

A GENERAL LEVEL GEOGRAPHY OF CANADA COURSE  
FOR GRADE NINE

A GENERAL LEVEL GEOGRAPHY OF CANADA COURSE  
FOR GRADE NINE

by

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## ABSTRACT

This project identifies a segment of the secondary school population which, in the author's opinion, is being ill-served by present day geography curricula. A philosophical argument is put forward in Chapter One as a model for new and more appropriate learning expressions. This introductory chapter is followed by four chapters of prepared student activities and guidelines for their implementation. Suggestions for additional activities are also provided. Chapter Two "What Can I Do Well?" is a diagnostic series of activities considered fundamental in a geography course. Chapters Three, Four and Five present a Geography of Canada based on the concept of working from the known to the unknown. Consequently, the titles are, "Our Neighbourhood", "Choosing a Place to Live in Canada" and "Canada and the World". Although these three chapters constitute an entire course, most of the activities therein could be successfully incorporated into existing courses. General conclusions and other summary remarks are contained in Chapter Six.

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INTRODUCTION

1.1 Background

Many secondary school students are part of a dilemma they are not even aware of. Education was rarely questioned during the industrialization period when there were ample opportunities for non-university bound students to secure good employment without, or in spite of, graduation. As the economies of the industrialized world have become more reliant on information than raw productivity, our way of life has changed irrevocably. Many institutions which were successful during the time of growth face serious difficulties as they attempt to adjust to a new world of technology. Unskilled industrial labour is an employment description which will likely disappear. The educational institutions which trained these workers must also change. Learning to be punctual, loyal and obedient may have been favourable attributes for earlier eras. As important as they are, they cannot provide the curriculum foundation for present and future years.

Students who leave school today without graduating are very likely headed for a career of irregular, low wage employment. If this same group of people stay at school they usually choose general level courses which, by and large, are diluted advanced level courses. This is frequently the only accommodation made to the non-university bound

student. As a result, their average marks are lower, absenteeism, failure and drop out rates are generally much higher than for their classmates choosing advanced courses.

If schools are to successfully prepare all their students to cope with a technological society, then a great deal of work needs to be done to develop relevant curricula. This study establishes the characteristics of the general level student, illustrates the unsuitability of present day geography courses, outlines the attributes of an educational package which would be more effective in meeting the needs of these students and provides the framework for a course of study for Grade Nine.

It is the author's intention to provide material of immediate value to the teacher without being unnecessarily prescriptive or constraining. Consequently, the four components of the proposed course are presented in varying degrees of completion. In order to maintain consistency, each is preceded by a brief introductory section. This section establishes major objectives, the relationships to preceding and subsequent units, recommendations on classroom management, highlights of field testing and additional information designed to achieve maximum success.

## 1.2 The Target Group

The "General Level Student" does not exist. However, there are students who are enrolled in general level classes. In a superbly docu-

mented account, King (1979) identified some revealing characteristics of students in general level classes when compared with their schoolmates in advanced level courses. He found that in general level classes:

1. more students come from the lower socio-economic strata;
2. more students have part time jobs;
3. more students have reading difficulties;
4. more students have problems with mathematics;
5. attendance is less regular;
6. median grades are lower;
7. failure rates are higher;
8. drop-out rates are higher;
9. fewer credits are gained per student;
10. fewer students are involved in extra-curricular activities;
11. the average age in the class is higher.

The homogeneity of this group of students is a highly debatable topic. I, for one, do not believe that these students are by definition intellectually inferior. Nevertheless, a group of people who are being ill-served by the educational system has been clearly identified. I intend to show that their lack of success is largely due to unsuitable curriculum design and inappropriate pedagogical technique.

Curriculum materials have been traditionally designed to meet the needs of students intending to pursue post-secondary education. It is argued that these students require educational experiences in high school that prepare them for the rigours of university. Consequently,

the courses presume a strong motivation for theoretical learning, place a heavy emphasis on absorption of large quantities of factual material and are over balanced in the favour of left-brain, linear processing. In spite of the claims for maintaining high standards of education, many courses expend a great deal of energy on passive rote memorization, a low-order stage in all educational taxonomies.

Students who are not university bound for whatever reason have the same curriculum guidelines imposed on them. The only accommodation is that the students are exposed to less material and the teacher adjusts his or her expectations downward to minimize frustration. King (1979) has clearly defined a large group of students in our schools who cannot respond in a successful way to this method of organizing the curriculum. Rather than simply reducing the quantity of data in a general level course we must restructure the entire program to meet their individual needs. It is contended that little progress has been made so far.

In spite of the demonstrated inability of general level students to read at the appropriate grade level, educators continue to present the bulk of their material in written form. To exacerbate matters, many of the textbooks are written at language levels beyond those of the intended grade levels.

### 1.3 Core Content

Huge quantities of factual material are identified as core



materials for an Intermediate Division Course on Canada (Table 1.1). Given the group characteristics, dealing effectively with this bulk of information in a meaningful way is a hopeless task (Gage and Berliner, 1979). For the university-bound geography student there is a cruel irony. Not only is senior geography not a prerequisite for entrance to any course, but also some professors have suggested that it would be preferable for students to concentrate on senior courses in math or science. It is apparent that at the secondary school level we are not serving the interests of either party.

#### 1.4 Rationale

The content of the existing Grade Nine course has largely been selected on the assumption that the data are, by themselves, of some intrinsic value. Many teachers regard with approval and pride the amount of factual information which they have shared with their students.

The amount of geographic information about Canada and her global relationships that presently exists precludes any attempt to teach it all (Hodgetts and Gallagher, 1978). Furthermore, if geography is to fully realize its potential as a component of the curriculum, we must accept the transitory nature of much of factual information. It is also debatable which generalizations are the most important.

Content can no longer be the only organizing vehicle in course construction (e.g. regionalism or thematic). Becoming proficient as a

TABLE 1.1: Core Content for an Intermediate Geography of Canada Course

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Through selection and organization of appropriate content on Canada, teachers should provide students with opportunities to develop an understanding of:

1. the natural, human, and economic characteristics of their local community and area;
  2. the extent and location of Canada in relation to other parts of the world in terms of distance, direction, time, and costs;
  3. the diversity of Canada's physical geography as seen in patterns of physiography, climate, natural vegetation, and animal life;
  4. the basic relationships which exist among relief, climate, vegetation, and soils;
  5. the effects of occupancy by native people, the founding nations, and subsequent immigrant groups on the Canadian landscape;
  6. the nature and importance of Canada's renewable and non-renewable resources with specific reference to a minimum of one agricultural commodity, one renewable resource, and one non-renewable resource;
  7. the need for wise use and management of resources;
  8. the conflict over land use or ownership of resources (one or more examples);
  9. the factors accounting for the density and distribution of population in Canada;
  10. the significance of transportation systems in the evolution of Canadian society;
  11. the factors affecting the rapid rate of urbanization (including the study of at least one city);
  12. the effects of industrialization and technological change on contemporary Canadian society;
  13. one (or more) major regions and its relationships to the rest of Canada;
  14. the sources, uses, and prospects of energy supply.
- 

Source: Curriculum Guidelines for the Intermediate Division Geography (1977).

geographic problem-solver should be the goal for the geographer of today! The mind is far too valuable to waste as a data bank; besides there are mechanical devices which are vastly more capable of storing information. We must teach students to identify, extract and combine data in order to solve real problems.

All teachers require their students to solve problems. However, very few teachers teach children how to solve real problems within a larger framework. Learning to draw a profile from a topographical map or to construct a climograph is learning to solve problems within a very narrow perspective -- usually to earn marks. Students need a vehicle to study and analyze situations which are of interest and relevance to them.

The vehicle, in my opinion, which is ideal for this situation is "The Basic Inquiry Model" as presented in the Ontario Ministry's Handbook of Research Study Skills for History and Geography Intermediate Division (1975). Students need to be taught how to deal effectively with each stage in the model:

1. actively perceive the initial experience;
2. pose inquiry questions;
3. produce a comprehensive range of alternatives;
4. collect data for each alternative;
5. synthesize the data;
6. assess the conclusion;
7. express the conclusion.

Accomplishing these objectives in a comprehensive manner in a single course offering would, in my opinion, put unreasonable pressure on the continuity of the course. I contend that by working with the model in its entirety on an ongoing basis, while stressing certain components each year, an effective reinforcing continuum can be created for the geography student.

As an educational researcher and theorist, I have strong concerns about the actual process of learning as it is currently applied in most classrooms -- including my own! The difference between information and knowledge is real (Hunt and Sullivan, 1974). Teachers possess a great deal of personal knowledge which for them is conveniently organized into well-defined frameworks which make the material easy to understand, useful and interesting. For the students, it is quite another matter! Often the same knowledge is disjointed, irrelevant and difficult information for them to understand. For the students to process this information into knowledge, the data have to be voluntarily decoded, manipulated, dissected, compared and finally discovered. Telling the students about material -- even in the most stimulating fashion -- does not allow this process to occur. In brief, courses must be re-organized so that there is less "teaching" and more learning.

Psychologists support this contention from a different perspective. Material that is left in short-term memory quickly dissipates. If we wish students to process information into long-term memory (hence knowledge) we must create an experience in a suitable environment which will stimulate the students to interact willingly with the material. Learning is a dynamic and creative activity.

Further support for the creative manipulation of material by students comes from an Ontario Ministry of Education directive called "Language Across the Curriculum". Boards of Education across Ontario have been instructed to develop and implement a program which should augment the learning process by using language more effectively. The more control children have over language, as receivers and senders, the greater opportunity they will have to move from old knowledge to new knowledge. In other words, the more effective and efficient they are with language, the more successful they are likely to be as learners.

In their particularly readable book, Torbe and Medway (1981, pp. 2 and 3a) provide some stout endorsements:

"School knowledge as we have called it, is not the only sort of knowledge, nor is it always the most important."

"We have no access to processes inside the head but inter-personal transactions are open and visible and their operations are thus susceptible to our influence."

The authors go on to describe the three kinds of behaviour which lead to knowledge acquisition:

1. handling the elements;
2. handling the generalizations and ideas;
3. finding personal significance.

Teachers must be taught to transform their role from passive information distributor to active learning facilitator (Lindsay and Norman, 1977). They must learn to accept and encourage student language. Students must be given the time and support to experiment with data. They must be taught to be comfortable with their own mistakes and learn to use them as guide posts for future endeavours.

Research in hemisphericity has established the existence of two distinct halves to our brain. More accurately, we have two brains connected together by the corpus collosum (Lindsay and Norman, 1977). Ideally, the left-hand side which perceives relationships across time blends harmoniously with the right-hand side which perceives relationships across space. This marriage provides a person with a balanced view of the world. Unfortunately this kind of balance is rarely achieved and our current educational environment is actively, if unwittingly, impeding a more complete development.

People are naturally disposed to a particular hemisphere which provides them with the information they require in the most comfortable way. There are those then who are well adapted for the way in which most schools handle material. Teaching is unquestionably dominated by propositional, "if-then" reasoning. Most of the time is spent listening and reading or talking and writing. For left-brain dominant people this is reasonable. For right-brain dominant learners it is not.

Well designed learning activities that appeal to the right hemisphere are, in my experience, rare. As a result these people are handi-

capped and their intellectual ability may be questioned. In order to create a more equitable program where right-brain learners are no longer disadvantaged and left-brain learners are more creatively challenged, the following general recommendations have guided me in this project

1. let/encourage the learner to take control over his own learning;
2. learn to trust and value feelings (your own and theirs);
3. learn to use metaphor and imagery as concise ways of communicating the complex and the unspeakable;
4. learn to use spatial, pictorial, diagrammatic, map representations to draw out and draw on the powerful intuitive/feeling/relational functions of the learner;
5. learn to recognize and use non-verbal communication in teaching.

In addition, I attempted to balance the course by:

1. presenting stimuli to both hemispheres;
2. augmenting a stimulus by following it with information beamed to the opposite hemisphere;
3. deliberately beaming to only one hemisphere for practice to increase fluency in processing one type of information.

#### 1.5 Personal Philosophy

As a classroom teacher I want my geography classes to be fun -- fun for the students and for myself. I want to be 'open' as a teacher,

negotiating authority and responsibility with my students in a mature fashion. I want to be involved in activities which the students see as personally relevant and over which they have some control.

I would like to teach a course which would never cause students to ask "Why are we doing this?". The value of each component should be apparent. Furthermore, the course would have something rarely achieved in my experience of teaching to date -- coherence. It would have a logical beginning, middle and end, and the students would understand and approve of the arrangement.

I want future students of mine to understand clearly the nature of the discipline of geography. I want them to see a geographer's way of looking at and doing things as valuable and current. I want them to become familiar with three interrelated elements of geography:

1. navigation;
2. monitoring resources;
3. planning.

From my perspective, these topics are highly significant for the discipline and the teaching of it. Of all the academic pursuits available to students in secondary schools, there is only one which is difficult to define and delimit succinctly -- geography! Students and teachers, to varying degrees are uncertain about the true identity of the 'geographic persona'. Respected geographic scholars have been unable to arrive at a concensus.



Historians look at maps, mathematicians and physicists draw graphs, earth scientists are interested in minerals, energy resources and pollution, and the phys-ed department takes their students orienteering. What is it about our discipline that separates us from our fellows?

Too often classroom teachers are preoccupied with the logistics of their job to devote any appreciable interest or effort to clarifying the issue. Frequently they disparage the work of those who do. They are unaware of the precarious nature of geographic education when viewed from a national perspective. It is absolutely critical for us to encourage in our students the development of a clear understanding of the nature of geography.

I would hope that this course will provide a model for other disciplines to consider. Regardless of our particular educational training and teaching responsibilities we are all involved in the same exciting process -- helping children to discover knowledge about themselves and the world around them. Consequently any teaching techniques that are successfully implemented for one discipline should, at the very least, provide a stimulus for others. Any improvement in the educational environment would be shared by the entire school community.

#### 1.6 Curriculum Design

Dr. Len Popp of Brock University has provided a clear foundation for curriculum design that effectively differentiates between the kinds

of students and the educational experiences which they require (Table 1.2).

TABLE 1.2: A Framework For Curriculum Development

Clientele	Nature of Material	The life skills related to the discipline are taught to use the content of the subject.	The practical and applied aspects of the discipline are added through a problem solving approach.	The theory and processes of the discipline are added in abstract ways.
Modified & Basic		1		
General		2	4	
Advanced & Enriched		3	5	6

Source: Dr. Len Popp, Faculty of Education, Brock University.

By using this model I have deliberately placed the educational requirements of my students first on the list of priorities. We have control over the curriculum. Our ability to make long-term changes in the broad life expectations of our students is very modest. It makes sense to me to devote our energies towards a phase of school life over which we exercise real influence.

I am not suggesting that all curriculum materials now in use be discarded. There are many excellent learning experiences which are ideally suited to general level classes. It becomes problematic as to

how these lessons may be effectively evaluated. An excellent set of criteria has been developed for just this purpose in a book entitled 'Building from Strength' (Andrew et al., 1981). The authors identify three levels of criteria:

1. Essential - all lessons must have them;
2. Very Important - in a continuum of lessons a majority of lessons should satisfy these criteria;
3. Desirable - wherever possible these considerations should be included.

Meanings of the terms have been effectively translated by the authors into familiar classroom operations (Table 1.3).

#### 1.7 Course Outline

The course is divided into four units, each unit being presented in a separate chapter. The majority of the student activities have been designed by the author. A few, however, have been extracted from "Building from Strength", a publication which the author helped to produce. These student activities are listed in the appendix.

##### 1.7.1 Unit I

"What Can I Do Well?" is a series of seven activities created to reinforce or introduce the geographic skills and concepts which will form the foundation for the rest of the course. This unit is ready for

TABLE 1.3: Operational Definitions

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ESSENTIAL	
Practical	- Are capable of being used on a day-to-day basis by the students.
Relevant	- Build, in a positive way, on learnings that have already been experienced.
Stimulating	- Create enough interest for the student to complete the assigned task.
Comprehensible by Student	- Use concepts, skills and language appropriate to the level of the students.
Expectations Clear	- Are structured so that procedures and outcomes are easily understood by students, when explained by the teacher.
Immediate Feedback	- Provide frequent information about progress and/or product from both teacher and peers.
Individual Attention	- Provide time for the teacher to interact with individual students or small groups each day.
VERY IMPORTANT	
Communication Skills	- Use a variety of forms of communication but emphasize oral, graphical and visual modes.
Peer Collaboration	- Provide opportunity for student interaction to clarify, process and evaluate information.
Product Oriented	- Culminate in a tangible piece of work completed by the student and readily checked by the teacher.
DESIRABLE	
Activities Oriented	- Involve touch, hand-eye co-ordination, and movement within and beyond the classroom.
Current	- Use topical issues and the most up-to-date data.
Flexible Pacing	- Allow students to work at their own pace.
Encourages Initiative	- Encourage further investigation beyond minimum expectations.

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Source: Andrew et al. (1981), Building from Strength.

immediate classroom use. "Student Instruction and Activity Sheets" are colour-coded for easy recognition. Accompanying these materials are instructions that cover all activities for the time allotted.

