

REMOTE ISLAND

A SIMULATED LEARNING SITUATION

Richard A. Schusler, Ph.D.
Kansas University, 1971

RATIONALE

Teaching map symbols to pupils in the classroom is usually considered one of the easiest lessons to "get across." Teachers usually have children come to the map at the front of the room to point out such things as rivers, oceans, states, capitols, mountains and valleys. These factual components of learning are readily memorized and, therefore, usually viewed with some enthusiasm by both the teacher and the pupils. They represent less abstractness in social studies than the study of a man's life, or the course of events in a war, battle or peace conference. In a sense, a pupil can "see" the facts.

Perhaps this is why most teachers do little more with the teaching of map skills than fill out dittoed worksheets or construct salt and flour maps. Too, it is often felt that there simply isn't time in the curricula to spend studying map symbols as a separate unit. Consequently, map symbols are taught by the teacher whenever he "feels" that the time is appropriate for a greater understanding of the lesson at hand. This, for the most part, represents an "addition" to a regular lesson.

Teaching map symbols in this manner does not necessarily insure a transfer to application learning. For this reason, REMOTE ISLAND attempts to use the symbols as they are learned in a simulated condi-

tion of problem solving. It is known that learning the application of knowledge at the same time that knowledge is presented allows the pupil to internalize the learning in usable form. Decision making, based upon the presented knowledge, enhances this mode of learning even more. The pupil is allowed to use the knowledge in his own way as he chooses a path through the decision making process.

DESCRIPTION OF THE SIMULATED EVENT

REMOTE ISLAND concerns a hypothetical island which the United States gained from Japan after World War II. It has remained virtually uninhabited since the time of its' discovery by the crew of a shipwrecked sailing vessel. Pupils who take part in the simulation are asked first to learn the physical characteristics of the island and then to apply these learnings to a problem that confronts the people of the island. All pupils participate in the learning and problem solving by contributing different information concerning the island. Each child is assigned a role to play. The members of each simulation group decide, by consensus, what to do about the problems facing the island.

MATERIALS AND STEPS IN IMPLEMENTING THE SIMULATION

The simulation is implemented by dividing the class into groups of six persons each. A sociogram lends itself well to this grouping. Groups represent inhabitants of the island. A member of the group will have a data card telling some physical characteristics of the island. He will also have a role card telling him what person he is to represent on the island. Each member will also have a worksheet on which he records the data about the island in the form of physical

characteristics and questions to be answered, (see Appendix for these materials.)

The simulation starts with the group compiling factual knowledge about the island. This is accomplished by a member of the group showing and reading his card to the rest of the group (cards of this type represent rainfall, temperature, locations of streams, etc.). As each member reads his card, the other members record this data on their outline maps on their worksheets. A crayola is used to duplicate the same colors presented on the data cards. Each member of the groups now has the same information.

The second part of the simulation has to do with placing three large cities, any number of small cities that the group desires, and appropriate roads and railroads on the map. Symbols to be used for these physical features are included in the worksheet. The group is encouraged to discuss where to place these additions and arrive at a consensus before placing them on the map. Discussing reasons for completing these placements are important to each member of the group and his understanding as the simulation progresses.

The third part of the game starts with the problem that is given in the worksheet. A wealthy man wants to smelt the iron ore which can be mined on the island. This event can cause many things to happen to the people located there. It can represent added income to the people of the island. A smelter can also represent other happenings to the island and the people that are not good. Smog can be generated, streams and the ocean, itself, can be polluted. Political corruption can set in, population can over-increase, and a way of life that is now leisurely can be upset. These spinoffs, or effects,

of the smelter have to be considered by the group. To do this, every member uses his second card which defines his role on the island. Maximum time should be allowed for the discussion until a group decision is reached and the reasons are clearly set down for the decisions that are made.

At the end of this discussion, Groups then report to the class-at-large on the decisions and the reasons behind them.

INTENDED LEARNINGS FROM THE SIMULATION

Map Symbols: Placing

Pupils learn the meaning of map symbols at the same time they learn to use them. The symbols appear on the map as having relations to each other, i.e., the ground cover is greener where there is more rainfall, foliage is less on mountain tops, and lakes occur in valleys and plains. The pupil will locate cities, highways and railroads, using designated symbols, with group approval.

