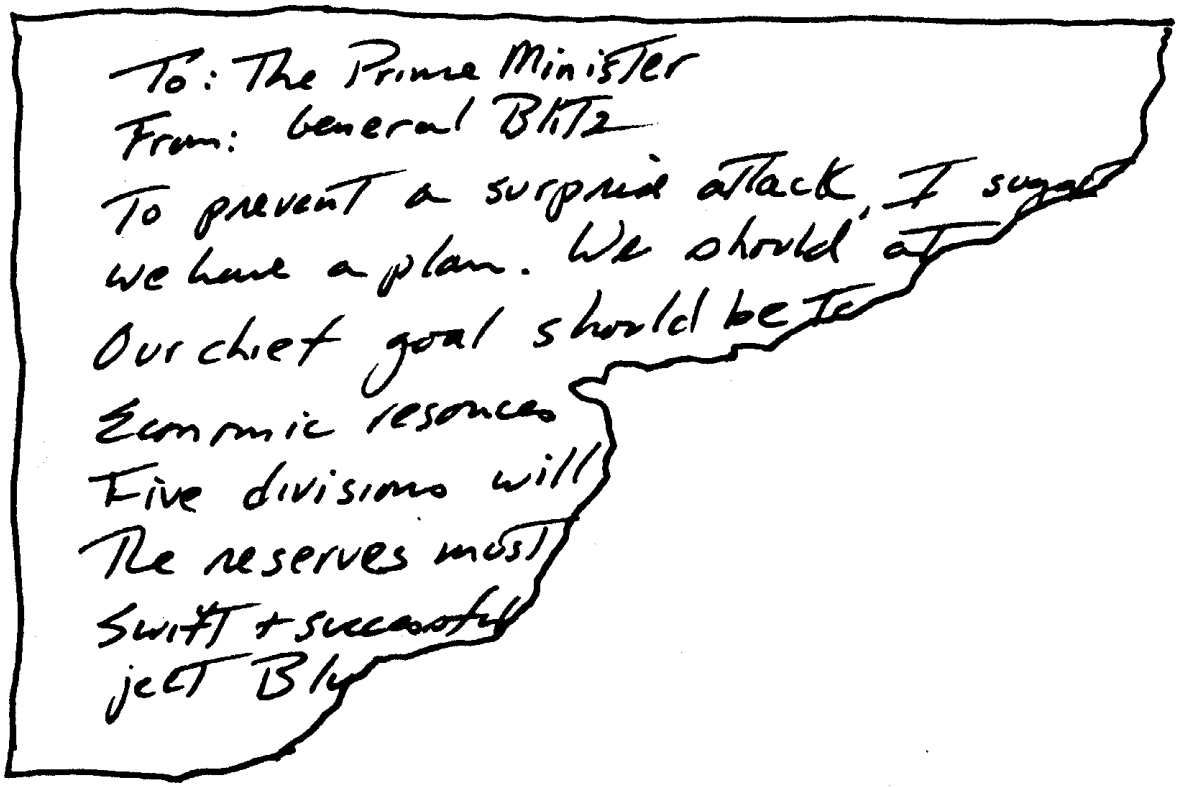
*The economic problems are due to the high cost of importing oil. Exports of food have not kept up with the cost of importing oil. Food exports will have to be increased. Food production must go up or the economy will be in serious trouble.

IN THE RESTAURANT

You overhear a secretary from the Defense Ministry talking about her job. She says that she processed the most interesting purchase orders lately. She bought 10,000 gas masks and 200 wooden boats.

OUT OF THE GARBAGE

You browse through the garbage of the Defense Ministry and you find this torn memo.



Below are several people who have had a great impact upon the lives of people in the 20th Century. You have to decide which person was the most influential, for good or bad, and develop reasons for your selection.

ADOLPH HITLER

German leader who re-armed Germany. Started World War II. The war destroyed Europe and cost the lives of 35 million people. He attempted to kill all the Jews.

HENRY FORD

American industrialist who put America on wheels. He produced the first inexpensive car that most Americans could afford.