### 1.7.2 Unit II

"The Local Environment" is the actual start of the course dealing with Canada in an organized manner. Working from the known to the unknown is a well established curriculum technique which has been adopted as the mode of operation for all activities. Consequently, "The Local Environment" is the single most important section. The students extend their ability to orient, organize and manage space from their classroom to their entire community (village, town, city, region). The dynamic interplay which exists among all levels in the constant search for need satisfaction (eg. food, employment, leisure, shelter) provides the framework to combine the sections into a coherent entity. Figure 1.1 is a diagrammatic representation of this perspective.

Philosophically sound ideas may be palatable and a necessary sustenance for educators, but they are a poor diet for students. They require more solid fare. The organizing theme, therefore, is presented as the pursuit of answers to these questions:

1. What are the attributes of my neighbourhood?
2. How can my neighbourhood be improved?
3. How does my neighbourhood fit in with the larger unit?

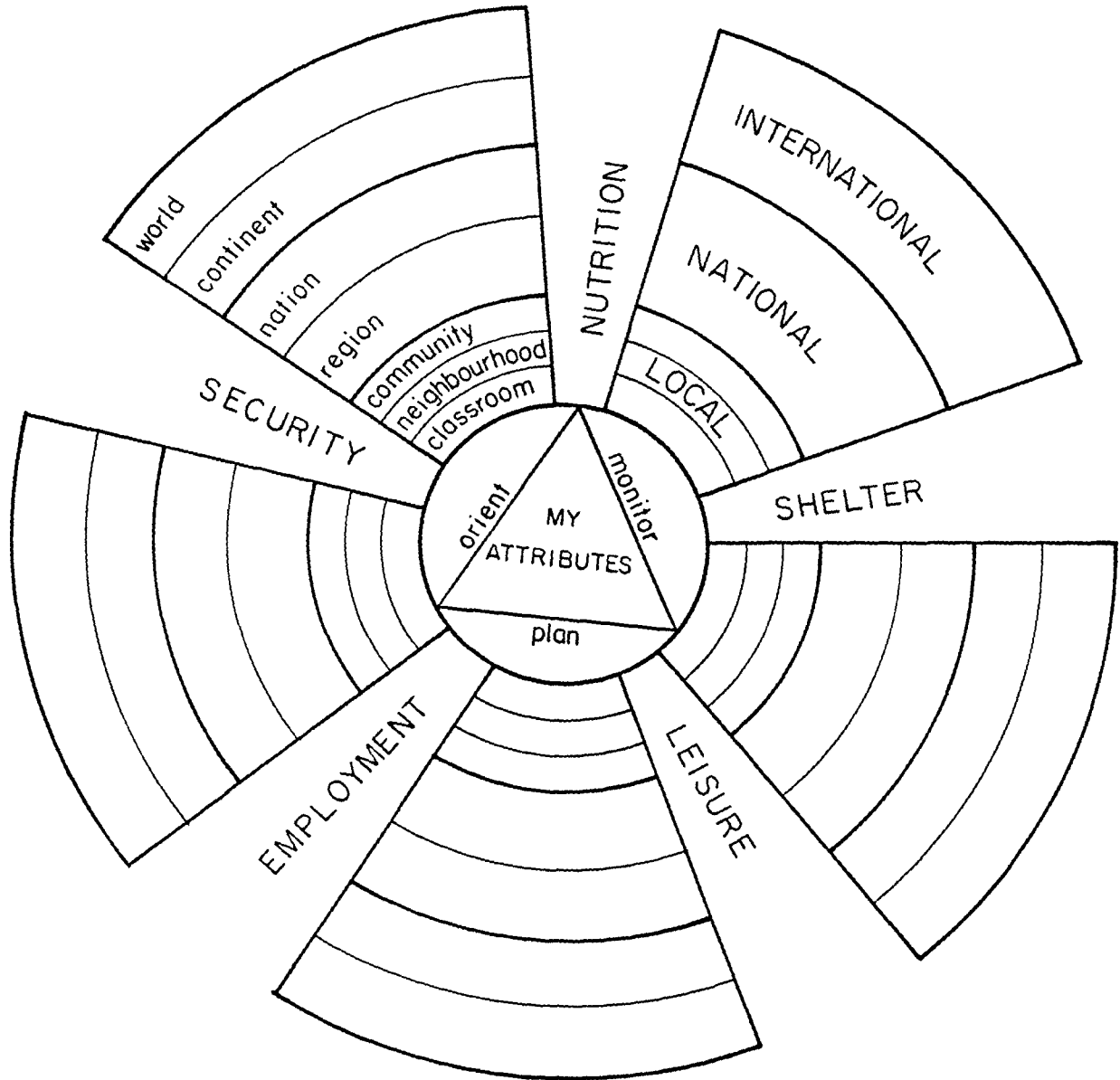


Figure 1.1 A Model of the Proposed Course

Although there are several activities which are ready to be used immediately, some components are merely outlined, thereby permitting the teacher the personal adaptations which are so vital in transforming a good idea into a dynamic learning experience. The concept of neighbourhood is universally accepted within fairly distinct theoretical parameters. However, the practical reality is so wonderfully diverse that it would be presumptuous to attempt to design a sequence of learning experiences which would be everywhere appropriate.

### 1.7.3 Unit III

"The National Environment" provides the student with a range of experiences intended to create a realistic set of images of the large scale geographical attributes of our country.

This material is presented to the students without a directly practical rationale. It is assumed that by now the classroom atmosphere will be such that students will expect interesting work that does not have to be justified every step of the way. Furthermore students should be more capable of abstract reasoning.

Students organize the content of this section by answering the question "Where in Canada would I like to live?". By establishing the factors which influence their choices, a framework is established. Considerable work needs to be done in this section to ensure personal relevancy and maximization of local resources.

1.7.4 Unit IV

"The International Environment" is the concluding section of the study. This section works toward a deeper understanding of Canada's international relationships. Some concrete student activities are provided in which the theme to be pursued reflects my personal concern for multiculturalism. This stems partly from my years of teaching at Sir John A. MacDonald which is blessed with the most culturally diverse student body in Hamilton, if not the whole of Ontario. Several strategies are offered which could be successful depending on individual preference, suitability for student needs and the available resources.



UNIT I: WHAT CAN I DO WELL?

2.1 Rationale

This part of the course provides a non-threatening environment for students to evaluate their capabilities by means of seven activities. Each activity focuses on a skill or concept considered essential for the entire year. In addition, the unit gives the students information about the strengths of their classmates thereby encouraging a more realistic process of group selection. Students are introduced to time management and are taught to assume a large part of the responsibility for their own success.

2.2 Objectives

The objectives are summarized in Table 2.1. It can be seen that although the objectives are quite extensive they are achieved within a diagnostic framework.

2.3 Strategies

1. Have all seven activities (with associated sheets in separate file folders) ready for distribution to each student on the first day.

TABLE 2.1: Unit I Objectives

ACTIVITY	COGNITIVE	OPERATIONS	AFFECTIVE
SLIDES	<ul style="list-style-type: none"> <li>- organize various process stages into chronological order, i.e. sequencing</li> </ul>	<ul style="list-style-type: none"> <li>- to view slides, extract the main idea and transform into words</li> </ul>	<ul style="list-style-type: none"> <li>- recognize and appreciate the benefits of discussion with others</li> <li>- encourage sense of independence</li> <li>- heightens level of trust</li> </ul>
SKETCHING	<ul style="list-style-type: none"> <li>- recognize the dynamic components of a static image</li> <li>- converting images into ideas and then into sketch</li> <li>- introduction to new vocabulary, foreground, background, midground</li> <li>- silhouette</li> </ul>	<ul style="list-style-type: none"> <li>- to draw a field sketch which locates and identifies important components of the original</li> <li>- practise organizing the environment into manageable units</li> <li>- match sketching tip sheets to appropriate type of image</li> </ul>	<ul style="list-style-type: none"> <li>- appreciate the difference between sketching and art</li> <li>- recognize and appreciate sketching as a resource</li> </ul>
TOP MAP	<ul style="list-style-type: none"> <li>- meaning of symbols</li> <li>- vocabulary - title, scale, index number</li> <li>- generalize location factors from 3 examples</li> <li>- introduction to concept of pattern</li> <li>- introduction to scale, symbols, amount of detail and use of colour on different kinds of maps</li> </ul>	<ul style="list-style-type: none"> <li>- identify and locate features on map</li> <li>- practise use of cardinal points of direction</li> <li>- introduction to using direction and distance as location</li> <li>- expressing ideas in words or pictures</li> </ul>	<ul style="list-style-type: none"> <li>- recognize ability of others</li> <li>- appreciation of using several examples to illustrate a concept as opposed to one correct answer.</li> <li>- recognizing and applying one's own resources</li> </ul>

TABLE 2.1: Unit I Objectives (continued)

ACTIVITY	COGNITIVE	OPERATIONS	AFFECTIVE
ATLAS	<ul style="list-style-type: none"> <li>- maps of provinces and capitals</li> <li>- difference between province and territory</li> <li>- names of physiographic regions</li> <li>- generalize population distribution in Canada</li> </ul>	<ul style="list-style-type: none"> <li>- practise reading a climograph</li> <li>- finding appropriate statistics</li> <li>- using Table of Contents, Gazeteer</li> <li>- practise using latitude, longitude, measuring distance, cardinal points</li> <li>- locate Canada on a world map and interpret colour from legend</li> </ul>	<ul style="list-style-type: none"> <li>- appreciate wealth of informaton contained in atlas.</li> <li>- value of comparing answers with others, ie. practise seeking consensus.</li> </ul>
GEOGRAPHY	<ul style="list-style-type: none"> <li>- sorting</li> <li>- extension of perception of boundaries of geography</li> <li>- appreciation of multi-discipline aspect of current real life problems</li> <li>- synthesize examples into a definition</li> <li>- vocabulary               <ul style="list-style-type: none"> <li>- navigation</li> <li>- managing resources</li> <li>- planning use of space</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- practise consensus decision making</li> <li>- practise communication skills</li> </ul>	<ul style="list-style-type: none"> <li>- appreciate the practicality and utility of geography</li> <li>- appreciate input from others</li> <li>- learning to be comfortable with and even supportive of diversity</li> </ul>
GRAPHS	<ul style="list-style-type: none"> <li>- terms               <ul style="list-style-type: none"> <li>- x axis</li> <li>- y axis</li> <li>- line graph</li> <li>- bar graph</li> </ul> </li> <li>- selecting graphs suitable for different kinds of data</li> <li>- concept of pattern, anomaly</li> <li>- generalizing, interpreting</li> </ul>	<ul style="list-style-type: none"> <li>- plotting bar graph, line graph</li> <li>- measuring</li> <li>- adding</li> </ul>	<ul style="list-style-type: none"> <li>- appreciate value of graphs</li> <li>- value of checking with others</li> </ul>

TABLE 2.1: Unit I Objectives (continued)

ACTIVITY	COGNITIVE	OPERATIONS	AFFECTIVE
SCALE	<ul style="list-style-type: none"> <li>- term/concept of scale</li> <li>- 2 ways of expressing scale                             <ul style="list-style-type: none"> <li>(a) line statement</li> <li>(b) visual or drawn scale</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- drawing lines to appropriate length</li> <li>- measuring distances</li> <li>- converting from map measurement to distances</li> <li>- locating cities - latitude and longitude</li> </ul>	<ul style="list-style-type: none"> <li>- value of being competent in the practise of scale measurements, drawings</li> <li>- value of checking/comparing answers with others</li> </ul>

2. Carefully review all "General Instructions" and "Activity Instructions" to allow students to realistically plan for the next five/four days (Requires one 75-minute period).
3. Make a large chart with the titles of the activities as headings and post it in the room. Students will print their names under activities about which they feel confident (scored themselves as A or B).
4. Provide students with a container to store their folders overnight.
5. Assign distribution and collection duties (folders, maps, rulers, etc) to students/groups on a rotating basis so as to avoid the likelihood of being swamped at the beginning and end of the periods with petty, non-teaching requests.
6. For time, when you are otherwise occupied, encourage students to seek assistance from those people who have entered their names on the large chart as being competent in the appropriate activity.
7. Evaluation: Completion of items 1a-1d (see checklist in instructions section) is marked on a mastery level (i.e. students receive their 30 marks when they have completed all components). If there are errors or deletions, they should be indicated and the work returned for correction without penalty. Prompt return is most likely to elicit the greatest response.

8. Alterations to the timetable can be negotiated between teacher and class.

#### 2.4 Suggestions

1. While students are initially inspecting the contents of their file folders, visit each group and informally exchange introductions and the correct pronunciation of student names.
2. Arranging the class into groups facilitates this unit in that:
  - (a) more space is provided for the slide projector and screen and the sketching area;
  - (b) students are more inclined to offer assistance, discuss and share their resources when seated together;
  - (c) a more comfortable environment is created when students are allowed to group with friends;
  - (d) it makes it easier for the teacher and students to work with small groups and move more freely around the room;
  - (e) it permits more efficient use of the entire room;
  - (f) it encourages the students to see their classmates as resource persons.

(Note: When arranging students into groups for these activities, the actual size is immaterial, although there are obvious limits. It is, however, essential that every student in the group has his/her own chair and desk. Not only does each person require

the space to do the work but it is a significant symbol of status which in absence can create many, apparently unrelated, problems. Students should be allowed to work with classmates of their choosing.)

3. Some students will complete the work much earlier than their classmates. They may be given related bonus work (see "Hodge City" in the student pages) or you may wish to give them credit for assisting students who are experiencing difficulties.

#### 2.5 Follow-Up

It has been my experience that many students are confused in a classroom environment of the type suggested. Behaviour which was negatively reinforced in other circumstances as cheating or copying is now apparently being rewarded as helping and sharing. It is timely therefore to clarify your expectations about these issues.

I personally am committed to actively teaching students how to be more successful learners in groups and as such devote time and energy to that end (Johnson and Johnson, 1975). The learning usually takes place within the context of a game or simulation. This is followed by a brief discussion of the process which highlights the objectives of the activity and relates it to the geographical objectives of the program.

2.6 Instructions

The following pages contain student and teacher instructions for Unit 1. They may be copied and used directly by the teacher.



GENERAL INSTRUCTIONS TO STUDENTS

1. All activities must be attempted to an extent that most of the work is complete and understood (ie. level c).
2. Activities may be done in any order.
3. Carefully inspect each activity and then fill in the top of the planning sheet which will then be your plan for the next week.

Here are some suggestions for planning the order in which you do them. Consider the good points and weak points of each for you and your group:

- (i) easiest to hardest
  - (ii) hardest to easiest
  - (iii) in order of their number
  - (iv) same as my friend(s)
  - (v) everyone in the group doing a different one
4. At the end of each period fill in the bottom portion of your planning sheet explaining in a few words why you are ahead of or behind your personal schedule.
  5. Whenever you complete an activity, draw a bar to the appropriate height on the Self Evaluation sheet.
  6. When you have completed all seven activities, there are two more small tasks:
    - (i) write your name on the large chart under the title of the activity which you found easiest. You are most proud of the work that you did in this activity. All students must write their names at least once - you may write your name more than once.
    - (ii) choose the two assignments for which you would expect to receive the highest mark and write their names on the checklist page.

7. If you complete all tasks before the scheduled five days are up, you may;

(i) do some additional activities for bonus work - see Hodge City Robbery.

(ii) assist a friend, who for whatever reason is behind, in understanding how to complete an assignment(s). Bonus marks will also be awarded. - see attached sheet.

Note: Bonus marks will be provided throughout the year and are intended to provide students with a chance of raising their marks from 95 to 100, from 45 - 50 without damaging the works of others. You will find them available when you have completed a unit of work before most of the rest of the class or have missed work which is impossible to repeat.

8. If you are not planning on doing homework, you are encouraged to leave your file folder in the container provided for your classroom.