Map Symbols: Using to Make Decisions

To make intelligent decisions about environmental, political, and economic problems facing geographical locations of the face of the earth certain kinds of knowledge and understandings are necessary. Map symbols for this simulation represent a part of this body of knowledge.

Social Structure and Its Relation to Decision Making

The group, through its role playing cards, is led to see that different people in the community have their individual views about what a smelter means to them. Differences in opinions and impasses have to be broken for consensus in the group.

Group Process: Group Decision Making

The group learns to make a decision solely on the data at hand. This makes the process independent of the teacher and thereby strengthens the independency of the group and the individual. In addition to knowledge, skills of persuasion, negotiation, compromise, leadership, followship, blocking, and facilitating are experienced.

APPENDIX A

REMOTE ISLAND

Worksheet

NAME _____ DATE _____ GROUP NUMBER _____

DIRECTIONS: This is a fact learning and decision making game about an imaginary island called REMOTE ISLAND. Please do the tasks in this order: 1. read the history about the island, 2. each person in the group take a large card from the brown envelope and read it as you show it to the group. Each member copy in crayola these symbols on the map on page three of this worksheet, 3. by discussing in the group, place the three large cities and as many small cities as you desire on the map. In addition, place highways and railroads, 4. now read the problem concerning Mr. Danks and make a decision about the smelter. Record in writing all reasons as to why you decided as you did.

HISTORY OF REMOTE ISLAND

About 1750 a frigate was wrecked and sank off the coast of REMOTE ISLAND (so named by the crew of this ship). Some of the men were able to make the shore of this island, some died in the sea. As the island was out of the traveled path of ocean vessels, it was forty-three years before the last two remaining men were rescued. Although the island was lush and inhabitable, after being rescued, these two men soon forgot about it. Japan claimed it as a submarine fueling station during World War II.

United States obtained the island in a trade with Japan in 1950. The United States government later sold it to Americans at \$1500.00 per acre with a maximum of five acres that could be purchased by any one person. No companies could buy land.

By 1970 the population of the island was 700,000 and growing at the rate of 10,000 per year.

The island is beautiful and peaceful. It is still out of the main ocean traveled routes of ships. However, lately a problem has become evident. The island is running out of money because the people on the island import more than they export. In other words, more money is leaving the island than is coming in. The people are concerned about this.

One day, a man by the name of Mr. Banks comes to the island from the United States and makes an offer to the people that can help them financially. He states that he will smelt the iron that is located on the island, sell it and ship it to the buyers. To do this, he must locate a smelter on the north side of the island. He must also build docks and oil storing facilities so that he can bring his ships close into shore and refuel them.

PROBLEM I

(After you have completed putting all the symbols on your own map.)
Locate on your map three large cities and as many small cities as the group desires. Put in the appropriate highways and railroads.

These questions may help guide you in this task:

1. What geographical factors are best to consider when locating a city?
2. What economic conditions cause cities to start and prosper?

QUESTIONS

1. Why did you locate your cities where you did? _____
-

2. Why did you locate your railroads and highways where you did?

PROBLEM 2

On REMOTE ISLAND are located deposits of high grade iron ore and tin. Discuss in your group what to do about Mr. Banks' offer to mine and smelt the iron ore. How could you use the tin (tin occurs in a free state and, therefore, doesn't have to be smelted)?

These questions may guide you in this task:

1. What could happen to this island if the iron was mined and smelted that would help the people?
2. What could happen to this island if the iron was mined and smelted that would be injurious to the island and its people.
3. What alternatives do you see that could be taken (what else could be done)?