MAHATMA GANDHI

An Indian leader who forced the English to grant independence to India, the second most populated country on earth. He used non-violent methods to gain India's freedom.

FRANKLIN D. ROOSEVELT

Became president of U.S.A. in the middle of the Great Depression. He started programs that helped restore confidence in America and put people back to work. Led America in World War II, but died before the war was finally over.

JOSEPH STALIN

Dictator of Communist Russia. Successfully resisted the German invasion during World War II. After the war, the Cold War began in which Russia and the West competed for influence in the world. Stalin was dictator of Russia for about 30 years.

ALBERT EINSTEIN

Developed a new theory in physics that led the way for developments in nuclear energy, including the atomic bomb.

MAO TSE-TUNG

The Communist leader of China who overthrew the Nationalist government and rid the country of foreign influence and control. Turned the most populous country on earth into a communist society.

RICHARD M. NIXON

The only U.S. president to resign because of scandals in his government. Ended the Vietnam War and recognized Communist China. Also began disarmament talks with the Russians.

WRIGHT BROTHERS

Invented the first practical plane. Ushered in a whole new era of rapid transportation.

When Germany was defeated at the end of World War II, the Allies faced the question of what to do with Germany. Germany had started two world wars within twenty five years. Germany was destroyed by the war. However, with large quantities of iron and coal, an excellent tradition in education and the capacity to organize themselves, Germany remained potentially strong.

If you were the Allies, what would you do with Germany? Below is a list of options. Select one or a combination of choices. Compare your answers with others in the class and arrive at a classroom decision.

1. Dismantle Germany's remaining factories and remove them from the country.

2. Force the Germans to pay war damages by taking their coal and iron.

3. Make Germany an agricultural nation only. Allow them to grow enough food to feed their own population, but do not allow them any industry.

4. Prohibit Germany from ever re-arming.

5. Occupy the country with soldiers on a long-term basis to ensure that they will never re-arm.

6. Divide Germany into two parts, one dominated by Russia and the other by the Allies.

7. Divide Germany into many parts and keep the country disunited.

8. Allow Germany to do whatever it wants to.

9. Give Germany aid to rebuild the country and its factories.

10. Annex Germany to France and Poland, two of the countries invaded by Germany.

11. Allow a substantial part of the German population to starve.

12. Provide enough food to feed the German people until they can grow their own.

Your Answer:_____

Teacher Directions

In this game the students will learn about the problems facing many countries in the world and the process of debate and the formation of alliances. The activity will take two to three class periods.

Objectives

* Learn about the problems of Third World countries.
* Learn about the relationship between the Third World and industrialized countries.
* Practice debate.
* Learn about parliamentary procedure.
* Learn about negotiation and the formation of alliances.

Procedures

1. Divide the class into teams of two people.
2. Assign countries to each team. Below is a list.
3. Have students do research on their country and fill out information on student hand–out. An almanac will be the best source of information.
4. Distribute list of problems.
5. Allow students time to formulate a resolution to propose to the General Assembly.
6. Have each team read its resolution.
7. Allow teams time to discuss with other countries possible alliances and the blending of resolutions.
8. Have teams present resolutions with arguments in favor and against.
9. Vote on resolutions.

Parliamentary Procedures

1. The class will elect a chairperson to guide the debates.
2. Resolutions will be organized by topic – hunger, peace, imperialism, etc.
3. Resolution will be read by team presenting it. Debate will be allowed with two speakers for and two against. Speeches should be limited to two minutes.
4. Each team gets one vote. A resolution must receive a majority to pass.
5. Before the presentation of the resolutions, they should be summarized on the board and identified by the country (or countries) introducing the resolution.

Countries

Underdeveloped Countries

1. Central African Republic
2. Burma
3. People's Republic of China
4. Iraq
5. Egypt
6. Kenya
7. Guatemala
8. India
9. Thailand
10. Cuba
11. Syria
12. Bolivia
13. Pakistan
14. Nigeria

Developed Countries

15. United States
16. U.S.S.R.
17. Japan
18. South Africa
19. Israel
20. Argentina

Student Directions

The United Nations General Assembly is the international forum where countries can debate important problems. They pass resolutions to solve those problems. In this activity you are to represent one of the countries in the United Nations. You will do some research on your country and fill out the information on the form below. You will then write a resolution to solve the most important problems and vote on them. Your goal is to get the assembly to adopt your resolution or a similar resolution that has been agreed to by more than one country.