9. For marking scheme, refer to Checklist Sheet.

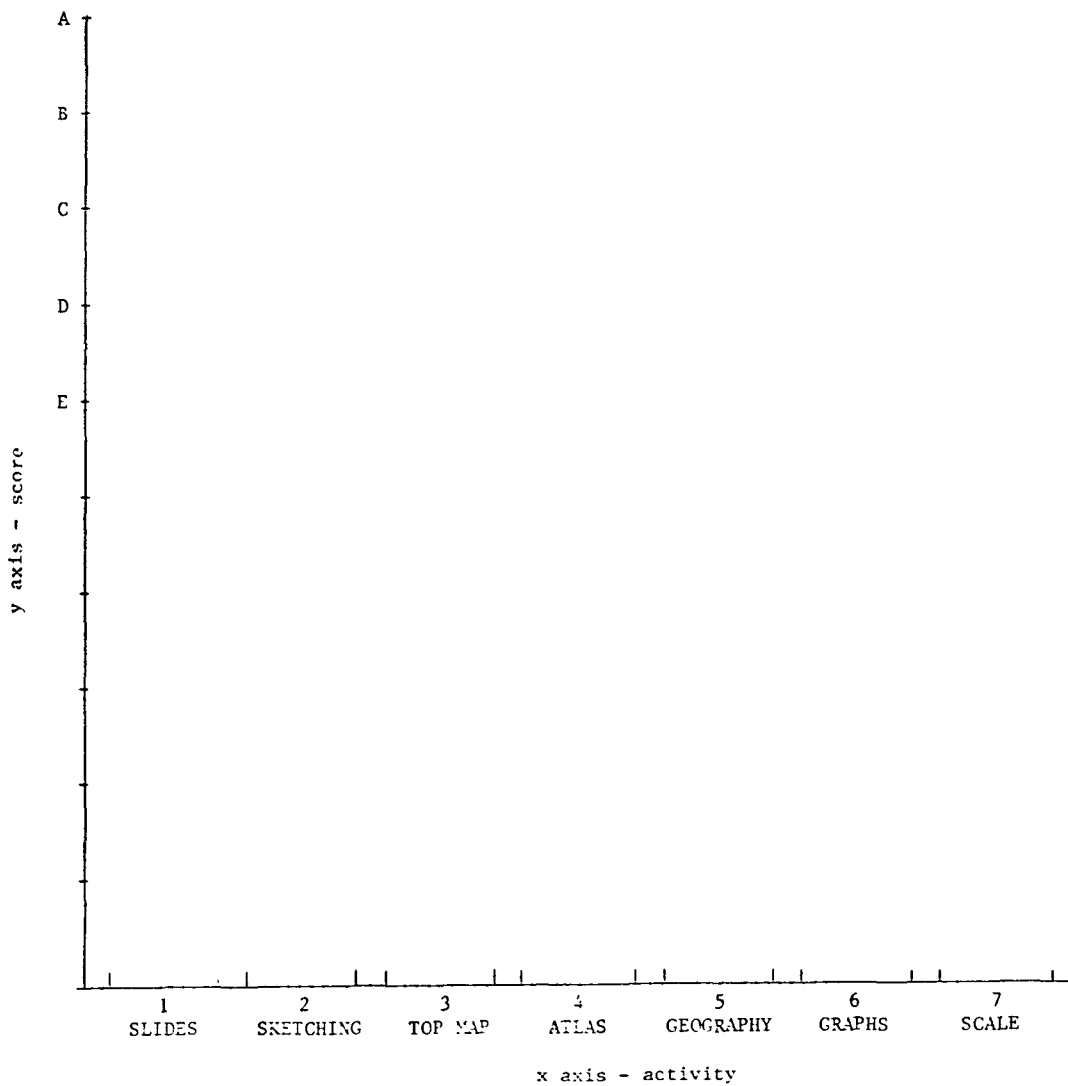
C H E C K L I S T

FOR: \_\_\_\_\_

- 1. (a) All activities attempted to Level C. )  
(b) Work Sheet completed. )  
(c) Self-evaluation completed. ) 30  
(d) Name entered on large chart. )
  
- 2. Two best activities posted and marked )  
out of 10 each. ) 20

My Total Mark is /50

BAR GRAPH OF RESULTS



SELF-EVALUATION

Scoring:

- A - can do perfectly all by myself
- B - can do perfectly with some help - teacher or friend
- C - can do most of it with help

		Day		Day		Day		Day	
		Work Planned	Done	Work Planned	Done	Work Planned	Done	Work Planned	Done
↑ /5 Minutes ↓									
Ahead or Behind									
Explanation									

Activity 1

Slides

Resources: Six (6) slides.

1. Study each of the six slides. To do this, Foreground, Background, Main Idea and Details should be considered.
2. When you have finished your study, describe what is going on in each slide in one or two sentences.

A. \_\_\_\_\_

\_\_\_\_\_

B. \_\_\_\_\_

\_\_\_\_\_

C. \_\_\_\_\_

\_\_\_\_\_

D. \_\_\_\_\_

\_\_\_\_\_

E. \_\_\_\_\_

\_\_\_\_\_

F. \_\_\_\_\_

\_\_\_\_\_

3. Arrange the slides to tell a story.

4. List the number of each slide below in your order:

A. \_\_\_\_\_ B. \_\_\_\_\_ C. \_\_\_\_\_ D. \_\_\_\_\_ E. \_\_\_\_\_ F. \_\_\_\_\_

5. Give a title to your story.

\_\_\_\_\_

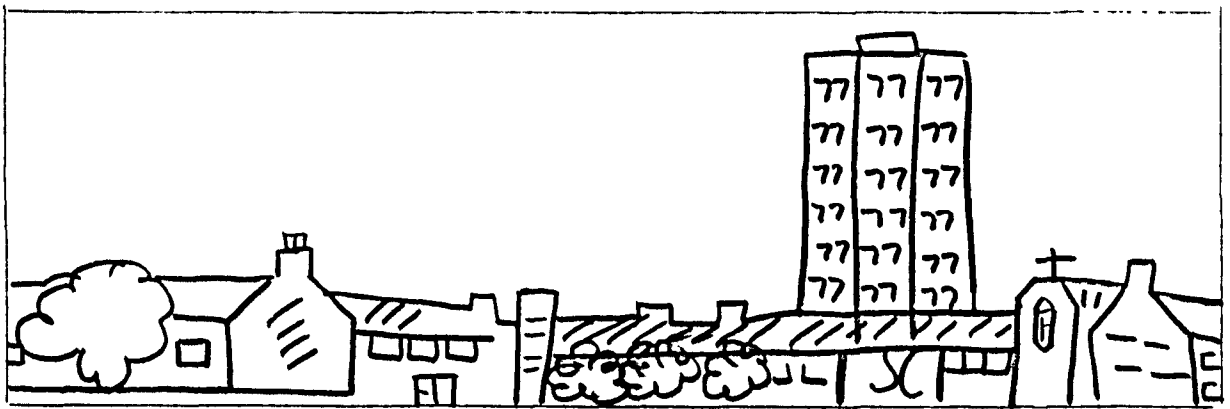
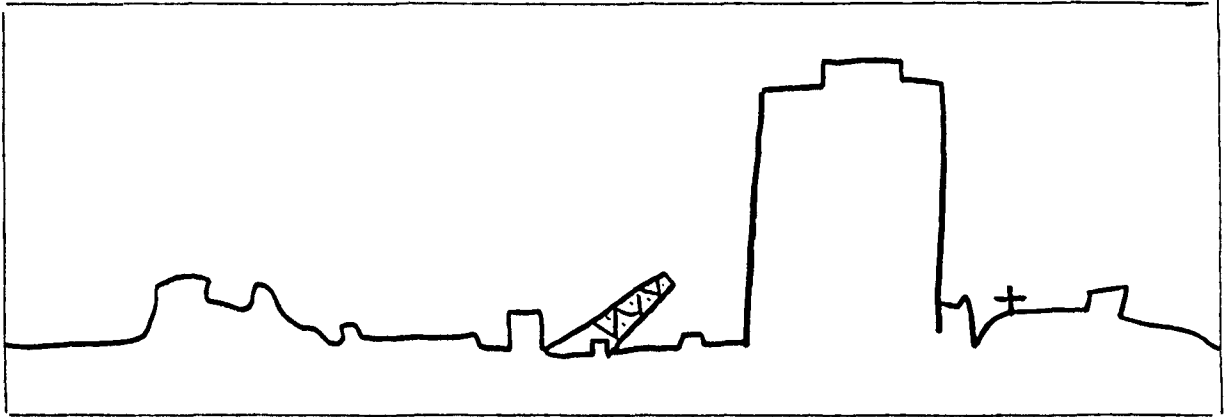
Activity 2Sketching

Resources: Large Photo, Sketching Tips

1. Select a photograph. Match one of the sketching tip sheets to your photograph.
2. Draw a rectangular border around your page to match the shape of the photo. Using the technique shown on the tip sheet sketch this scene.
3. Add any colour that you feel is necessary.
4. Label all the features you have in your sketch.

Sketching Tip #1

SKYLINE SILHOUETTE





Sketching Tip #2

NAME	TITLE
DETAILS:	
SKYLINE SKETCH	

Fold Down

Fold Up

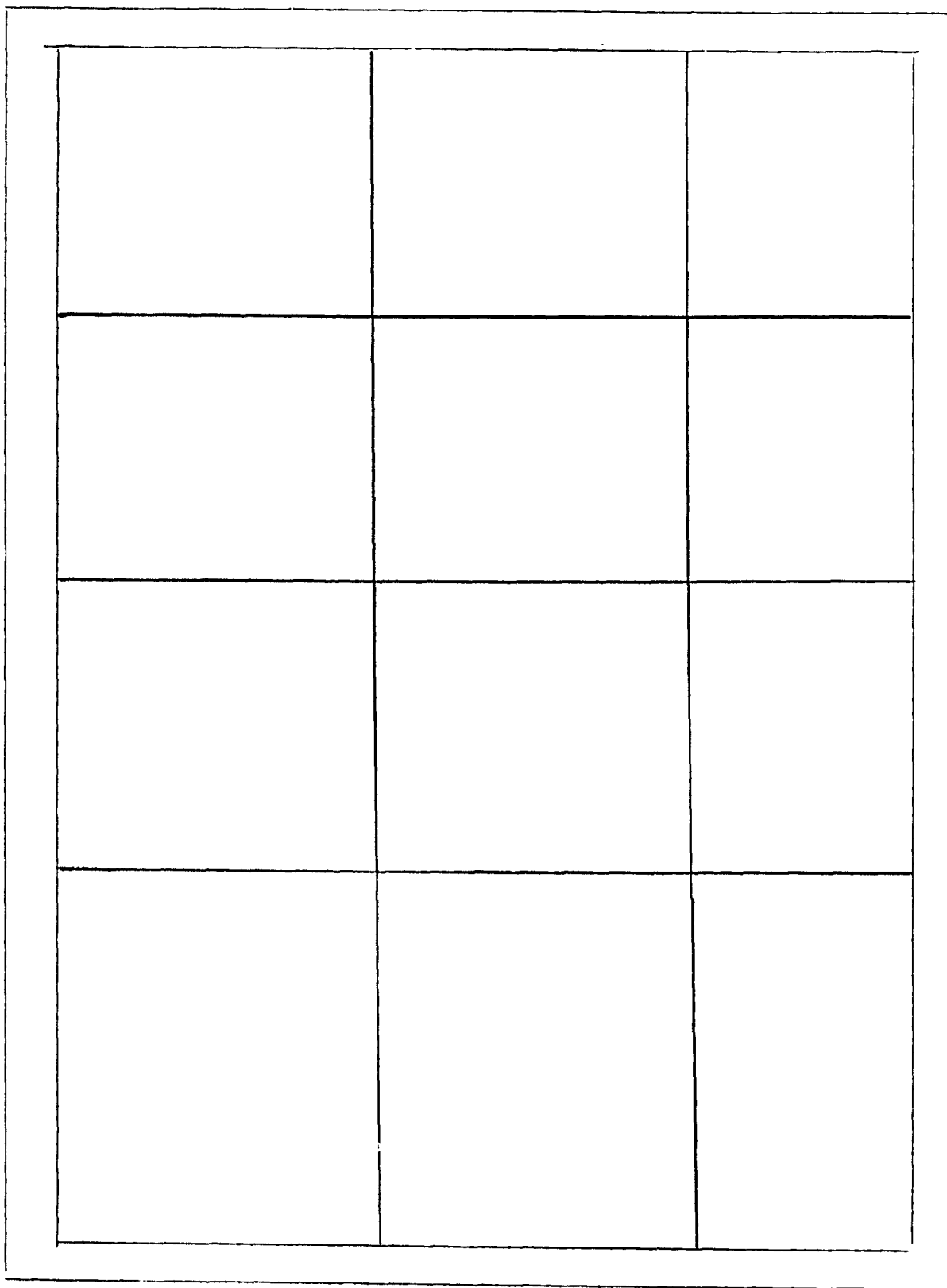
*Background*

*Midground*

*Foreground*



S K E T C H I N G   G R I D



Activity 3

Topographic Map

Resources: Topographic Map

1. Find and copy this information:

Title \_\_\_\_\_

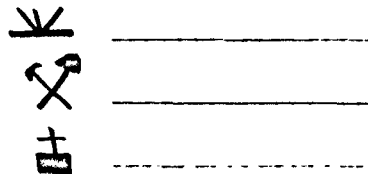
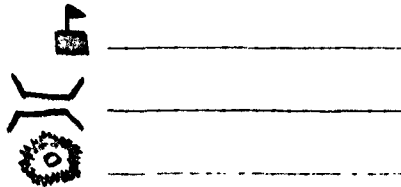
Scale \_\_\_\_\_

Index Number \_\_\_\_\_

2. Name three (3) features (things) found in each quarter (quadrant) of the map and place their names in the correct box.

NW	NE
SW	SE

3. What do these symbols represent?



4. (i) Choose one of the symbols from Part 3 and find three (3) of them on the map.
- (ii) For each symbol location, describe in point form where it is found. You might use direction and closeness to other features.

Symbol

\_\_\_\_\_

Location 1

\_\_\_\_\_

Location 2

\_\_\_\_\_

Location 3

- (iii) What is the same (similar) about the location of all three?

\_\_\_\_\_

Activity 3

5. Show in pictures or words 3 ways this map is different from an atlas map.

---

1.

---

2.

---

3.

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Activity 4

Can You Use an Atlas?

Resources: Atlas

1. What is the average monthly temperature in Vancouver in January? \_\_\_\_\_

2. Name the provinces and their capitals.

Province	Capital

3. What was Canada's exact population in 1976?
4. Which province had the lowest percentage of people living in urban (city) areas in 1971? \_\_\_\_\_
5. Name the six major Physiographic Regions of Canada.

- (1) \_\_\_\_\_
- (2) \_\_\_\_\_
- (3) \_\_\_\_\_
- (4) \_\_\_\_\_
- (5) \_\_\_\_\_
- (6) \_\_\_\_\_

6. Describe the location of each of the places in three ways by filling in the chart. Niagara Falls is given as an example.

	Lat & Long		Description	Distance Direction
Niagara Falls	43° N	79° W	On Niagara River and USA border.	About 20 km N. of Buffalo, N.Y.
Saskatoon				
Schefferville				
Inuvik				

7. Give the name of a land form or community found near
- (i) 60 degrees N, 140 degrees W \_\_\_\_\_
  - (ii) 43 degrees N, 80 degrees W \_\_\_\_\_
  - (iii) 47 degrees N, 64 degrees W \_\_\_\_\_
8. What kind of manufacturing is carried out in Merritt, British Columbia?
- \_\_\_\_\_
9. What is the "Crude Birth Rate" for Canada?
- \_\_\_\_\_
10. Write one sentence which describes where most of the people in Canada live.
- \_\_\_\_\_
- \_\_\_\_\_

Activity 5

What's Geography

Resources: Partners for Discussion

1. Look at the list of questions on the next page.

All of those questions would be best answered with a team of people who had different kinds of training.

Sort that list into 2 groups as shown on page 3.

2. Take those problems which you said that a geographer could help with and divide them into the groups as drawn on page 4. Each group should have at least one item.

3. These titles represent the 3 parts of geographic training. Using these titles for each column and the items as examples, write an explanation for what geography is.

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Activity 5

1. What is the fastest way to travel to Canada's Wonderland and return to Hamilton?
2. What causes cancer?
3. Should Hamilton build the new arena?
4. If you were going to run for the office of mayor of Hamilton, what kind of campaign would be best?
5. Where should the next high-rise apartments be built?
6. Should the Skyway Bridge be widened to eight lanes or should a tunnel be built?
7. Should the new gas pipeline in Alaska and NWT be built?
8. Where should the USA put her nuclear submarines?
9. Does Hamilton need a monorail?
10. How would you find the survivors from a lost airplane that crashed?
11. Where should I buy my new house?
12. How can I improve my chances of winning a car rally?

Problems That Geographers Could  
Help Solve

Problems That Geographers Could  
Not Help Solve

Finding Your Way

Finding Your Way AND  
Making Sure There's Enough

Finding Your Way AND  
Making Sure There's  
Enough AND Deciding  
Where to Put it

NAVIGATION

MANAGING RESOURCES

PLANNING USE OF SPACE

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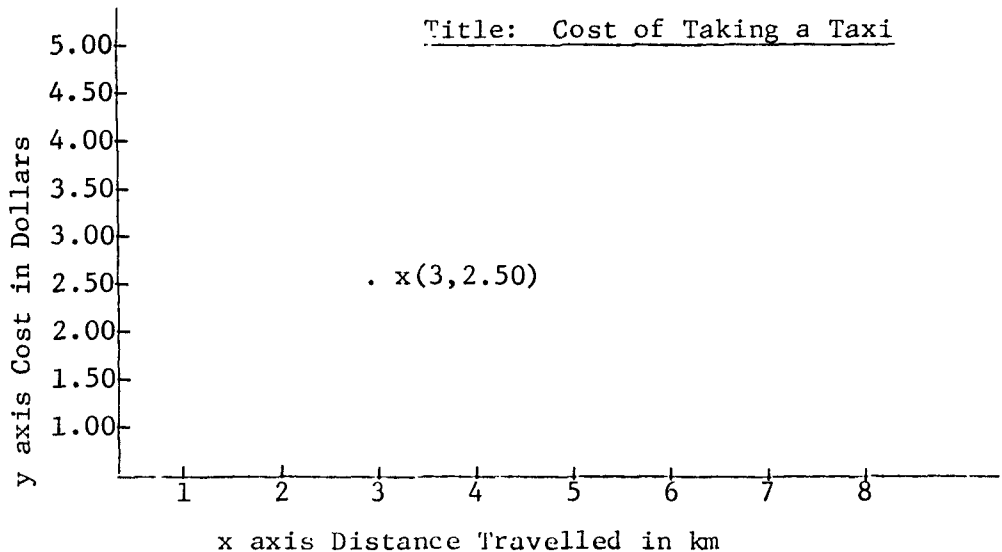
Activity 6

Graphs

Resources: Graph Paper, Ruler, Pencil

How to Make Them -- Part A

1. Draw straight lines at right angles to each other which meet in the lower left-hand corner of the graph paper.
2. Label each line as shown in the example.  
Note: Make the graph as large as possible.