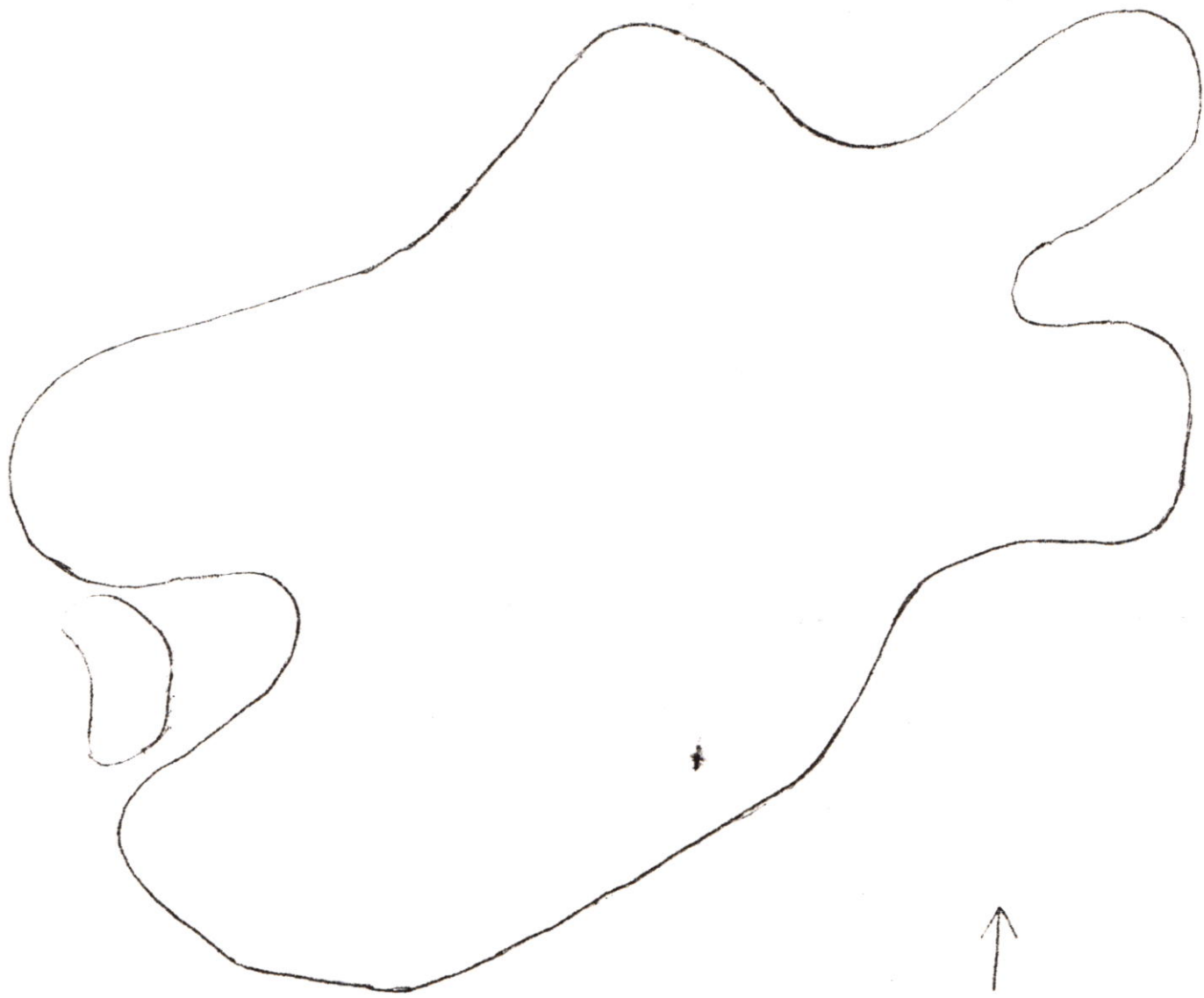
Write below what you did about the problem and why you did it (the group has to agree on all decisions.)

MATERIAL TO BE USED FOR THE SIMULATION

1. Cards which represent geographical features of REMOTE ISLAND are made on $8\frac{1}{2}$ x 11 tagboard with appropriate felt tip pens. There are six cards for each group, or one for each member.
2. Role cards are put on 5 x 7 index cards. There are six cards or one for each member of the group.