Name of country:_____

Population:_____

Per capita income:_____

Population growth:_____

Literacy rate:_____

Infant mortality:_____

Gross National Product:_____

Standard of Living Index:_____

Resources:_____
_____
_____

Industry:_____
_____
_____

Chief exports:_____
_____

Chief imports:_____
_____

Geographical features:_____
_____
_____

Population density:_____

Type of government:_____

Alliances:_____

Problems:_____
_____
_____

WORLD PROBLEMS

Counties throughout the world are beset with a variety of problems. Below is a summary of some of them.

Underdeveloped Countries

l. Population growth. Some countries have a very high growth rate.
2. Low standard of living. Some countries are very poor and cannot provide adequate health, education and nutrition.
3. Imperialism. Some countries are under the economic and indirect political control of more powerful countries.
4. Conflict with neighbors. Some countries have been or are at war with neighboring countries. Some of the disputes are over land or over ideology.
5. Refugees, hunger and war have displaced many people and have forced them to live in other countries. This is a problem with Palestinians who have lost their land to Israelis, in Southeast Asia and in central Africa.
6. Lack of industrial development. Many countries lack the resources to develop local industry. They cannot afford the energy resources, the purchase of machinery, and they do not have the necessary transportation system or an educated population to prosper.
7. Dependence on industrialized countries. Some countries depend on industrial countries to buy their natural resources. They also depend on industrialized countries for their manufactured goods. This, for some countries, means that more money leaves the country than is taken in.
8. Political instability. Many countries are new. They do not have stable governments. In some countries there have been many revolutions and bloodshed. Some of the revolutions have been communist led, backed by Russia and China.
9. Unproductive farming. Many countries do not produce enough food to feed their growing populations. They must import food. This is an additional drain on resources.
10. High military budgets. Some countries feel they must maintain large armies to protect themselves from their neighbors and to keep the government in power. These arms are purchased from industrialized countries.

Developed Countries

1. Large military budgets. The USA and Russia in particular spend large sums on the military. There is the constant threat of war between the two.
2. Trade competition. Several countries are keen competition for world trade.
3. High unemployment and inflation. Some countries have high unemployment rates and high rates of inflation.
4. Dependent upon others for essential resources. Some countries depend upon others for vital resources such as oil.
5. Ideological conflict. The Russians and the United States are in a constant struggle to promote their philosophies in other parts of the world.
6. Foreign debt. Many poor countries owe rich countries large sums of money. They are having difficulty paying it back.

One of the chief problems facing the world today is the possibility of nuclear war. Both the United States and Russia have the nuclear capacity to destroy each other many times over.

PURPOSE

In this activity you will try to negotiate a settlement between the United States and Russia to limit, reduce or eliminate nuclear weapons and missiles. In this game you will learn two things:

1. How to negotiate – giving up a little to get something you want.
2. The difficulty of reaching agreement between the two major powers.

RULES FOR GAME

1. The class is to be divided into teams of four. Two people from each team will represent the United States, two will represent Russia.

2. Each team is to try to come up with an agreement that either limits arms or brings about disarmament.

3. Each team must try to protect its national and ideological interest in making the agreement.

4. At the end of one class period, each team will explain its agreement to the rest of the class. Each agreement will be evaluated by the following criteria.

A. Does the agreement limit or reduce arms?
B. Does it protect the interests of each country?
C. Does it give one country or another an edge in nuclear capability?

5. The class will evaluate each agreement and decide which is the best agreement according to the above criteria.

6. The following point system will be used in evaluating each agreement.

3 points for excellent
2 points for average
1 point for poor
1 point bonus for each team that reaches an agreement

BACKGROUND

After World War II the United States and Russia were the dominant world powers. The United States and Russia had large land armies. Russia took control of eastern Europe and Germany was divided into two parts and disarmed.