3. This is the information (data) to be graphed/plotted:

<u>Distance Travelled (km)</u>	<u>Cost in Dollars</u>
0	1.00
1	1.50
2	2.00
3	2.50
4	3.00
5	3.50
6	4.00
7	4.50

When graphing data like this, the numbers are paired up, e.g., (3,2.50) so that the first number tells you how far over (x axis) and how far up (y axis) you must go to locate the point. (3,2.50) is accurately plotted for you to use as an example.

4. Join the dots with a ruler (because it should be a straight line).
5. Write, in one sentence, what this LINE GRAPH says or shows you.

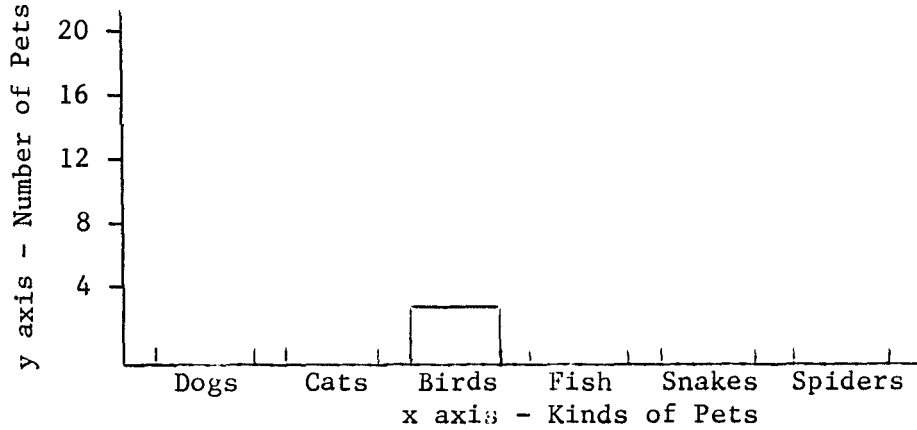
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How to Make Them -- Part B

1. On another sheet of graph paper, repeat Step A 1.
2. Repeat Step A 2.



3. Graph the following information as shown in the example:

<u>Kind of Pet</u>	<u>Number of Pet</u>
Dog	10
Cat	15
Bird	3
Fish	20
Snake	1
Spider	12

4. Colour each bar a different colour.
5. Write, in one sentence, what this BAR GRAPH tells or shows you.

---



---

When to Use Them

Sort the following titles into the chart below by writing the number of the title under the name of the graph which would be best for it:

1. Cost of gasoline per litre in Canada, 1950-1982.
2. Numbers of cars made in the USA, West Germany and Japan in 1982.
3. Number of families owning colour T.V. in Ontario, 1960-1982.
4. Home country of New Canadians in 1981.

Line Graph Best	Bar Graph Best
Reasons:	Reasons:

Activity 6

Why Use Them

Write one sentence which describes the advantages there are in changing data into graphs of any kind.

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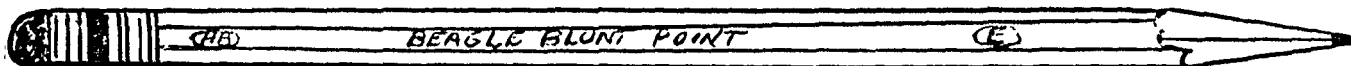
Activity 7

Scale

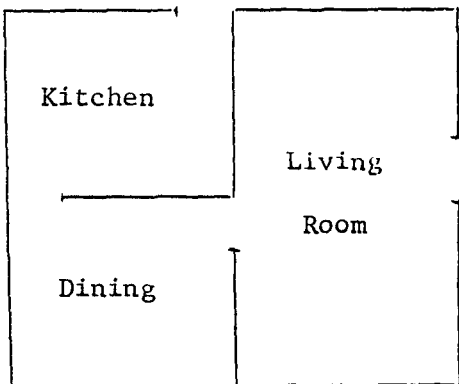
Resources:

1. Circle the drawing of the object which has been drawn to its actual size.

A.



B



2. If the other object was also drawn according to its actual size it \_\_\_\_\_ fit on this page.  
would / would not
3. Therefore, the draftsman \_\_\_\_\_ the drawing so that it would fit.  
shrunk / enlarged
4. The size of the sketch as compared to the actual size (or the amount of shrinking) is called the \_\_\_\_\_ of the drawing.  
mixed up letters - ceals
5. List three other examples where objects are carefully shrunk, i.e., drawn to scale.
  - A. \_\_\_\_\_
  - B. \_\_\_\_\_
  - C. \_\_\_\_\_
6. If this length  $\longleftarrow$  measured on the drawing represented 10 metres on the ground, we would write this as \_\_\_\_\_ cm = \_\_\_\_\_ m.

Activity 7

7. Using  $1\text{ cm} = 5\text{ m}$ , give the actual size of the house drawn for Question 1  
\_\_\_\_\_ m x \_\_\_\_\_ m.

8. We could also show the scale by drawing it. For example:

(i)  $1\text{ cm} = 2\text{ m}$  means the same as  $\begin{array}{cccccccc} 0 & 2 & 4 & 6 & 8 & 10 & 12 \\ | & | & | & | & | & | & | \end{array}$  m.

(ii)  $1\text{ cm} = 3\text{ m}$  means the same as  $\begin{array}{cccccccc} 0 & 3 & 6 & 9 & 12 & 15 & 18 \\ | & | & | & | & | & | & | \end{array}$  m.

Using the above as your examples, make up two new scales

\_\_\_\_\_ means the same as \_\_\_\_\_

\_\_\_\_\_ means the same as \_\_\_\_\_

9. What is the distance between the two cities if the scale is 1 cm represents 10 km?

City A

City B

.

.

10. City X is 100 km from City Y. Draw a line to represent this distance for each of these three scales:

(i)  $1\text{ cm} = 50\text{ km}$

(ii)  $1\text{ cm} = 10\text{ km}$

(iii)  $1\text{ cm} = 25\text{ km}$

11. Using your atlas, calculate the following distances in km:

page 13 - Hamilton to Winnipeg

page 18 - Hamilton to Boston

page 40 - Toronto to Mexico City



## HODGE CITY ROBBERY

### News Item:

At **dawn** this morning, the **Hodge City Stage** was robbed of \$10,000 in gold dust, and the driver was murdered. The robbery occurred at point X on the accompanying map. The sheriff has arrested two suspects . . .

### Suspect A

Arrested by the sheriff when he came to town to report the robbery. He had \$10,000 in gold dust which he says he mined himself. Awakened by shots he saw a bandit run in a N.E. direction from the stage. He was sure the bandit could not see him as he was in the shadow of the hill. His mine is at 053310. He claims he saw no camp near the hill. There are no trees south of the river because this area is a desert.

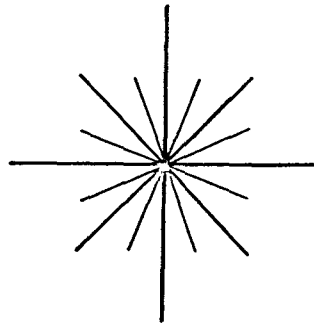
### Suspect B

Picked up by the posse 2 hours after the robbery at 060340. He had \$10,000 in gold dust which he said his father willed to him. He claims to have seen the stage standing in the road at dawn from his campsite. The deputy discovered his campsite at a point 4 km S.S.E. from the point where he was picked up. The suspect claims he saw a man running up the hill in a N.N.E. direction from the stage. He says he was on his way to report the robbery when picked up.

- 
1. On rough copy of map - Read the news item carefully for details. Locate all places and routes on map, and solve problem
  2. On good copy of map - (a) Draw a neatly labelled 16 point compass in the square in the right hand corner of the map.  
(b) Below the map, make a rectangle and inside it make a legend for all the symbols on the map. Be sure to make symbols for the camp, mine, routes, etc., after you have placed them on your map.
  3. (a) Use rough copy map to determine who stole the gold. Be sure the entire group **agrees with** and **understands** the decision.  
(b) Transfer all material from rough copy map to good copy map.
  4. On a separate paper write (a) The suspect who stole the gold.  
(b) Your proof. List geographical reasons for your decision then explain location, distance, time and direction.

# PRETEST FOR HODGE CITY

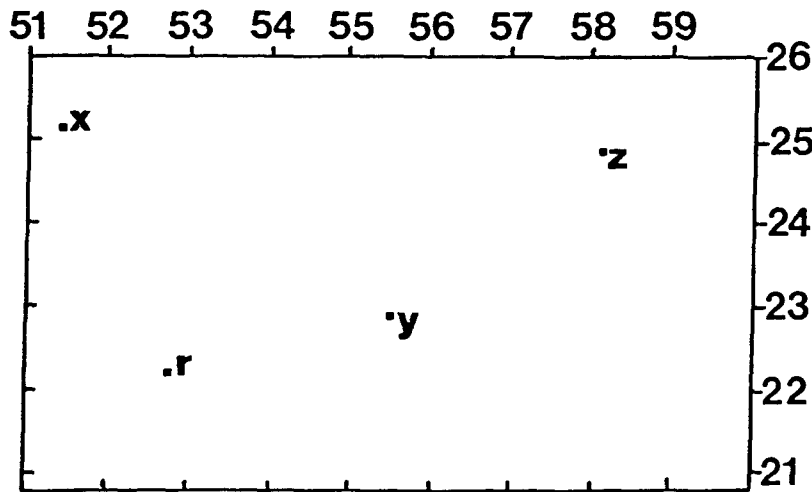
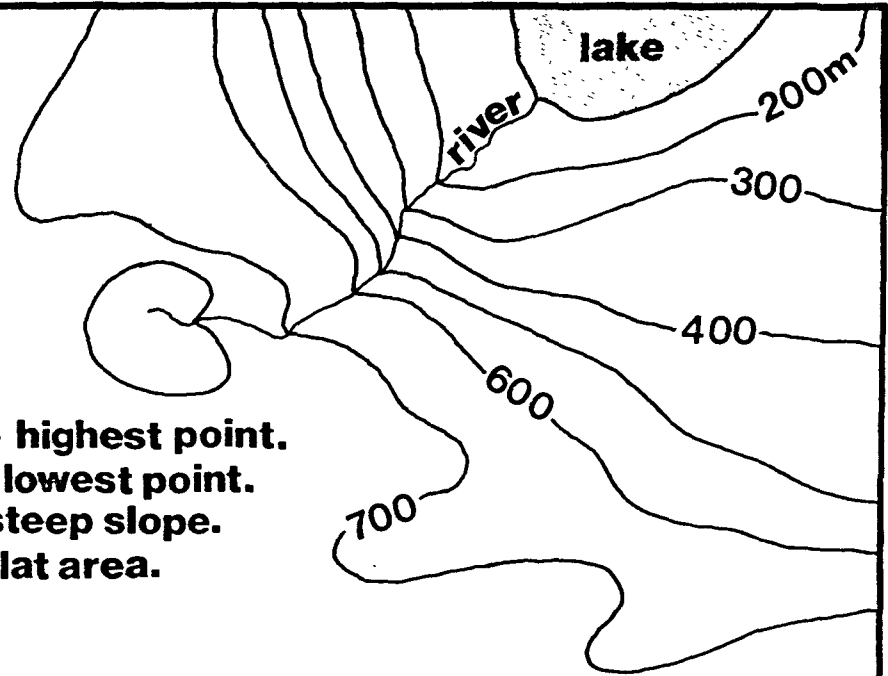
**A.**



Label all the points of the compass.

**B.**

- a) Put 'h' on the highest point.
- b) Put 'l' on the lowest point.
- c) Put 's' on a steep slope.
- d) Put 'f' on a flat area.



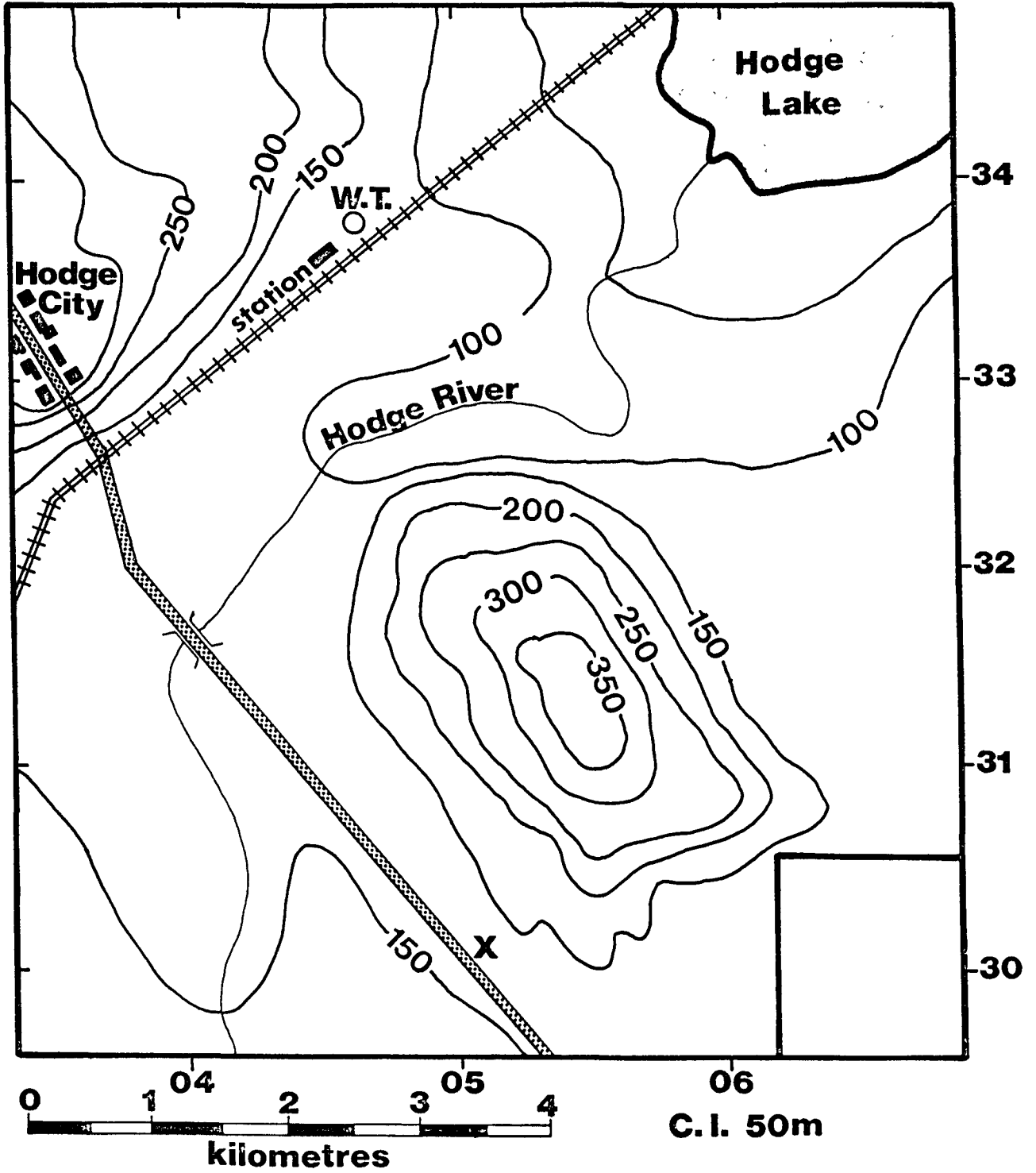
**C.I. 100m**  
 0 0.5 1  
 km

**C.**

Point 'x' is at grid reference 514252.  
 Write the grid reference for points r, y, and z.

r \_\_\_\_\_  
 y \_\_\_\_\_  
 z \_\_\_\_\_

# HODGE CITY MAP



UNIT 2 - OUR NEIGHBOURHOOD

3.1 Rationale

This unit enlarges the students' ability to geographically manipulate their environment. We begin with a manageable piece of space (the classroom) and then extend their understanding outward to the whole community.

The nature of the geographic discipline is developed from Unit 1, Activity 5 in that students orient themselves within their neighbourhood, make an inventory of neighbourhood resources and then make planning decisions. Students will develop a sense of the dynamic interplay which exists between their part of the community and the whole.

3.2 Activities and Objectives

In this section an outline of the activities and objectives is listed in sequential order for the benefit of the teacher. Students will:

1. Draw an accurate scale map of their classroom showing their location.

2. Make a chart comparing the construction and characteristics of several different types of maps.
3. Spatially define their neighbourhood.
4. Create a series of practical criteria for measuring the desirability of a neighbourhood and participate in evaluating one of them.
5. Explore the relationships between their neighbourhood and the larger unit by investigating the sources of need satisfaction.
6. Develop and apply a land-use classification system.
7. Recognize the patterns which particular land-use types are likely to develop.
8. Investigate the factors which can influence land-use patterns.
9. Draw a topographic map of the Hamilton area.
10. Become familiar with the concepts of site and situation as they apply to Hamilton.
11. Investigate the long term effects of major land-use changes in their neighbourhood.