APPENDIX B

PELOTE ISLAND



REMOTE ISLAND

GROUP _____

CARD I

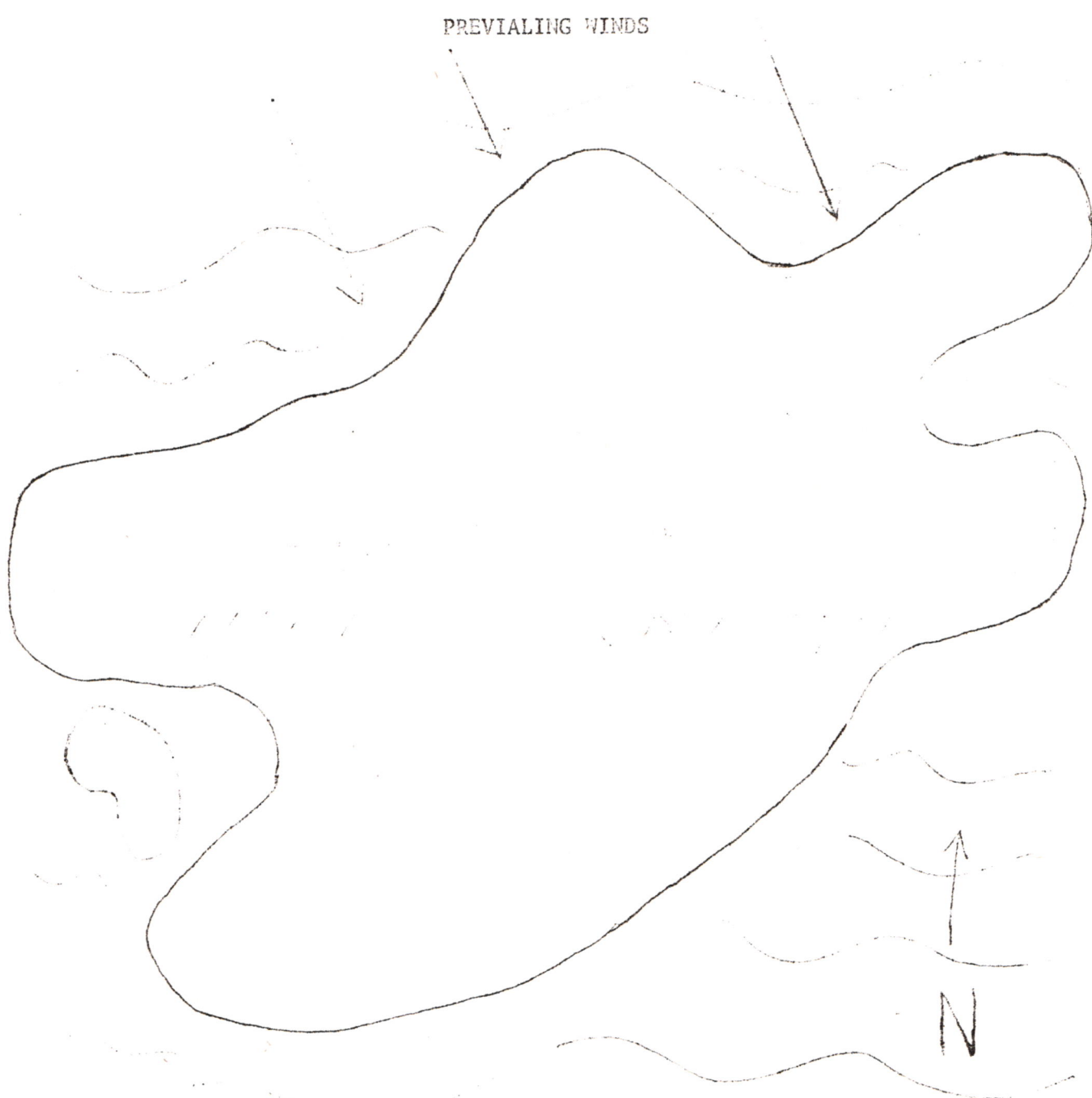
PREVAILING WINDS

BLUE WATER SYMBOLS

GREEN WIND SYMBOLS

RED NORTH DIRECTION

PREVAILING WINDS