The Cold War immediately began. Russia attempted to blockade Berlin to force the United States out. It failed. They also attempted to invade Iran and had to retreat under U.S. pressure. The U.S. gave aid to rebuild western Europe and Japan. Both countries were destroyed after the war.

Communism triumphed in China in 1949 and communist North Korea invaded South Korea. A three year war was fought. The Russians supplied North Korea with arms and U.S. soldiers fought in South Korea. The Russians developed a policy of secrecy and isolation. They developed their own atomic bomb in 1949. The United States, on the other hand, followed a policy of containment. This meant they would ring Russia with a series of defensive alliances. In Europe, there was the North Atlantic Treaty Organization (NATO) which was comprised of the re-armed countries of western Europe and the United States. In Asia, there was the Southeast Asian Treaty Organization (SEATO) which was comprised of the countries of that area and the United States.

POINTS OF DISAGREEMENT

1. Russia is communist. It supports revolutionary movements in various parts of the world, particularly in Latin America, Africa and Asia. It would like to see communism succeed in more countries.

2. The United States is capitalist and democratic. It would like to see private enterprise and the profit motive succeed in other countries along with democratic traditions.

THE ARMS RACE

In the late 1950's, both sides began to build inter-continental ballistic missiles that could carry nuclear warheads to each other's countries. In the late 1950's, the United States felt that it was falling behind the race with Russia. Many talked about a "missile gap". The fact that the Russians were the first to send a man into space reinforced this notion. In the early 1960's, the United States built the Minuteman missiles which were propelled by solid fuel. This type of fuel is much safer than the old liquid used to power rockets. The U.S. also developed a missile, the *Polaris*, which could be launched from under the ocean and had a large bomber fleet comprised of B-52's. A portion of this fleet is kept in the air all the time in case of nuclear attack. Russia has similar missiles and bombers.

STRATEGY

Both sides believe in nuclear deterrents. Since both sides have the capacity to destroy each other, it is not in the interest of either side to start a war. Both sides are concerned that the other side does not get an overwhelming edge in missiles, planes and bombs. Each side is afraid that if one side gets superiority, it may be able to destroy the other side's ability to retaliate. This is called the FIRST STRIKE STRATEGY. If one side could do this, its country would be safe except for the nuclear radiation that would float around the earth. To protect missiles from attack both sides have put them under ground or under water. However, modern guidance and detection systems now enable both sides to hit underground sites accurately and to detect subs under the water.

PREVIOUS DISARMAMENT TALKS

In 1963, the United States and Russia agreed to a nuclear test ban treaty. This treaty prevented above-ground nuclear tests where the radiation harmed people. In 1972, after three years of negotiation, two agreements were signed. This was called the SALT agreement. SALT stands for Strategic Arms Limitation Talks. Both sides agreed not to build a nation-wide ABM (anti-ballistic missile) system designed to shoot down the rockets from the other side. In the second agreement, the U.S. and Russia agreed to freeze offensive ballistic missiles. For the U.S., this meant that they could have 1,054 ICBM (inter-continental ballistic missile) missiles and 656 submarine based missiles. For Russia, it meant they could have 1,618 land-based missiles and 710 sub-based missiles. The agreement was to last for five years.

This agreement did not cover five important problems.

1. It did not cover the number of warheads per missile. The U.S. had perfected the MIRV warheads in which one rocket can carry several nuclear weapons which can strike different targets. The U.S. had 5,700 warheads and the Russians 2,500.

2. It did not cover the explosive power of the warheads. The Russians who have larger missiles and nuclear devices had a 3 to 1 edge in explosive power.

3. Long range bombers were not covered. The U.S. had 460 bombers and Russia 140.

4. It did not prevent the replacement of old rockets with new ones with more destructive capacity.

5. It did not provide for on-site inspection.

THE RUSSIAN VIEW OF THE UNITED STATES

The Russians believe they are surrounded by the United States. U.S. submarines patrol close to the Russian coasts. To Russia's west, Europe is only a short hop away, and there is the NATO alliance in Europe. On the east, they face China which, although communist, is not friendly to Russia. It is friendly with the U.S. The Russians have a great fear of an armed Germany. They have fought two world wars with Germany and have suffered tremendous losses.