12. Become acquainted with local government officials and the process of land-use changes.
13. Identify and put into operation effective lobbying techniques.
14. Make major planning decisions for a green belt site and evaluate their impact on the quality of life afforded to a particular residential site.
15. Recognize the positive attributes of their neighbourhood.
16. Increase their awareness of the planning process and the potential influence of the individual criteria.
16. Develop a greater confidence in understanding the dynamics of an urban environment.

### 3.3 Strategies

1. This unit requires a thorough overview of the entire course with particular reference to the practical goal of improving our neighbourhood.
2. Most "Student Activity" pages in this unit are substantially different from those in Unit I. These instructions provide only the framework for the activities and should be carefully reviewed and adapted to the individual characteristics of the school environment.

3. Most of the resources for this unit originate from the local planning office which necessitates an early visit (at least one month) before starting.
4. Allow at least 6 weeks for the completion of this unit.
5. Students will be working in groups for most of the time. The groupings should be arranged on the basis of the nature of the task and the skills defined on the large chart from Unit I.
6. The nature of most of the activities encourages a mastery approach to evaluation.
7. A good deal of Socratic teaching will be required.
8. Use this unit to demonstrate the nature of the geographic discipline:
  - (a) Navigation/Orientation - classroom and neighbourhood maps.
  - (b) Monitoring Resources - mapping neighbourhood services.
  - (c) Planning - how can we improve the neighbourhood in a real way?

### 3.4 Suggestions

1. Old phone books may be obtained from the Bell offices.

2. Visits to the school by planning personnel and/or tours of the planning offices add a great deal to the impact of the unit. Getting an article published in the local paper (e.g. editorial) is also a worthy endeavour.
3. This framework will readily accommodate a more thorough treatment of concepts which could be advantageously developed throughout the year (eg. regionalism, meeting the needs of security and shelter).
4. Bonus work of an individual nature should be available.

### 3.5 Follow-Up

Students are particularly enthusiastic about the land-use classification activity and will do a superb job if they are given the appropriate level of instruction and support. This whole unit provides an excellent opportunity for a large whole-class endeavour and consequently stimulates a real camaraderie.

### 3.6 Instructions

Review the following "Student Activity" pages and prepare auxiliary materials where required.



### Mapping the Classroom

Using a regular size sheet of paper draw a rough sketch map of your classroom. Transfer your rough copy to the large paper so that it takes up as much room as possible. Remember to include:

1. a title;
2. a legend;
3. an arrow showing north;
4. a border;
5. a scale;

You will also have to think about:

1. how much detail to include;
2. whether or not to use colours;
3. how many people you need in your group and what skills they should have to complete the job in 2 periods (see large chart).

When you have finished, carefully mark on the map your location and the locations of your group members; then post your map on the board.

Different Kinds of Maps

1. Find a partner and enlarge this chart onto the sheets of paper provided.

What They are Like	Classroom Map	Planning Dept. Neigh.	Planning Dept. City Street	Topographic Burlington 30 M/Sc.	Ontario Road Map	Oxford Atlas Map of Canada
Symbols Found Only On						
Use of Colour						
Typical Scale						
Extra Information						
Best Used For						
How to Make Them						
Information Required						
Skills Required						

2. View the film Every Square Inch.

3. Get a copy of each of the maps, study them under the headings and fill in the chart. Use diagrams, sketches or symbols wherever possible.

Our Neighbourhood

1. Using copies of the Planning Department "City Street Map" mark on your house, our school and the route that you take to school. Measure the distance in kilometers and miles.
2. Our neighbourhood is the part of our community with which we are familiar - we know where things are and we are recognized by other people as being part of that group. To decide on the limits (boundaries) of our neighbourhood mark, on one map, 10 places that you would be likely to visit several times during a week.
3. When everyone in the class has marked on their 10 places draw a line around the piece of our city (use roads for the lines i.e. don't cut blocks in half) which would include at least 80% of the dots. That area is our neighbourhood.
4. Using tracing paper draw an accurate map of our neighbourhood. Remember to include all the required parts of a map.

Evaluating Our Neighbourhood

1. Make a list of all the services which should be available within the boundaries of a neighbourhood.
2. Give names for services that go together (e.g. Health Services - drug stores, doctors, etc., Emergency Services - ambulance, police, fire, etc.).
3. Make additions to this list of desirable characteristics

1. Residential
2. Environmental
3. Security
4. Stability

and then decide how to measure and map them.

4. In pairs, enlarge your neighbourhood maps 8-10 times using either overhead or opaque projectors.
5. Assume responsibility for one of the categories of service (Instruction 2) or for one of the characteristics identified in Instruction 3. Using phone books and the Planning Department "Neighbourhood Maps" mark the location, name and phone number of these services on your maps. If there are too many, try to choose a representative sample of 25. If you are mapping a

characteristic, establish how you intend to measure it and transfer your estimates to the map.

6. Classify each service or characteristic as Excellent, Average or Poor and make a chart which summarizes the class results.
7. Write a 3-paragraph essay which has as its title "The Advantages of Living in Our Neighbourhood". Use specific examples for the services or characteristics which were judged to be excellent.
8. (a) Select one of the services or characteristics which were judged to be Poor and which you think is important for the neighbourhood.  
(b) Make a list of all the ways in which it could be improved.

Using Resources Effectively

What are you going to do this weekend? When you take the time to plan out your time away from school, you mentally separate things into two categories:

1. those which will help you to have an enjoyable time, i.e. tools to help you - resources or ASSETS.
2. those which will get in the way of your having an enjoyable time, i.e. LIABILITIES

Make a chart in your book like the one below:

ASSETS (Resources)	LIABILITIES

Here are some things which might be suitable for you to include in your chart:

1. Sunny and warm weather
2. Bicycle broken
3. Lots of money in the bank
4. Have a cold
5. Lots of homework to do
6. Working at the grocery store
7. Parents purchased Atari game

Sort the items that apply to you in the appropriate place in your chart. Make up another list of factors which apply only to you and add them in the suitable spot in your chart.

Did you notice that some items are difficult to place on the chart? Depending on the circumstances, a visit from an aunt or uncle may or may not help you have a good time on the weekend. To solve this problem, go back to your original goal and explain it in more detail, i.e. what kinds of experiences do I enjoy on a weekend?

Compare your chart with your friend's. Did you find any items on the opposite side of their chart, i.e. what you considered an ASSET he/she considered a LIABILITY? This does not mean that one of you is correct and the other incorrect. It means that people use what is available to them in the best way they can and in the manner in which

they have been taught. A snowy weekend may be an ASSET for a skier and a LIABILITY for someone travelling to another city.

You should now be able to summarize your chart and make a forecast about your weekend. If your ASSETS are greater in number and strength than your LIABILITIES then you're all set; you're going to have a great time. If however the ASSETS are out-weighted by the LIABILITIES then you have a problem. This gives you four options:

1. Do nothing and have a terrible weekend.
2. Try to change the conditions under which you will have a good time so that LIABILITIES become ASSETS (i.e. switch from travelling to skiing).
3. Search for some extra ASSETS that you missed the first time (e.g. your friend owes you some money).
4. Try to eliminate some of the LIABILITIES (eg. get your homework completed before the weekend).

Can you think of anything else to do? If you followed this routine for all of your time you would certainly make better use of it. In a sense you would be making time an ASSET rather than a LIABILITY. Time can be a very powerful LIABILITY (e.g. when there is too little to complete our jobs we are in a rush and nervous). When we feel there is too much time, we are lazy and bored. Planning helps to make time feel just right, i.e. an ASSET.

Let's check to see whether time is an ASSET or a LIABILITY for



you. Make up two time graphs for yourself; one for a typical school day and one for a typical Saturday. The whole circle ( $360^\circ$ ) represents 24 hours so each quarter ( $90^\circ$ ) of a circle is 6 hours and each half ( $180^\circ$ ) of a circle is 12 hours. Start with your wake-up time at the top.

Compare yours to a few of your friend's, looking for things that are the same and things that are different. What would a time chart look like for someone who felt that the amount of time is too much, too little, and just right? Try to think of ways that you might manage your time so that it feels more comfortable.

This kind of planning before an event has taken place, where problems are identified before they happen, is called Pre-Planning. Sometimes it's not possible or just doesn't get done and we have to look back in time. When we do this kind of planning it's called Post-Planning. For example, you might want to answer the question, "Is my first year in high school an enjoyable one?" Make a chart and fill in the two parts with things/events that have contributed to your enjoyment of the school year and those which made you dislike it. If the LIABILITIES side appears to outweigh the ASSETS side, then you have identified a problem which you can now deal with by PRE-PLANNING the next part of your schooling, e.g. join a club, do more homework, start jogging. If the ASSETS win then you now have an indication of which events are of importance to you and which make you happy.

This way of thinking is especially suitable for geographic problems, e.g. navigating (finding your way), monitoring resources (making

sure there's enough) and planning the use of space (deciding where to put it). For example, consider the following:

Is the Q.E.W.-Gardiner Expressway the best route to take to get to and from the C.N.E.?

ASSETS	LIABILITIES
<ul style="list-style-type: none"><li>- highest speed limit</li><li>- most number of lanes</li><li>- road in good repair</li><li>- fewest number of exits and entrances</li></ul>	<ul style="list-style-type: none"><li>- most crowded</li><li>- highest speed limit</li><li>- fewest number of exits</li><li>- boring</li></ul>

Note that the same items appeared on both sides of the chart:

- highest speed limit
- fewest number of exits

From the previous examples we have learned to be careful about classifying items as ASSETS or LIABILITIES and then thinking that other people feel the same. Not only do the people in your classroom think differently but so do people in different locations and periods of time. What we consider to be a valuable ASSET might not be so valued by others. For example, in our society we place a very high value on own-

ing thing: cars, houses, stereo, etc. They make us feel important and give us power. However, this isn't true for everyone. In some societies, the people who were considered to be most important were those who gave the most away (e.g. Potlatch ceremony in British Columbia). If you owned a piece of land that had iron ore on it, it would depend on your circumstance whether it was an asset or not. If you lived in Canada and the property was close to a city, you would probably be happy because if the ore could be mined, you would receive money. If you were a farmer in Brazil you would be sad because that kind of mineral is usually found in places with poor soil. Here is a list of items which could be classified as either ASSETS or LIABILITIES. Give an example for each:

1. Trees
2. Fire
3. People
4. Water
5. Oil
6. Uranium
7. Space

Not only do "objects" change their value from place to place but they may also change in the same place over time. Explain how these items have changed over time and suggest some reasons for the change:

1. Old furniture, cars
2. Fresh water
3. A job
4. A big house
5. Farming
6. Being a good reader
7. Have a tan

Can you name some items that will be highly valued assets in the future?

In summary there is a real danger of looking at problems which involve other people and places and not seeing the situation through their eyes. Choose one of these large-scale problems and analyse it according to POST-PLANNING and PRE-PLANNING:

1. Should Canada allow/encourage anyone from any other countries to come and live here?
2. Should nuclear energy be expanded?
3. Who would win a nuclear war?
4. What is the best way for a rich country to help a poor one?
5. Who owns the oceans?

Explain how "Using Resources Effectively" relates to the problem that you are working on now.

Choose a plan that involves changing the use of land in a definite way. Show what changes are to be made on your large service level maps and in words, diagrams/sketches show how your suggested change would attack the problem which you identified.

How does our Neighbourhood fit in with the Larger Unit - the City?

1. What goods and services cannot or should not be supplied within our neighbourhood?
  
2. (a) From the provided list, group the kinds of buildings etc. with the ones that are the same.

1. Dentist's Office
2. Beer Store
3. Bell Telephone Building
4. Police Station
5. Eatons's
6. Consumers Gas
7. Gas Station
8. Travel Agent
9. Eastwood Park
10. Courthouse
11. Mohawk College
12. T.H. & B. Yards
13. Century 21
14. Library
15. Light Bulb Factory
16. Princess Point
17. Harvey's
18. Townhouse
19. Spectator
20. Christ Church Cathedral
21. Stelco
22. Bus Terminal
23. Rollerworld
24. Your house
25. Sir John A. MacDonald
26. Hamilton Place
27. Jackson Square
28. Mac's Milk
29. Mother's
30. Goré Park

- (b) Supply names for each group.
  - (c) Compare your groups to the Planning Department groups or classes and standardize them.
  - (d) Add any that are required for our neighbourhood.
  - (e) Assign standardized colour to land-use types.
3. Trace a 3-4 block section of your neighbourhood from large-scale base maps (work in pairs).
4. Visit the area and classify the goods and services.
5. Translate the classes into a colour code and transfer to the Master Map.
6. (a) For each land-use type make a list of locations which are typical (i.e. Tendencies).
- (b) Compare "Tendencies" to "City-wide Land Use Map".
- (c) Translate "Tendencies" into "Patterns" by doing the "Land Use Pattern" exercise.

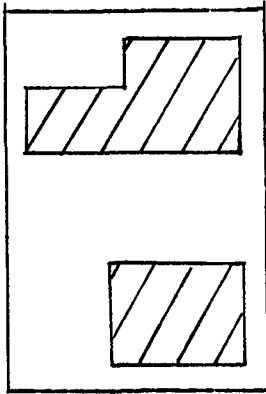
LAND USE PATTERNS

Example

Describing Words

Land Uses That Can

Look like this



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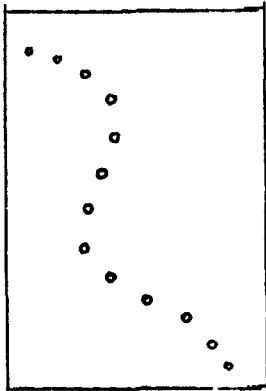
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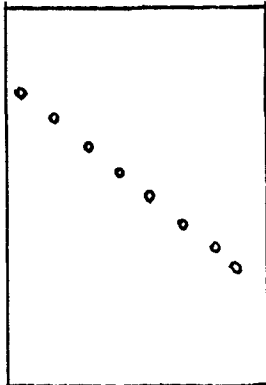
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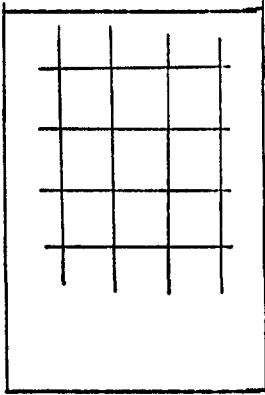
LAND USE PATTERNS

Example

Describing Words

Land Uses That Can

Look like this



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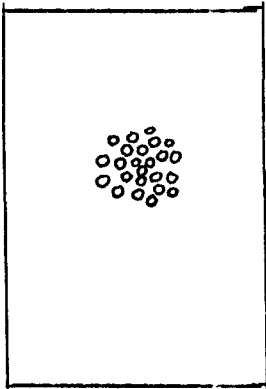
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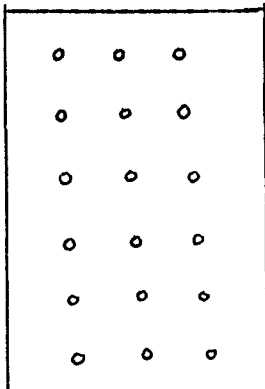
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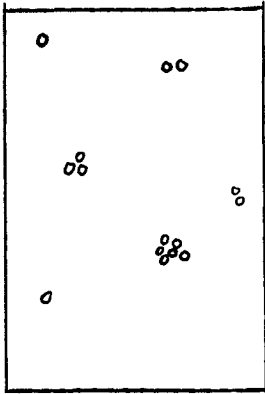
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LAND USE PATTERNS

Example



Describing Words

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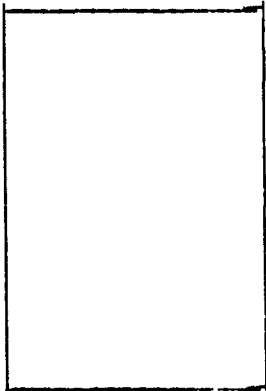
Land Uses That Can

Look like this

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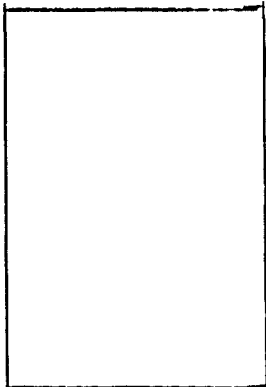
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Factors that Influence Land-Use Patterns

Draw sketch maps or a series of cartoons to shown how each of the following factors could influence the land-use patterns in an imaginary community.

1. Nature of the land use (e.g. commercial)
2. Relationship with other land uses
3. Historical fact
4. Site
5. Situation
6. Other

## TAILHOMN

Draw an accurate map from the description below.

Use 21.5 x 35 cm. paper.

Do a sketch map first.

Remember -- good topographic maps contain the following:  
direction, scale, symbols, colour, title, contour lines, legend.