REMOTE ISLAND

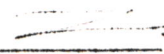
GROUP _____

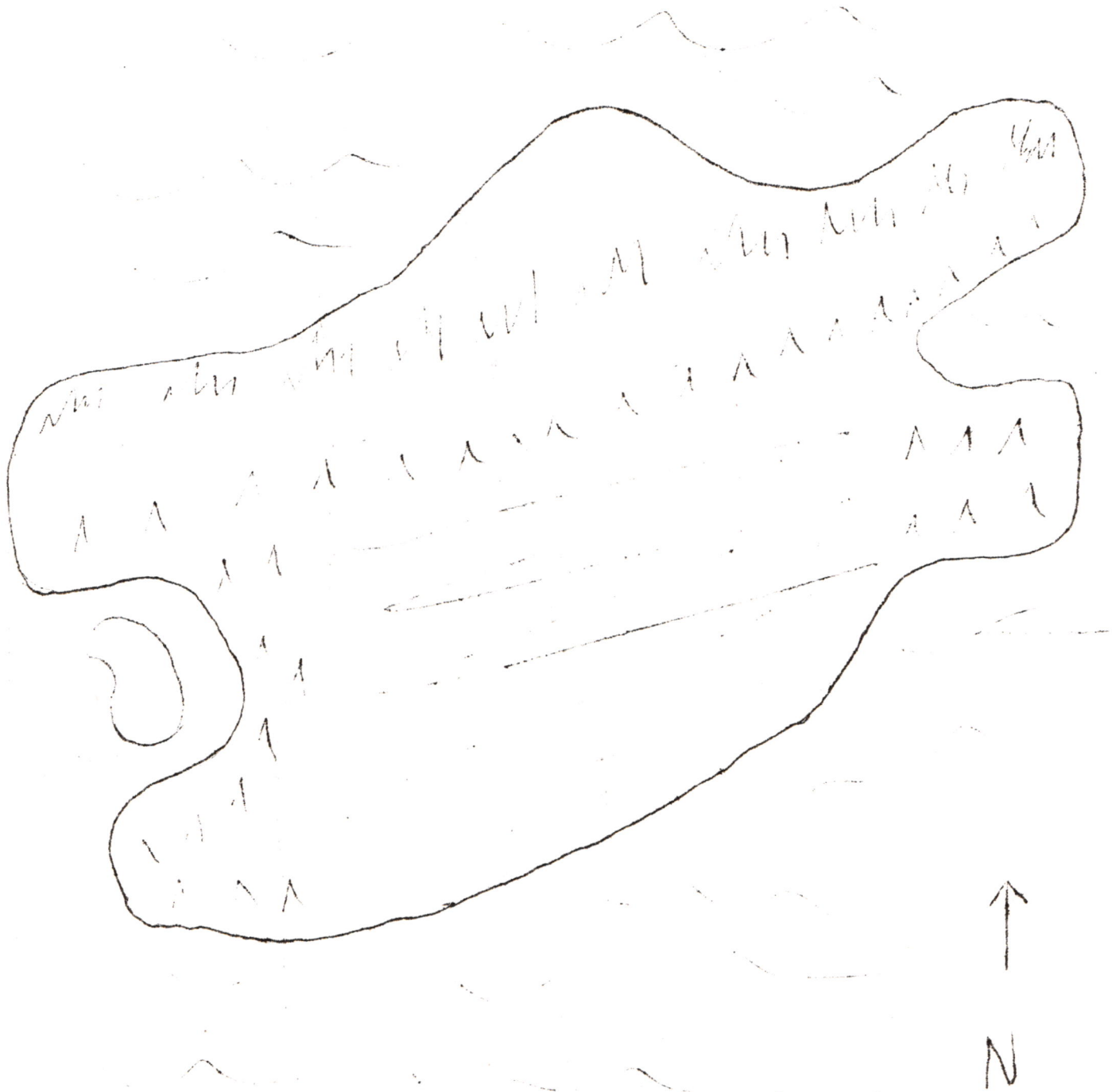
CARD 2

LAND FORMS

 - MOUNTAINS (BLACK)

 - HILLS (ORANGE)

 - PLAINS (YELLOW)