THE AMERICAN VIEW OF RUSSIA

The Americans believe that Russia is aggressive and expansionist. The Russians have put down a number of revolts in eastern Europe to keep the people there from having more rights. Poland is the latest example of Russia's interference in the affairs of other countries. The invasion of Afghanistan is another example of Russia's dictatorial aggressiveness. Americans also believe that the Russians supply aid to many revolutionary groups around the world.

FIRST STRIKE 0R PREEMPTIVE STRIKE

Both sides have great fears that the other side will have the ability to destroy its nuclear force with a sudden sneak attack. This would make it impossible for the one side to destroy the other. Nuclear deterrents only work if each side has the ability to blow the other up.

INSPECTION

The United States is very concerned with the problem of inspection to make sure the other side is disarming if an agreement is reached. Russia is a closed society and it is difficult to find things out. The United States is more open and it is easy to find out what the U.S. is doing. In negotiating you must keep both of these concerns in mind.

YOUR GOALS IN NEGOTIATION

* Limit or reduce the number of nuclear arms.
* Have an inspection system that will insure the other side isn't cheating.
* Protect the safety of your country.
* Make sure your missiles are protected from a first strike.

STEPS

* Both sides should prepare proposals. Look at the information on the next page and decide what both sides can do without.
* The proposals should be exchanged. Where do you agree and disagree with the other side? Can you make compromises that will overcome the disagreements?

Nuclear Strength

Below is information on the nuclear firepower of Russia and its allies and the United States and its NATO allies.

Russia (Includes Warsaw Pact countries)

STRATEGIC NUCLEAR WARHEADS
8,135
EXPLOSIVE POWER OF WARHEADS
7,868 megatons
ICBM'S (intercontinental missiles)
l,396
IRBM'S (intermediate range missiles)
650
SUBMARINE LAUNCHED MISSILES
950
STRATEGIC BOMBERS
216
NUCLEAR MISSILE SUBMARINES
86
FUTURE PLANS
Plans to install 250 SS-20 medium range missiles pointed at Europe to replace old missiles.

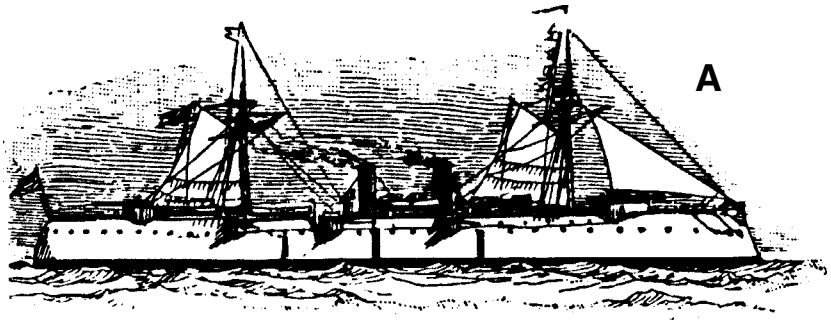
United States (Includes NATO countries).

STRATEGIC NUCLEAR WARHEADS
9,670
EXPLOSIVE POWER OF WARHEADS
3,505 megatons
ICBM'S (intercontinental missiles)
l,052
IRBM'S (intermediate range missiles)
18
SUBMARINE LAUNCHED MISSILES
688*
STRATEGIC BOMBERS
464
NUCLEAR MISSILE SUBMARINES
43
FUTURE PLANS
Plans to install 572 Pershing and cruise missiles in Europe pointed at Russia.
Plans 232 B-l and Stealth bombers to replace aging bomber fleet.
Plans to build 100 MX missiles to be based in U.S.