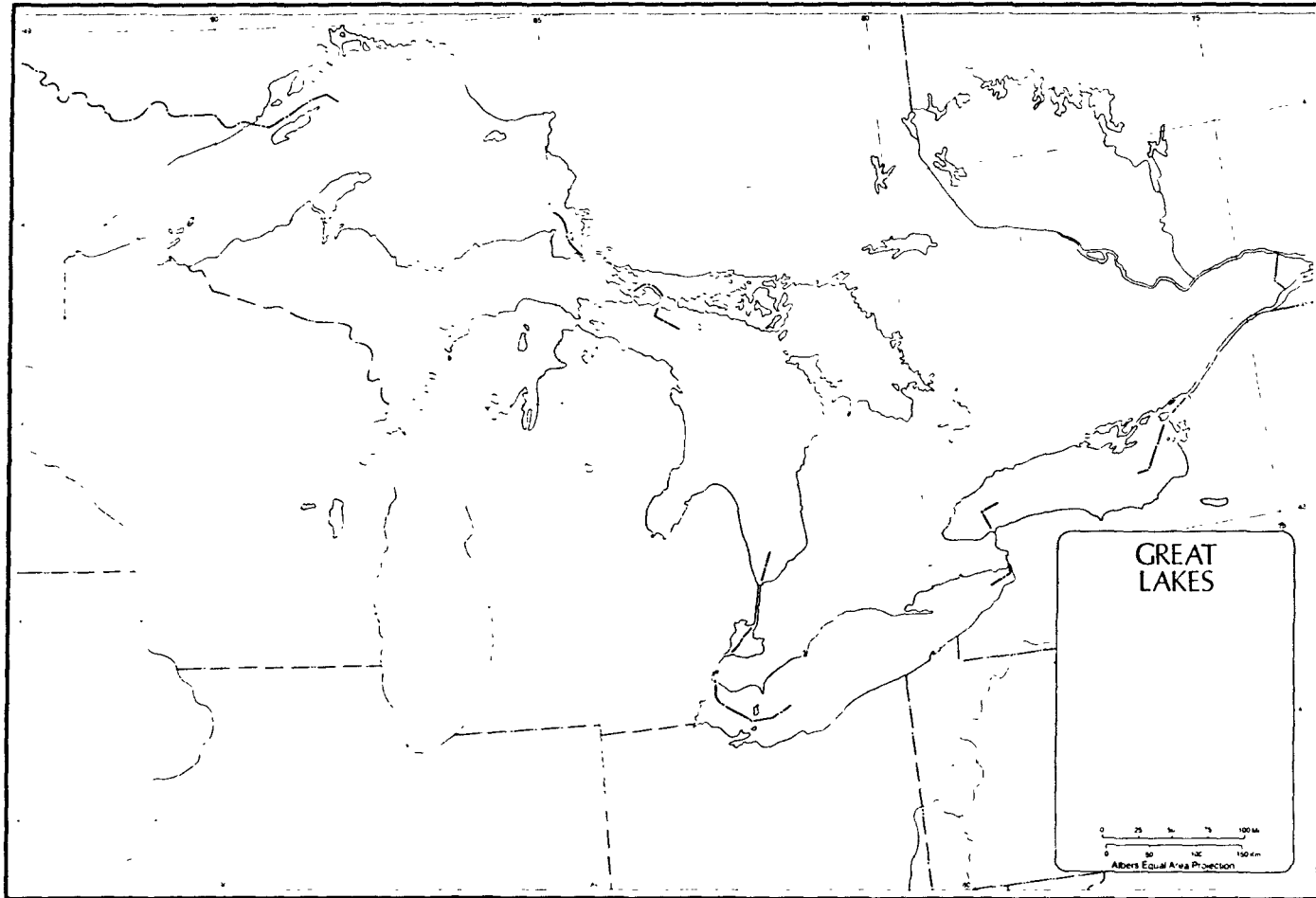
HERE ARE TAILHOMN'S CHARACTERISTICS

1. Draw a roughly triangular bay in the central part of the page having sides as follows:
  - (i) 12 km. east to west
  - (ii) 12 km. SW - NE
  - (iii) 7 km. long
2. In 1. side (iii) is a narrow low piece of land (bar) covered with road (4 lanes) and rail facilities, separating the bay from a larger body of water, Lake Riaton. There is an entrance through this side of the bay for boats.
3. Near the western end of the bay there is a short but wide ( $\frac{1}{2}$  km.) bar of sand. It separates the bay from swampy lowland
4. Along sides (i) and (ii) of the bay, about 2 - 4 km. from the water there is a steep ridge or escarpment about 60 metres high.
5. Along side (i) there is a concentration of heavy industry, shipping facilities with a mixture of commercial and residential land uses between the industry and the escarpment. The area south of the escarpment is residential. The shoreline side (ii) is mostly residential and recreational, and part of another city.
6. Tailhomn has city boundaries as follows:
  - (i) the shore of the bay
  - (ii) a line parallel to the escarpment and 4 km. south of it
  - (iii) a line from the western end of the bay running south
  - (iv) a line from the eastern end of the bay running south.
7. Transportation routes are below the escarpment and parallel to the bay and Lake Riaton.
8. Outside the city the area is largely agricultural with emphasis on dairy farming in the south and west, and fruit on the east.

Situation of Hamilton

Neatly mark the following features on the accompanying map.

Hamilton	Q.E.W.	Welland Canal
Toronto	Hwy 401	St. Lawrence River
London	Trans Canada	Ottawa River
Windsor	Hwy 17	Georgian Bay
Ottawa	Hwy 400	Lake Ontario
St. Catharines	All double track railroads	Lake Erie
Sudbury	Limited Access Highways	Lake St. Clair
Sault Ste. Marie		Lake Huron
Thunder Bay		Lake Superior
		Lake Michigan
		Niagara River
Ontario		
Quebec		
New York		
Pennsylvania		
Ohio		
Michigan		
Indiana		
Wisconsin		
Illinois		
Minnesota		
Iowa		



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SITE AND SITUATION OF HAMILTON

1. (a) Title your Tailhorn map Site of Hamilton.  
(b) Describe in point form the area upon which our city is located.  
(c) How have these characteristics affected Land Use Patterns?  
(d) With these factors in mind, why is the proposed location for the new arena a poor one?
  
2. (a) Title your Great Lakes map Situation of Hamilton.  
(b) Describe in point form the location of our city (i.e. situation).  
(c) How have these characteristics affected Land Use Patterns?  
(d) With these factors in mind, why is the proposed location for the new arena a poor one?
  
3. Using both maps, choose a more suitable location and explain your choice.

Changes in Our Neighbourhood

1. What changes are planned for our neighbourhood which might better be located elsewhere?
2. Choose an alternate site (within the city) for the proposed change which is superior to one proposed and support your plan.
3. Find out who decides these changes and how the decisions are made.
4.
  - (a) In what ways could we as a group influence that person(s) and the decision-making process?
  - (b) Choose the method of influence that matches your interest and resources and do it!
  - (c) Evaluate the effectiveness of your plan.
5. What other source will be available to you as an adult to make your opinions known that aren't available now?

MID SEMESTER EVALUATIONINSTRUCTIONS:

1. Form groups of 3-4 skills required:
  - A. map drawing
  - B. writing skills
  - C. land use planning ie - types of land use and site requirements.
  - D. organizer and time planner.
2. Enlarge the base map provided to a scale of 1:50,000.
3. Using the coloured paper provided (colours correspond to earlier established classification) plan the city called Sopex on this site. N.B. you are not required to use all the paper but you must use some of each colour.
4. Write two paragraphs which outline the overall characteristics of your city and advantages of your plan.  
For each land use type, write one paragraph which outlines the reasons for the location(s) planned by your group.  
(2½ periods. 25 marks).
5. As an individual, choose a location for your residence and write a 3(three) paragraph essay explaining the reasons for your choice.  
(½ period)- 10 marks.
6. Each person must choose a different location, but you are encouraged to help each other in your choices and the explanation.





## CHOOSING A PLACE TO LIVE IN CANADA

4.1 Rationale

This chapter is designed to provide the data and the process which will cause the students to seriously question the parochialism which is so prevalent among this group. Using the "Basic Problem Solving Model" as their guide, students will extend their sense of familiarity from the community, to the province, to the region and finally to the country as a whole. Major attributes such as area, relative and absolute location, physiography and population distribution will be developed within a context that is both relevant for, and comprehensible to, the students.

Many of the skills introduced earlier will be developed to a more sophisticated level, e.g. interpretation of topographical maps and photographic slides, and the management of time. Several new components are also introduced such as the interpretation of aerial photographs using stereoscopes and participating in a simulation game.

4.2 Activities and Objectives

Students will:

1. Learn the shape, area, size, location and population of our country and it's components (politically and physiographically).
2. Produce two outline maps of Canada - one drawn and one cut out and glued.
3. Learn the concept of population density and how to describe the Canadian pattern.
4. Produce a large chart which summarizes the characteristics (human and physical) of the six major physiographic regions of Canada.
5. Acquire the basic skills of handling a stereoscope and stereogram.
6. Produce a set of six land-use maps drawn from the stereoscopes and augmented by information from the corresponding slide and topographic map.
7. Learn the relative advantages of using slides, stereograms and topographical maps.
8. Establish a personal set of locational factors.
9. Learn the ways in which jobs can be categorized and the technique most often used by geographers.
10. Acquire a feeling for the stresses and strains of a modern day mining company operating on the Canadian Shield by participating in a simulation game.
11. Learn the location of Canada's secondary industries and the factors responsible for this pattern.
12. Learn how to personally evaluate the attractiveness of a job by creating a questionnaire and then having it completed by someone employed in the tertiary sector.

13. Learn the general locational pattern of tertiary jobs in Canada.
14. Organize a three-month tour of Canada which highlights many of the more important geographical characteristics.
15. Select a location in Canada as a working adult.
16. Consider the advantages of employment in the three sectors.
17. Appreciate the value and difficulty of long-range planning.

#### 4.3 Strategies

1. Introduce this unit with an explanation of the major organizing questions:- "Where in Canada would I like to live?".
2. "Join the Dots", "Size and Shape", "Population Distribution", "Population Density" and "Urbanization" in Canada require little extra teaching other than sufficient explanation so that the students see the connection.
3. There is a major shift in focus from "Urbanization in Canada" to "Physiographic Regions" which will need to be dealt with to maintain continuity.
4. A great deal of small group teaching is required to bring the whole class to completion in the "Physiographic Regions" exercise.
5. A short lesson on accounting procedures before play actually commences in the "Mining Game" will avoid a lot of confusion.
6. The four activities on employment need to be expanded so that students have a clear idea of why they are included in the chapter.

7. The chart in "Project Canada" requires a thorough explanation.
8. The final activity is suitable for a summation and evaluation.

#### 4.4 Suggestions

1. The section of "Join the Dots" which compares Canada's area with other countries could be improved by including countries of greatest significance to the students.
2. Encourage the students to work with a variety of people.
3. Provide safe and convenient storage locations for materials.
4. Make available pencils, rulers and other supplies, which students might not have for a particular period.
5. Mark everything they do and return the work promptly. Many of the assignments are suited for Complete/Incomplete grading. Encourage students to re-do faulty work.
6. Expand the "What I can Do Well?" chart to include new items.

#### 4.5 Instructions

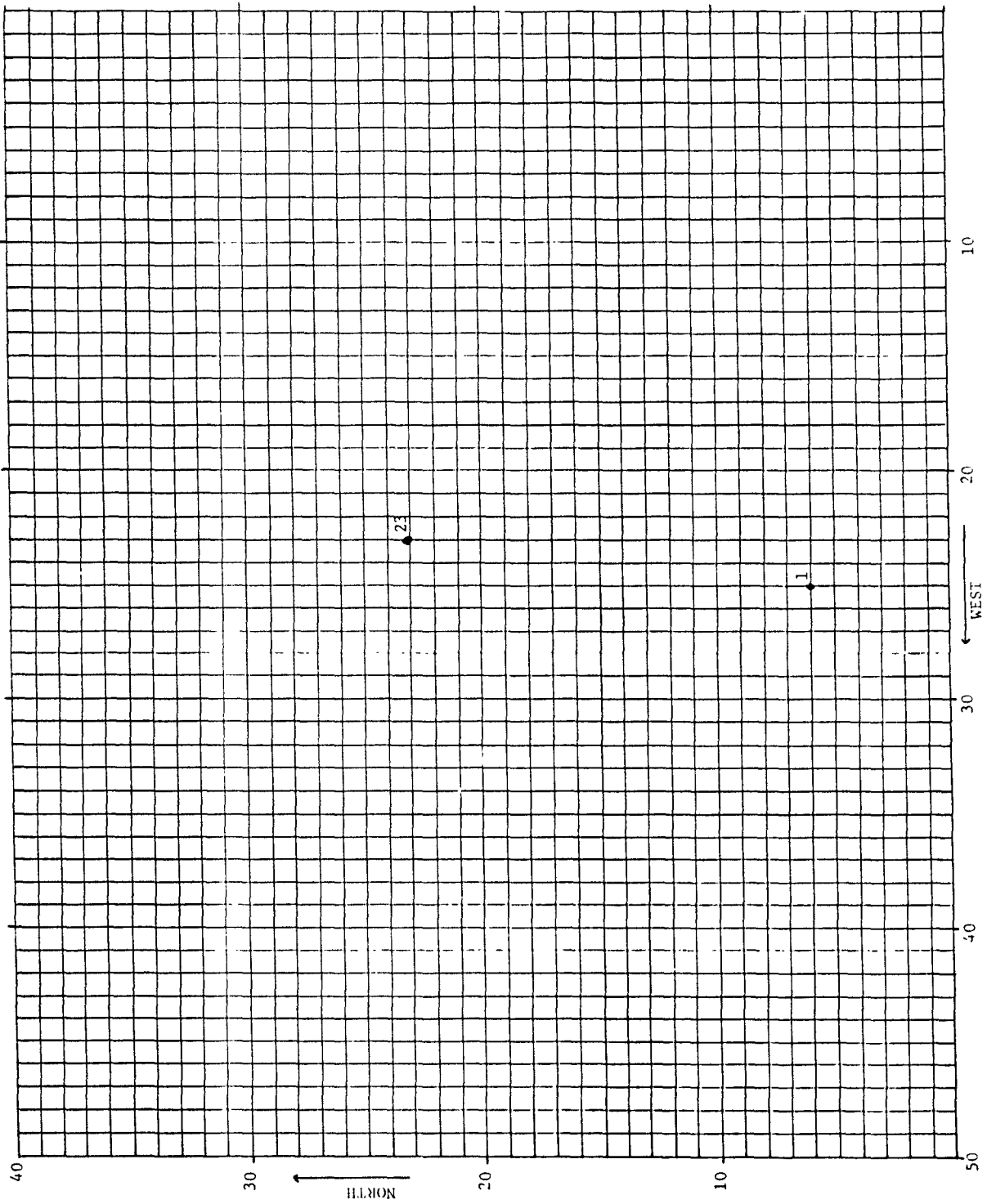
1. Carefully review the following exercises and prepare the required materials.
2. Adjust the scope of the open-ended activities to the level of interest and competence of the students.

Join the Dots

1. Using the grid provided and the dot location for Part A, match up the circled examples and the dots shown. When you are sure that you understand how the system of locating dots works (check with friends and/or teacher) place the rest of the dots and their numbers on the grid. Join the dots with straight lines in the correct order. Don't forget to join the last dot to the first.
2. Do the same for Parts B, C, D, E, F, G, H, I and J.
3. With the help of your friends try to name all of the parts. When you are all agreed, check your answers with your atlas.
4. Label the large bodies of water.
5. Name 5 parts of our country that were not drawn. Think of reasons why they were not included. What could be done to the size of the map so that all parts could be drawn? How would the change affect the scale?

6. Size (Area)

- (a) With your friends divide up the country so that each person has about the same amount of area. Persons count up the number of squares in their own part and then the individual totals are all added to give the total area. Each part square will count as a half so count them separately and divide by two.
- (b) If you are interested in the area in square km, multiply the number of squares by 15,625 (1 cm = 250 km, each square is 0.5 cm; thus  $125 \times 125 = 15,625$  sq. km). Compare your calculations with those given in the atlas.