REMOTE ISLAND

GROUP _____

CARD 3

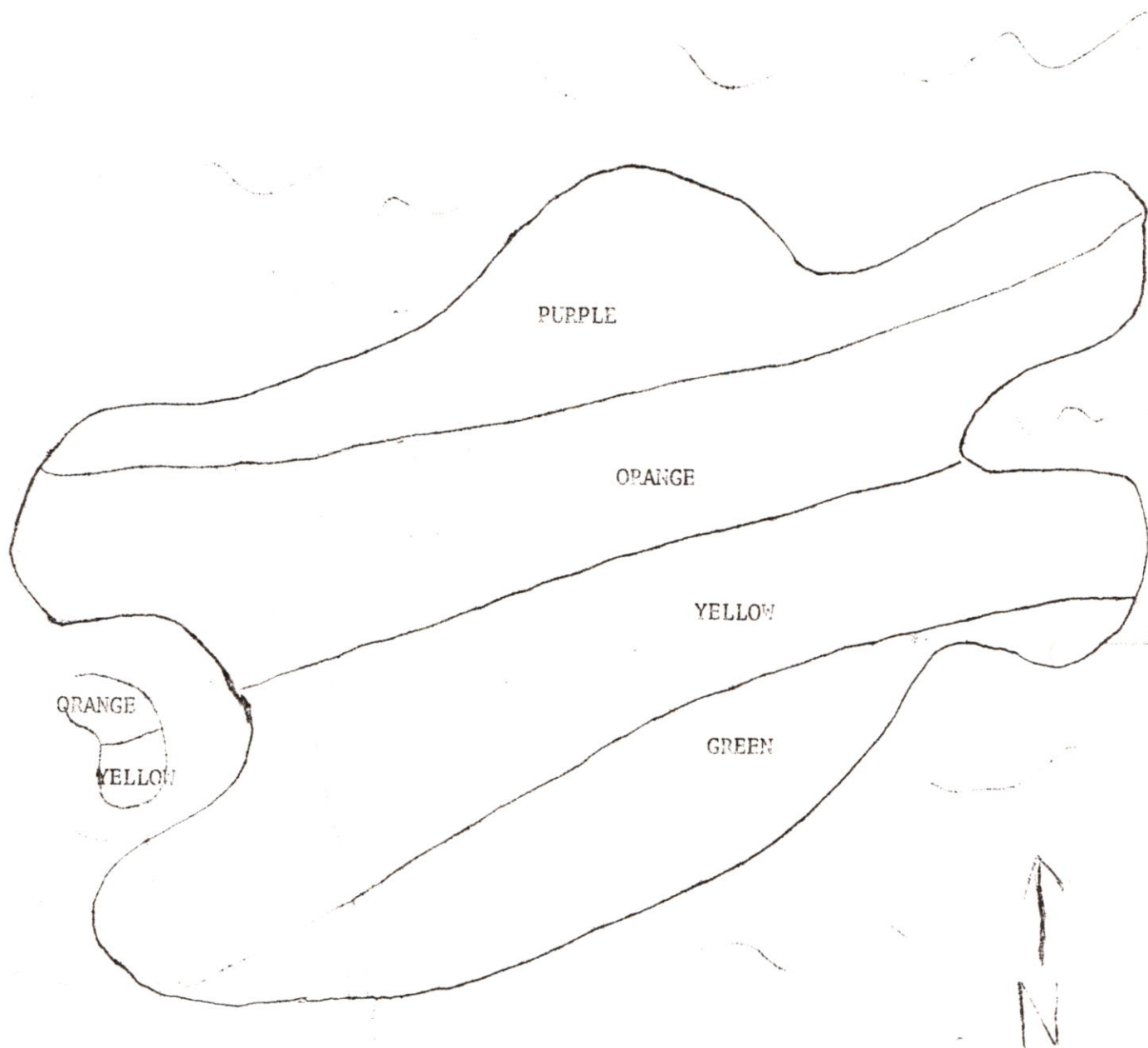
RAINFALL

100+ INCHES PER YEAR (PURPLE)

6 to 10 INCHES PER YEAR (ORANGE)

10 to 15 INCHES PER YEAR (YELLOW)

20 to 25 INCHES PER YEAR (GREEN)