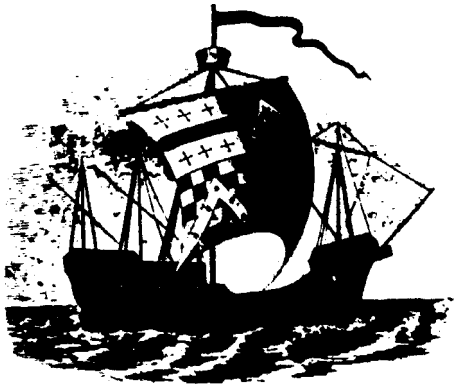
* These missiles carry multiple warheads whereas the Russian missiles do not. U.S. actually has superior fire power in this category. Each missile can carry 2 or 3 warheads.

Which are the oldest? Arrange the ships in chronological order beginning with the oldest.

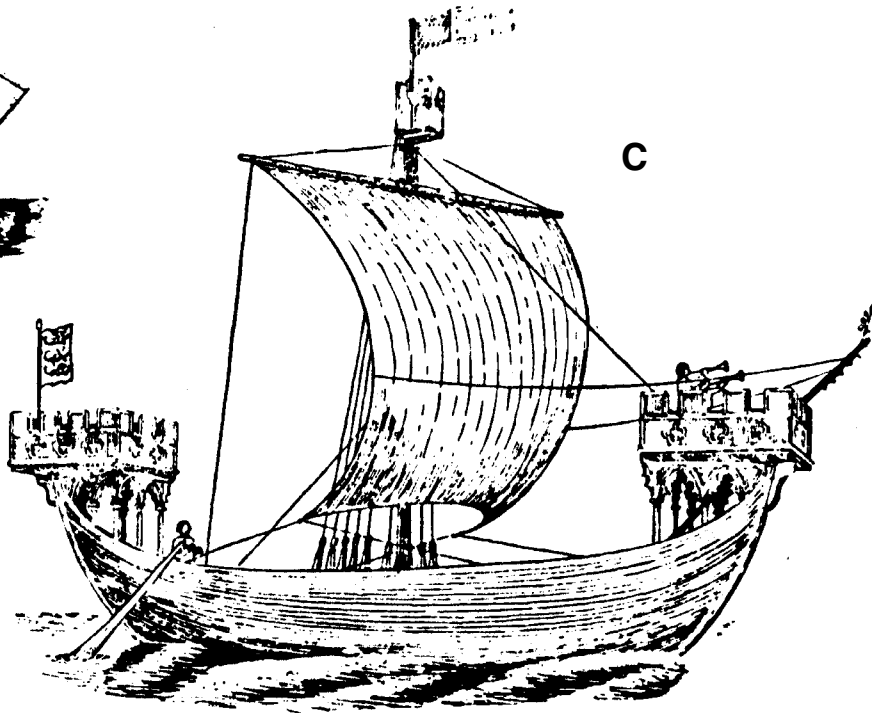
A

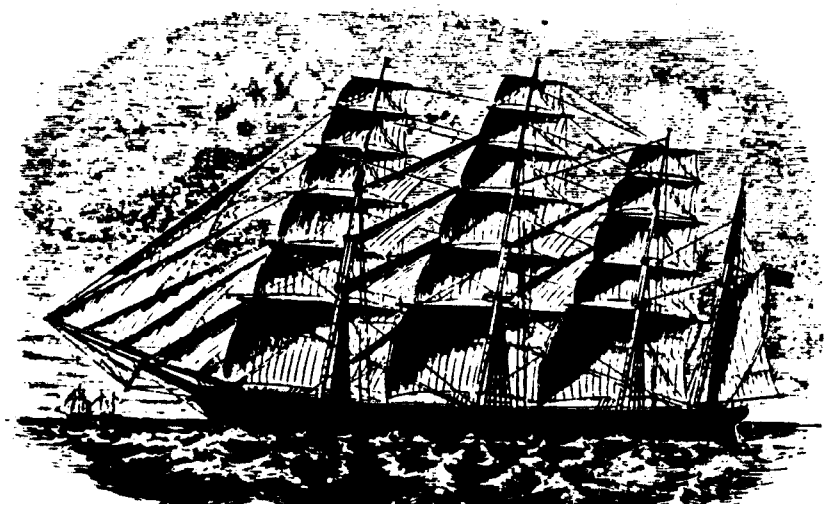


B



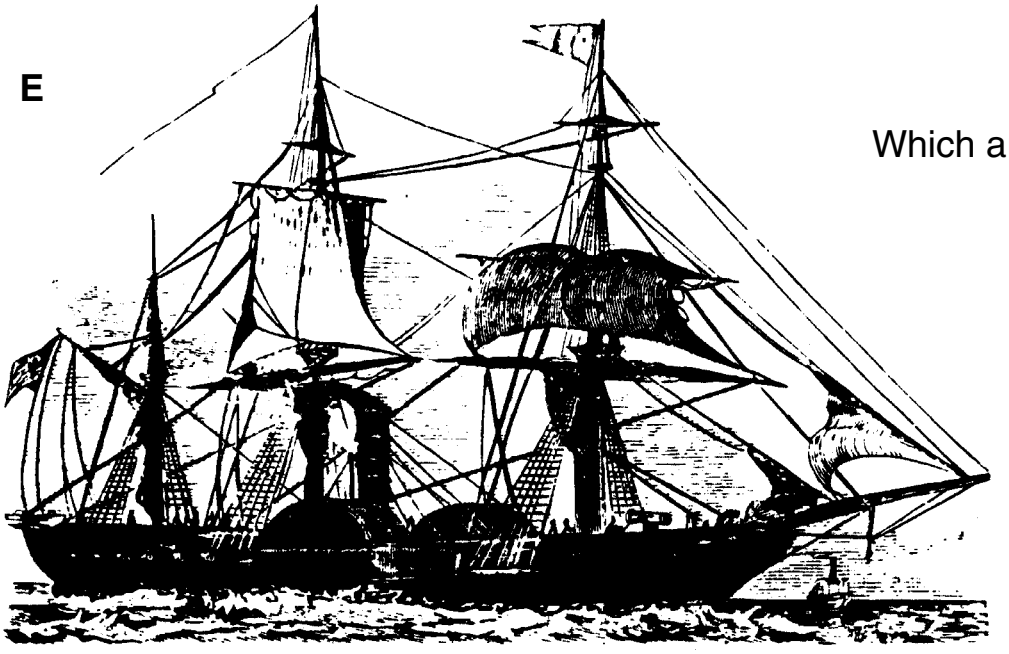
C





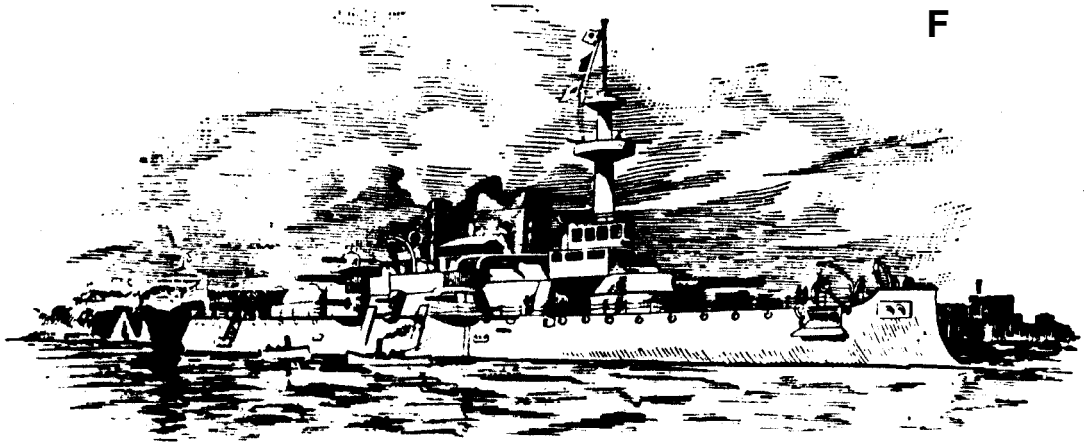
D

E



Which are the oldest?

F



G

H