Locations of DotsPART A

1.	6N	25W	20.	24N	24W	39.	17N	16W	58.	6N	9W
2.	7	28	21.	26	24	40.	17	15	59.	5	9
3.	9	38	22.	25	23	41.	19	14	60.	5	10
4.	12	44	23.	23	23	42.	16	11	61.	6	10
5.	16	45	24.	18	27	43.	16	9	62.	7	9
6.	19	45	25.	16	27	44.	15	7	63.	7	10
7.	24	40	26.	14	25	45.	12	9	64.	6	11
8.	25	46	27.	13	22	46.	11	11	65.	8	12
9.	31	40	28.	11	21	47.	9	13	66.	7	13
10.	30	39	29.	10	20	48.	7	14	67.	5	13
11.	29	36	30.	10	19	49.	5	15	68.	5	15
12.	26	33	31.	11	19	50.	7	14	69.	1	19
13.	25	33	32.	13	20	51.	9	12	70.	1	20
14.	25	30	33.	14	19	52.	10	11	71.	3	20
15.	24	28	34.	15	19	53.	10	10	72.	6	23
16.	25	27	35.	16	20	54.	9	11	73.	6	25
17.	21	27	36.	20	20	55.	9	10			
18.	28	28	37.	20	12	56.	8	10			
19.	25	26	38.	19	17	57.	8	7			



Locations of Dots

PART B

- 1. 27N 33W
- 2. 26 32
- 3. 29 29
- 4. 30 29
- 5. 29 30
- 6. 29 31
- 7. 30 32
- 8. 30 33

PART C

- 1. 30N 21W
- 2. 28 27
- 3. 28 28
- 4. 30 28

PART D

- 1. 30N 23W
- 2. 38 21
- 3. 37 22
- 4. 35 22
- 5. 33 23
- 6. 32 23
- 7. 32 25
- 8. 33 24
- 9. 35 24
- 10. 36 23
- 11. 36 25
- 12. 37 25

PART E

- 1. 32N 26W
- 2. 11 25
- 3. 21 23
- 4. 30 23
- 5. 30 25
- 6. 32 27

PART F

- 1. 29N 21W
- 2. 25 16
- 3. 24 16
- 4. 24 17
- 5. 23 17
- 6. 22 15
- 7. 20 15
- 8. 22 19
- 9. 21 20
- 10. 22 21
- 11. 24 19
- 12. 27 22
- 13. 26 22
- 14. 27 24
- 15. 27 25
- 16. 29 25

PART G

- 1. 32N 34W
- 2. 32 33
- 3. 31 32
- 4. 30 34
- 5. 30 35
- 6. 31 35

PART H

- 1. 33N 31N
- 2. 32 30
- 3. 33 30
- 4. 33 29
- 5. 31 29
- 6. 31 31
- 7. 33 32

PART I

- 1. 14N 7W
- 2. 13 6
- 3. 13 5
- 4. 12 4
- 5. 12 3
- 6. 11 4
- 7. 11 6
- 8. 10 7

PART J

- 1. 15N 36W
- 2. 15 35
- 3. 12 35
- 4. 12 36

7. Comparing Canada's Size and Shape

Choose an example from those below and repeat Steps 1-6. This time you must draw your own grids. Watch out for changes in the size and direction of the grid as compared to the one for Canada.

France

- |          |           |           |
|----------|-----------|-----------|
| 1. 1N 2W | 8. 8N 0   | 15. 2N 3E |
| 2. 4N 2W | 9. 7N 2E  | 16. 2N 2E |
| 3. 5N 3W | 10. 7N 3E | 17. 1N 1E |
| 4. 5N 4W | 11. 6N 3E |           |
| 5. 6N 3W | 12. 4N 2E |           |
| 6. 6N 3W | 13. 4N 3E |           |
| 7. 8N 1W | 14. 3N 4E |           |

West Germany

- |          |           |
|----------|-----------|
| 1. 2N 4E | 8. 7N 6E  |
| 2. 3N 4E | 9. 5N 5E  |
| 3. 3N 3E | 10. 4N 6E |
| 4. 7N 3E | 11. 4N 7E |
| 5. 8N 4E | 12. 3N 7E |
| 6. 8N 5E | 13. 7N 6E |
| 7. 7N 5E |           |

8. Projections

Projections are different ways of putting a round object on a flat piece of paper. Select one of the grids provided by the teacher and transfer the dot locations. Compare the resulting shape and area to the original. Can you think of any uses for this way of drawing a map?

9. Location

- (a) Find out how large the whole world is (i.e. from the North Pole to the South Pole and around the Equator).
- (b) Using the graph paper provided [large sheet at least 1 m square] make up a scale so that the world fits on it.
- (c) Make up a grid system.
- (d) Divide up the world into pieces and assign each group a part.
- (e) Each group is to convert the shape of their part into dot locations which will be transferred to the large map and joined up.
- (f) Label all parts and the spaces inbetween.
- (g) With a pin mark on your community and two places outside our country that you would like to visit. Join the pins with thread and measure the distance in kilometres. Make a large chart for the class showing the distances from your community to the others.




10. Population

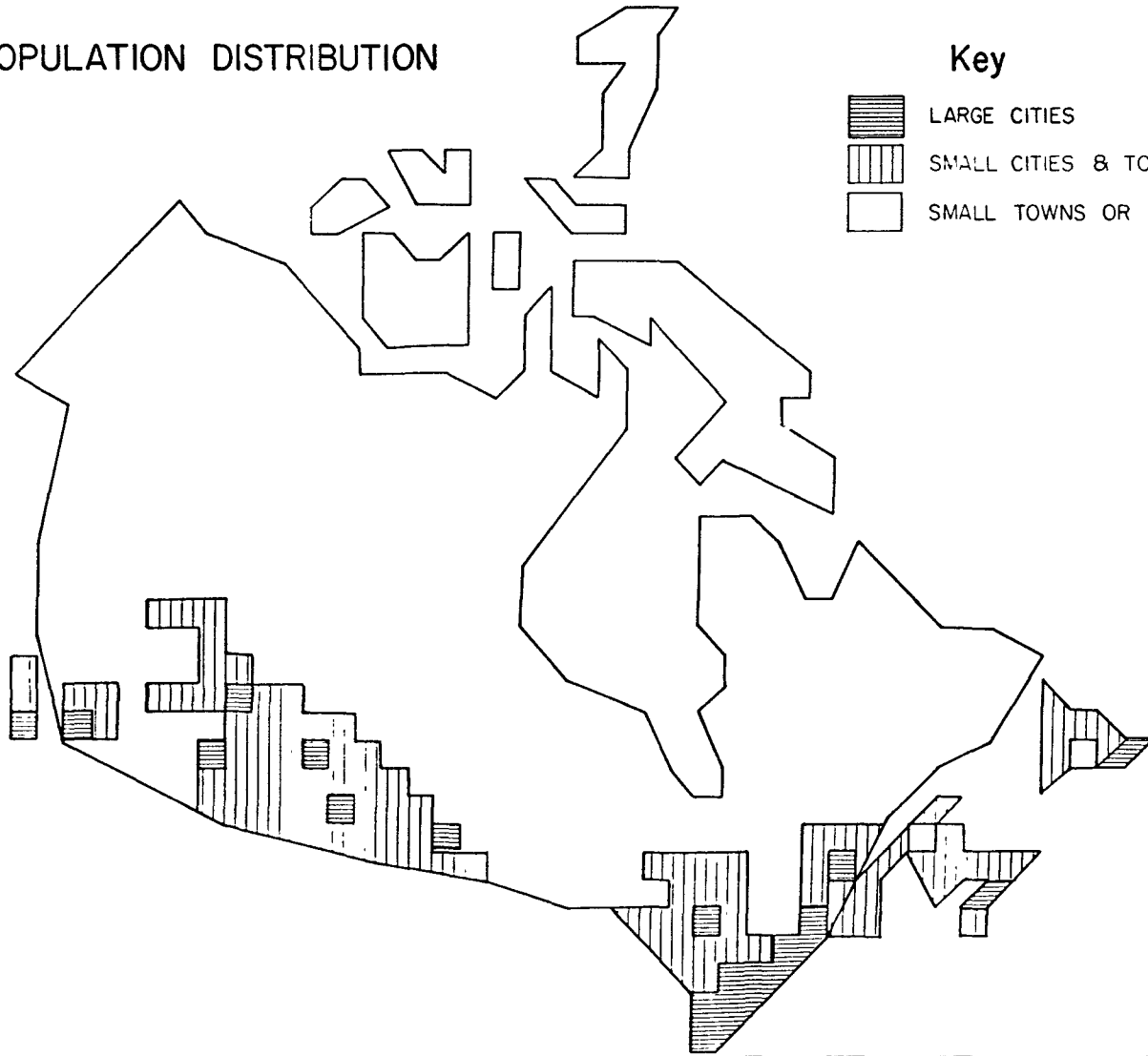
The map of "Population Distribution" shows the parts of Canada which have:

1. Large cities
2. Small cities and towns
3. Small towns and empty areas

# POPULATION DISTRIBUTION

## Key

-  LARGE CITIES
-  SMALL CITIES & TOWNS
-  SMALL TOWNS OR EMPTY



Count up the number for each and make a bar graph.

If each square represented 600,000

120,000

What is the total population of Canada?

Find out the total population for the comparison country you chose in Step 6. Using the same scale, how many squares of each type would be required? Do they fit? Why not?

## Part A

Answer the following questions in your notebook.

1. (a) Cut out each piece from sheets a, b and c and fit the map together.  
(b) What is it? \_\_\_\_\_  
(c) **On the back** of each puzzle piece lightly pencil its name.  
(d) List the pieces by name, from west to east.  
(e) List pieces that are missing to make the map complete.
2. (a) Get sheet D and cut out the pieces. Fit them into your map. Use the atlas to help you.  
(b) Label them on the back.
3. Divide the provinces and territories into these 2 categories:  
Territories or Provinces that border on salt water.  
Territories or Provinces that do not border on salt water.
4. (a) By carefully observing each province and territory, arrange them in order of size from smallest to largest.  
(b) Then starting with the largest, write the names in a list.  
(c) Using an atlas, check your answer. Write actual order beside yours and check your list.
5. (a) Trace around the edge of each province with your finger. Put them into these 3 categories:  
(i) All edges uneven.  
(ii) Most edges uneven.  
(iii) Most edges smooth.  
  
(b) Why are some edges or **boundaries** smooth lines or arcs?  
(c) Where are most of the even boundaries found?
6. (a) Paste all pieces in their correct location on newsprint.  
(b) In light, sharp pencil, draw on the outlines of the following lakes and label them.  

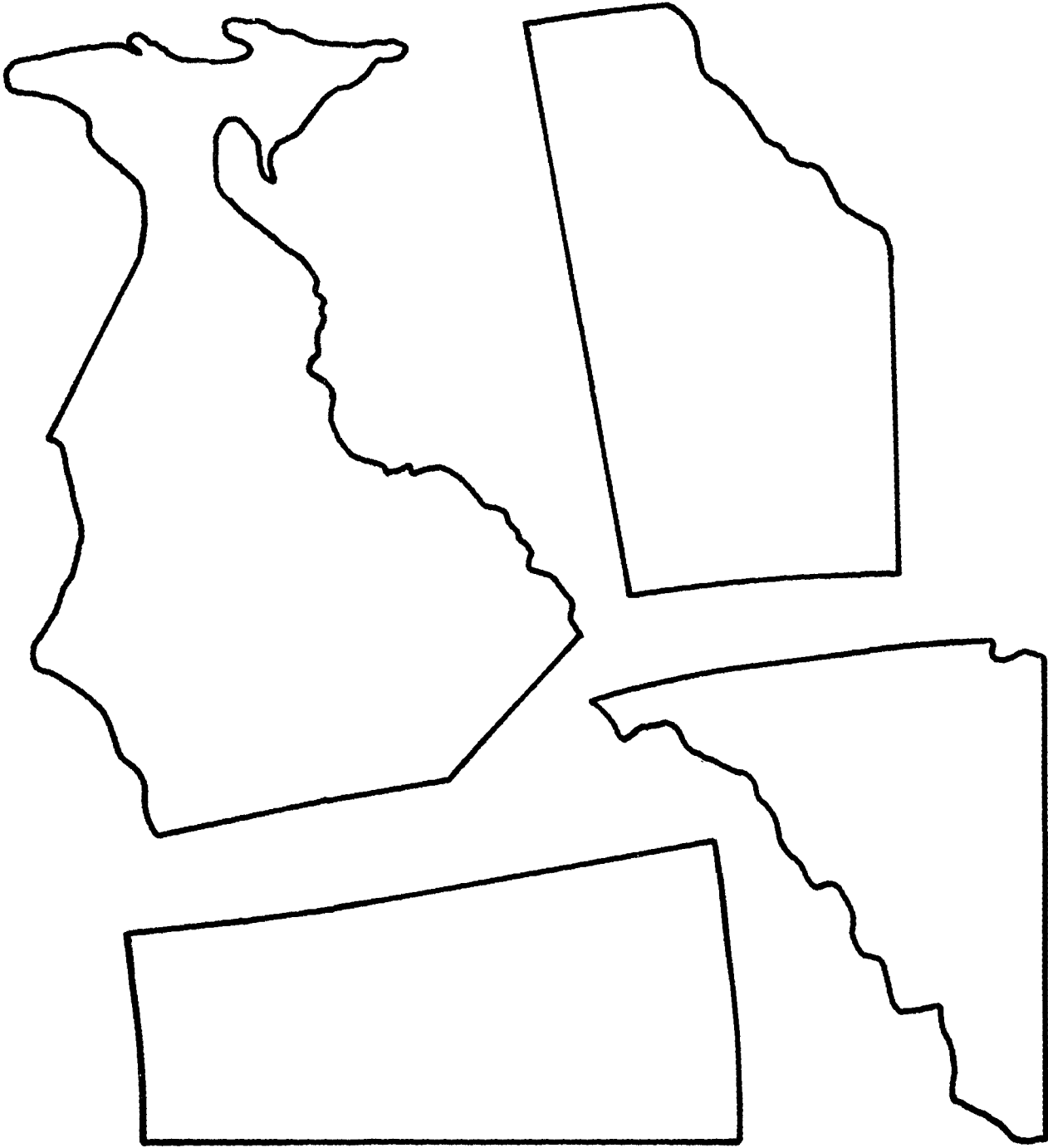
Lake Erie	Lake Superior	Great Slave Lake
Lake Ontario	Lake Manitoba	Great Bear Lake
Lake Huron	Lake Winnipeg	Lake Athabaska

  
(c) Draw a dotted line through the Great Lakes to show the boundary between Canada and the United States.
7. On each province, neatly **print** its name.
8. Using the atlas to help, neatly print the names of the major seas, oceans and bays.
9. Put a title on your map.
10. Put a compass on your map.
11. Cut out the scales and paste them on your map.

**a.**



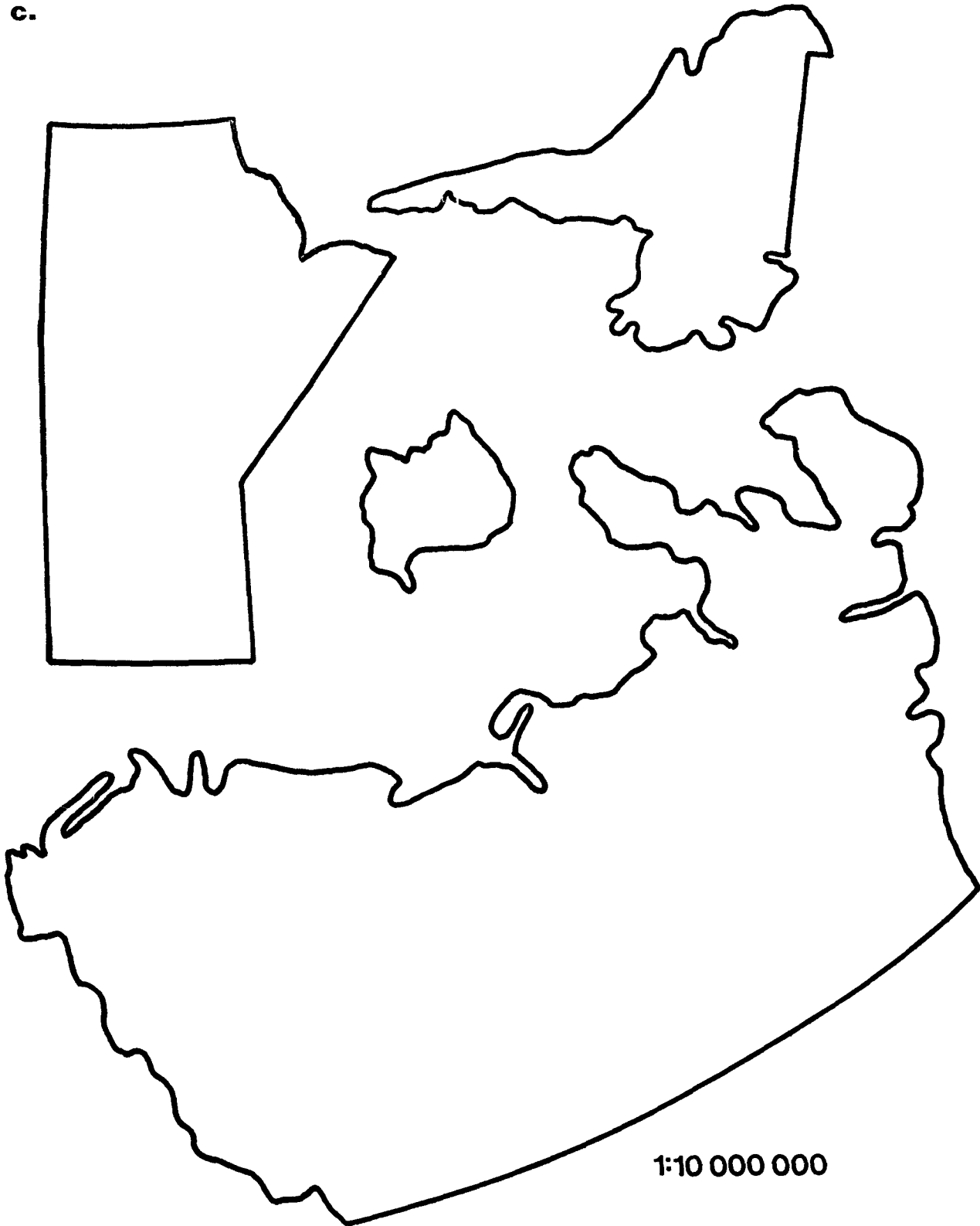
b.



1cm=100km



C.



1:10 000 000

d.