REMOTE ISLAND

GROUP _____

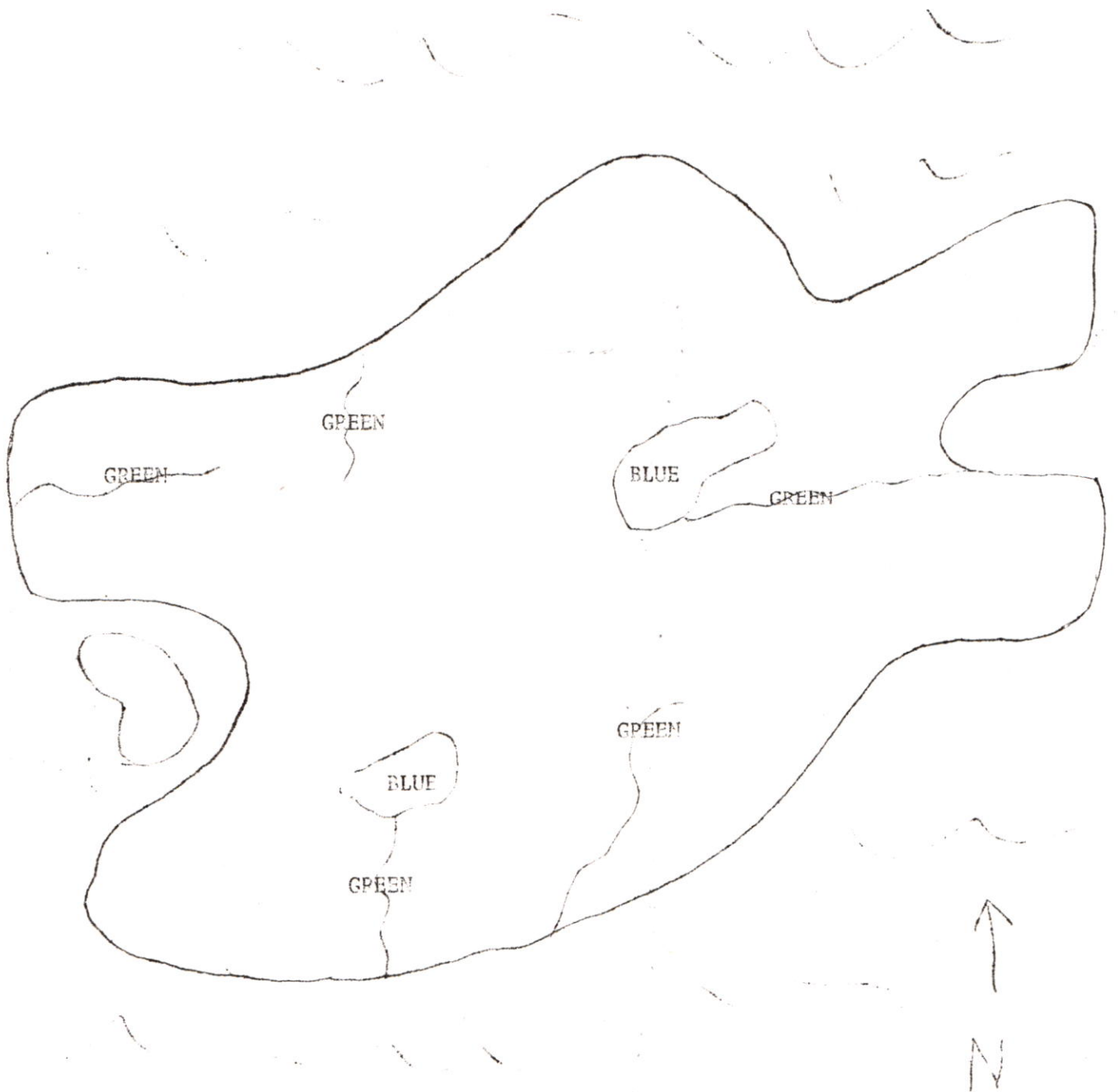
CAPT 4

LAKES AND RIVERS

 - LAKE (BLUE)

 RIVER (GREEN)

SCALE: 6 inches=50 miles



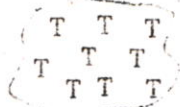
REMOTE ISLAND

GROUP _____

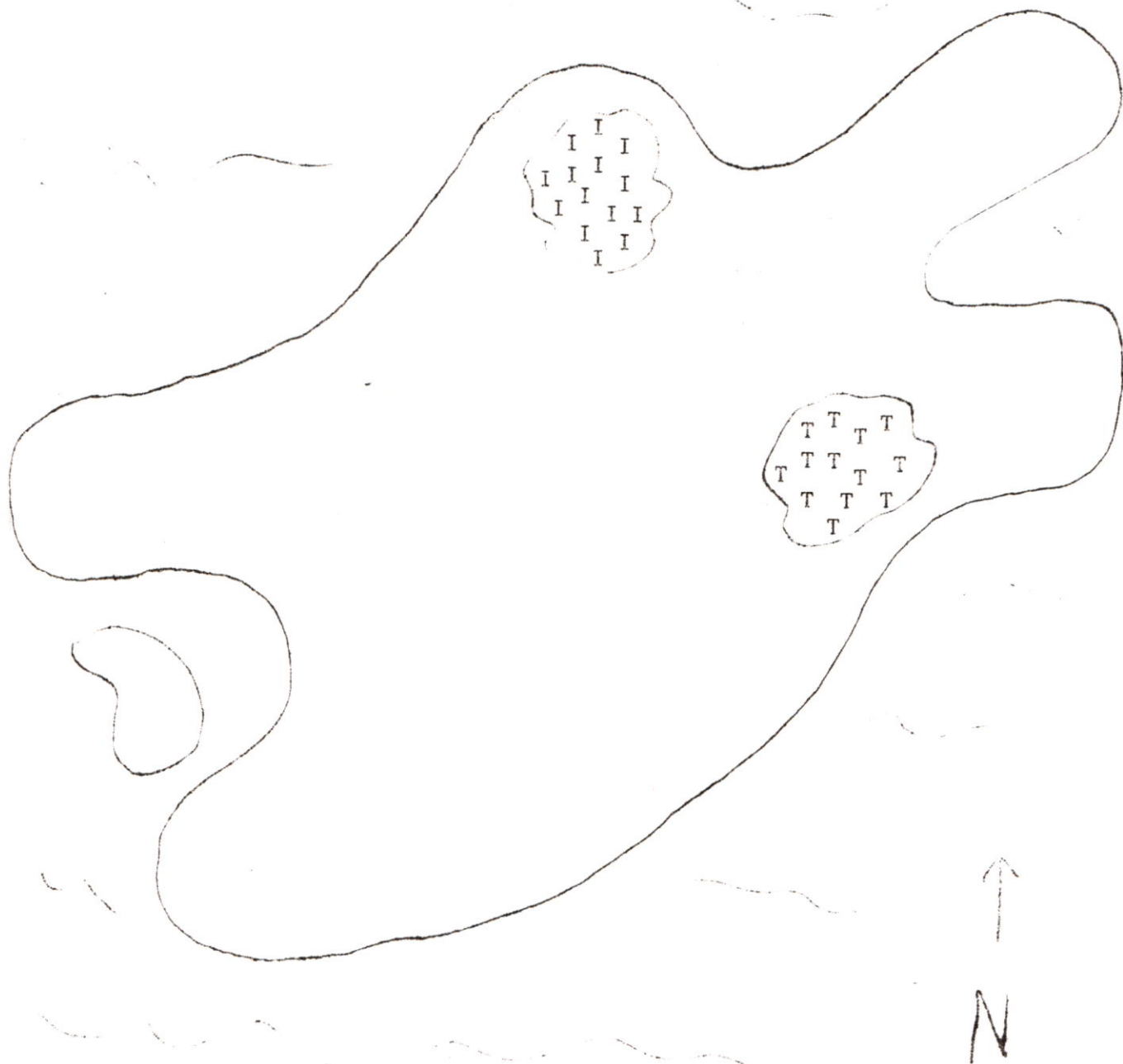
CARD 5

MINERAL DEPOSITS

- IRON DEPOSIT (BLACK)



- TIN DEPOSIT (BLACK)



REMOTE ISLAND

GROUP _____

CARD 6

FOLIAGE

↑ ↑ ↑ ↑ ↑ TREES (GREEN)

× × × × × NO FOLIAGE (BROWN)

∩ ∩ ∩ ∩ ∩ GRASSES (ORANGE)

↑ ∩ ↑ ∩ ↑ TREES AND GRASSES (GREEN AND ORANGE)



Role Playing Cards

Card No. 1- Your name is J. D. Banks. You are the owner of an iron mine and smelting plant in Minnesota. You have learned of the iron deposit on this island and want to mine and smelt it because you see a good profit in it for yourself. It will be necessary to put a smelter on the northern shore of the island. Plants such as these give off contaminated smoke that is injurious to the health of man and animals. Smelters also need to discharge sulfurous waste material into streams. This will pollute the stream and, finally, the ocean, itself. You are to try to convince the other members of your group that putting a smelter on the island is a good thing.

Card No. 2- Your name is Jack Boatwright. You are a fisherman. You make your living by fishing in the ocean just off the northern coast of this island. You are able to sell all the fish that you catch because the streams and, therefore, the ocean is not contaminated with pollutants.

Card No. 3- Your name is Mr. Vote. You are the local politician in the small town near where the smelter could be located. You know that you could be a much stronger politician in this area if the smelter were to locate here and you could be responsible for supplying the labor for it. You want to work with Mr. Banks about this.

Card No. 4- You are Dr. Planterman, a retired university professor of Biology who has made a life-long study of ecology systems and how man has mis-used them. You have come to the island to retire and get away from the polluted air.

Card No. 5- You are Jack Wilson, a hippie from a western college in the United States. You have quit school and left the United States because the U. S. Government hasn't done enough about pollution. You are very outspoken in the group against letting the smelter be brought in.

Card No. 6- You are Mrs. Homington, a housewife and mother. You represent a group of housewives who are interested in the smelter and whether it is coming to the island or not. You listen to the arguments and ask some questions, but you don't know what to believe about all this.