Physiographic Regions

Part A

1. Form groups of four.
2. Each person should take responsibility for one regional map of Canada from the following:

1. Climate
2. Vegetation
3. Landform
4. Soils

and trace it on the transparencies provided.

3. Superimpose all four maps and draw composite boundaries - one copy for each student (i.e. Physiographic Regions).

Part B

1. Form groups of five and enlarge this chart.

Physiographic Region	Landforms	Climate	Vegetation	Distribution Density	Economy
Cordilleran					
Prairies					
Great Lakes - St. Lawrence Lowlands					
Shield					
Appalachians					
Arctic					

2. Cut the chart in strips so that each person has one column (i.e. Landforms, Climate, etc).
3. Fill in your chart using diagrams, charts, pictures, etc. No words are allowed.

[Parts B, C, D and E will be introduced in rapid succession and work will be progressing simultaneously on all four].

Part C

1. View the 24 slides and sort them into six groups of four. The four slides will be different views of the same community which is representative of each of the "Physiographic Regions".
2. Refer to Activity 1 in the introductory unit for more information.

Part D

1. Learn how to use a stereoscope.
2. Review land-use classification as established earlier and adjust the classes to be applicable to the air photographs. Establish typical examples and their characteristics when viewed through a stereoscope.
3. Produce one set of six colour-coded land-use maps from each of the stereograms provided. Use information from the slides to assist in the classification.

Part E

1. Inspect each of the six topographic maps and match each to its appropriate "Physiographic Region" and hence to the stereogram and the slides.
2. Give the grid numbers of the area covered on the maps by each of the stereograms.
3. Identify the names of these communities.

Part F

Discuss this chart with your friends and complete it.

	ADVANTAGES	DISADVANTAGES	BEST FOR
SLIDES			
STEREOGRAMS			
TOPOGRAPHIC MAPS			

Evaluation

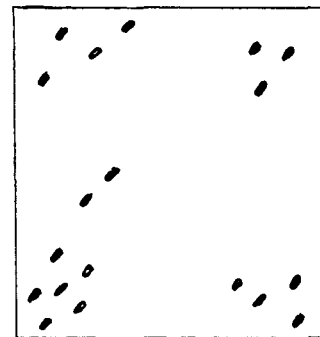
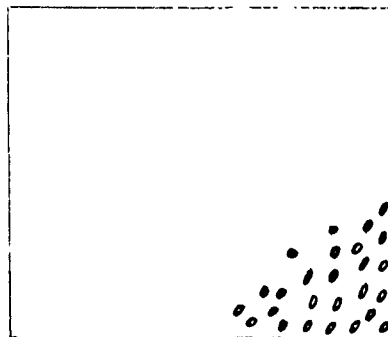
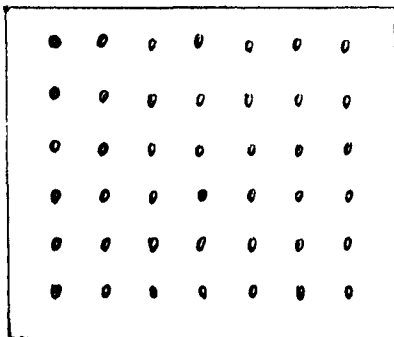
Large symbolic chart	- 20
Small chart with matching information	- 20
Land-use maps	- <u>20</u>
	<u>60</u>

## DISTRIBUTION - EXERCISE A

See accompanying map.

1. What does each dot on the map mean?
2. Circle the dots that represent Toronto, Vancouver and Montreal.
3. With an X mark the location of your community on the map.
4. Shade the parts of Canada that have a large number of people with a red pencil. What areas of Canada did you shade?
5. Some areas of Canada have few people. Colour these areas pink.
6. Geography uses terms to describe the distribution of people. Match these three terms to the diagrams below:

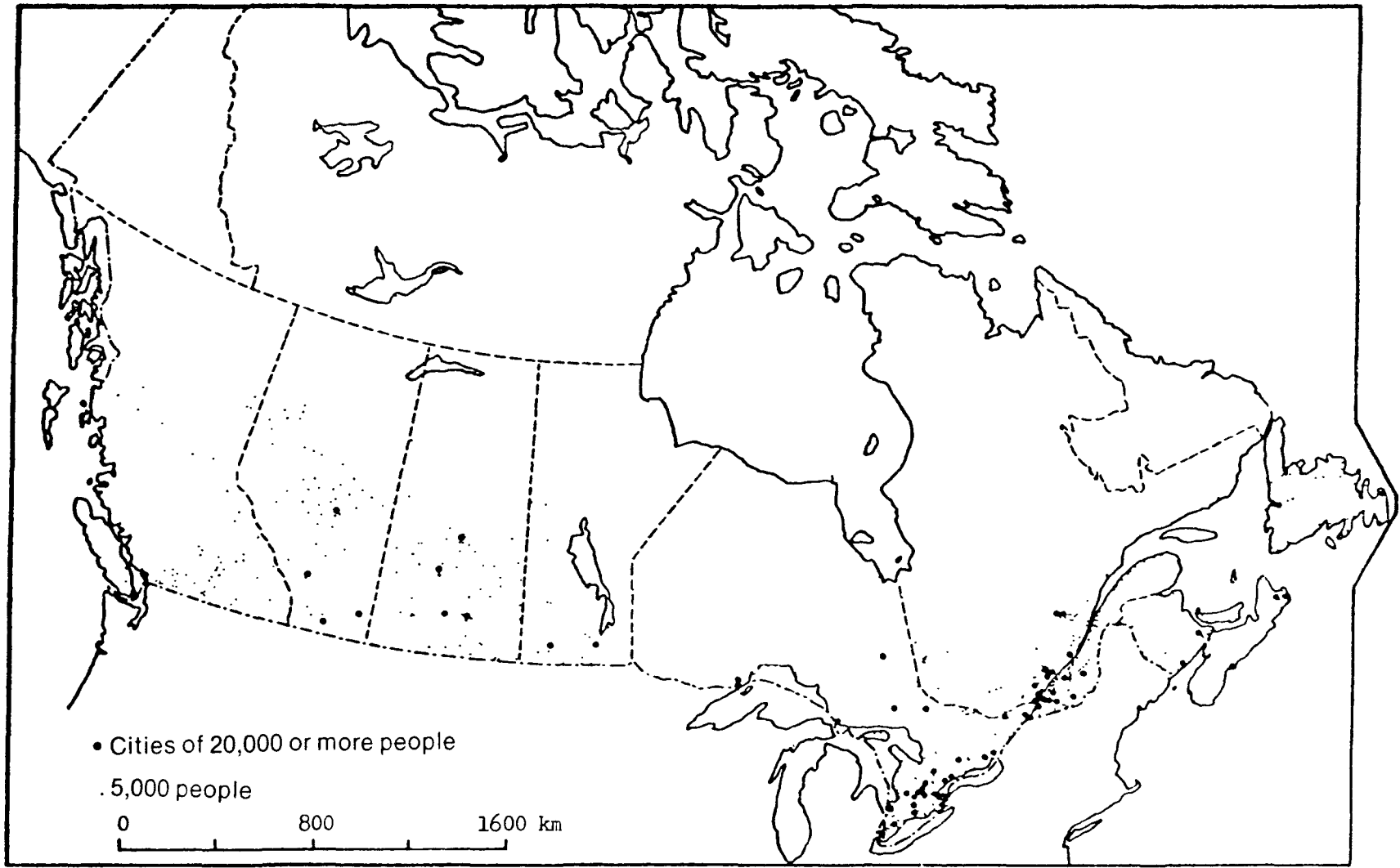
CONCENTRATED  
EVENLY SPREAD  
UNEVENLY SPREAD



7. What does **distribution** mean?

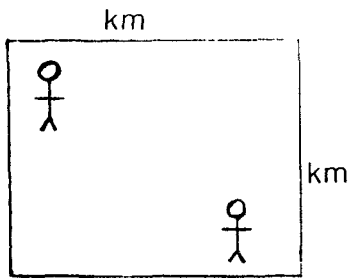
8. In one or two sentences, describe the population distribution in Canada.



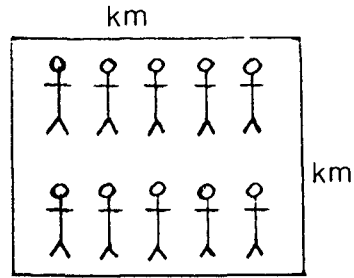


POPULATION MAP OF CANADA

## DENSITY - EXERCISE B



2 persons/sq. km



10 persons/sq. km

$$\text{Population Density} = \frac{\text{Population}}{\text{Area}}$$

PROVINCE	AREA	POPULATION	DENSITY
Newfoundland			
Nova Scotia			
New Brunswick			
Prince Edward Island			
Quebec			
Ontario			
Manitoba			
Saskatchewan			
Alberta			
British Columbia			
Yukon Territory			
Northwest Territory			
Canada			

In your own words, define **population density**.

# THE DISTRIBUTION OF CANADA'S POPULATION

Most maps show an area of the earth's surface by representing the area's physical shape. The map you are going to create will show provinces in Canada in an imaginary way, so that the size of the province represents the number of people who live there.

You will need graph paper, scissors, paste and paper.

1. Begin by filling in the chart below. The "scale" you are using is 1 square (of graph paper) represents 100,000 people. Divide each provinces' population by 100,000 and round off to the nearest quarter.

PROVINCE	POPULATION *	NO. OF SQUARES NEEDED
Newfoundland	578 789	
Prince Edward Is.	116 251	
Nova Scotia	812 127	
New Brunswick	664 525	
Quebec	6 141 491	
Ontario	8 131 618	
Manitoba	1 005 953	
Saskatchewan	907 650	
Alberta	1 799 771	
British Columbia	2 406 212	
Yukon	21 392	
Northwest Territory	42 237	

\* 1976 data

2. Using the graph paper, count out the number of squares that you need for each province and territory and cut them out.
3. Plan your map on the large piece of paper:
  - (a) Place pieces on in appropriate order from east to west, but don't glue them.
  - (b) Decide where title, legend and scale will be placed.
  - (c) Paste map down carefully.
  - (d) The proper name for this map is "Isodemographic Map of Canada". Print this neatly in the space for title.
  - (e) Lightly colour each province a different colour and label each colour in a legend.
  - (f) Go back to #1 -- find the scale and print it on the map.

# URBANIZATION IN CANADA

1. (a) Write down your definition for the term "urban" as it applies to Canada.

---

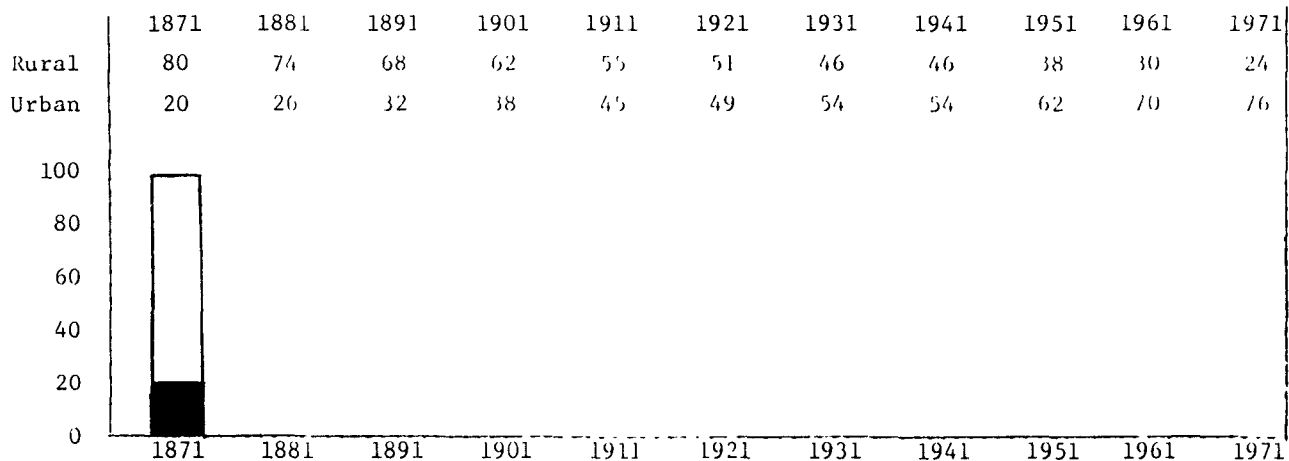
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(b) Write a dictionary definition.

---

---

2. The graph below is a "divided bar" graph showing the percentage of Canadians living in rural and urban areas in 1871. Using the other statistics, draw a divided bar graph using these percentages for each decade up to 1971.



3. (a) What percentage of Canadians lived in urban areas in 1971?

(b) What happened to the percentage of people living in urban areas from 1871 to 1971?

---

(c) The graphs illustrate the "process of urbanization". In your own words, write a definition of this term.

---

---

4. (a) During what 10-year period did a move to urban areas not take place? . . . . .

(b) Suggest reasons why this situation happened in Canada at this time.

\_\_\_\_\_

\_\_\_\_\_

5. Canadians tend to move to large cities rather than small communities. Using the most recent statistics in your atlas, list in order the 10 largest cities in Canada with their populations. Add these numbers together to get the **total** population of these 10 cities.

Year _____	Cities	Population
	1.	
	2.	
	3.	
	4.	
	5.	
	6.	
	7.	
	8.	
	9.	
	10.	_____
		TOTAL _____

6. (a) Give the total population for Canada for the same year. . . . .

(b) What percentage of Canadians lived in the 10 most populated cities? \_\_\_\_\_

$$\frac{\text{total population of 10 cities}}{\text{population of Canada}} \times 100 = \text{_____} \%$$

(c) In 1951 the percentage of Canadians living in the 10 most populated cities was 35%.

Has the percentage gone up or down? \_\_\_\_\_ By how much? \_\_\_\_\_

(d) Construct 2 pie graphs, comparing the total number of people living in the 10 largest cities, one pie graph to represent 1951, and one for 1971.

7. In 1871 over 80% of Canadians lived in rural areas (and most of these were farmers). Suggest 3 possible changes that have taken place in farming which might have caused people to move from the farms to the cities.

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

8. Between 1891 and 1971 approximately 3 million more people arrived in Canada, than left Canada. While there were numerous reasons why they chose to come to Canada, most decided to move into the cities when they arrived here. Suggest 3 reasons why immigrants would choose the cities over the rural areas.

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

9. (a) Estimate what percentage of Canada's population will be urban in the year 2000.

\_\_\_\_\_

(b) Suggest reasons why this percentage would not likely be 100%.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Planning for the Project "Choosing a Place to Live"

1. Add any items to this list of factors which could influence where you might want to live:

1. Employment
2. Climate
3. Recreation
4. Family
5. Education
6. Medical service
7. Entertainment
8. Cost of living
9. Security
10. Pollution
11. Cultural mix
12. Religion
13. Language

2. Check the ones which are important to you.
3. Write a sentence beside each one which explains why this factor is something which is important to you.
4. Put them in order of their importance to you.

Different Kinds of Jobs

Geographers find it useful to group all the jobs people do into categories. This makes it easier to talk about how people earn money and how they satisfy their needs. Let's see how we can categorize the jobs found in a modern industrial country.

1. Make a list of 30 different jobs that people do. You can begin your list by thinking about the jobs your friends or relatives have. If you need more jobs for your list, why not ask your classmates about the jobs their friends and relatives have?
2. We can now begin to think about the ways the different jobs can be grouped into categories (e.g.: those jobs that require specialized tools and those that don't). Together with one or two of your classmates, come up with at least two other ways you could put the jobs on your lists into several groups. Try to get five different methods.
3. Pick one of your methods and categorize the jobs on your list into the groups you formed.
4. Grouping jobs together is only valuable if you can use the groups to make a task easier. For each of the situations listed below, decide which of your methods would be the best or most useful. Give reasons for your answers.
  - (a) You have to figure out a way of creating more jobs in manufacturing.



- (b) You want to organize a library about the different jobs in Canada.
- (c) You want to figure out the best job for yourself when you leave school.

As you can see, there are many possible ways of grouping the jobs that people do. Geographers find it useful to group our activities into three categories we call industries. These industries provide goods (products or objects) and services (actions) that people require in order to live well.

Resource Dependent

- (Primary) industries -- 'first' step
  - obtain natural resources and change them into useful partially finished products.

Resource Related

- (Secondary) industries -- 'second' step
  - obtain partially finished products and change them into finished goods to be used by consumers.

Resource Independent

- (Tertiary) industries -- 'third' step
  - provide services in order that the consumers may better enjoy the consumer goods.

Here is an example:

The trees (natural resources) are cut down and turned into paper (semi-finished products). This paper is then used to manufacture books (finished goods) which are sold to the consumers in stores (services). It is necessary to have all three categories of industries since few natural resources can be used without changing them in some manner to finished goods.

There are some problems in using the method of classifying jobs. Sometimes it is difficult to tell if an activity is clearly primary, secondary or tertiary. Many large companies may fall into several categories. The Kodak company is a good example of this, both producing photographic film (secondary industry) and processing the film after the consumer has taken the pictures (tertiary industry). Also, the tertiary group contains a great variety of services, including those we use personally and those that serve everyone. For example, a hair stylist provides personal services to us, but the police and military provide services for all Canadians. Under this category system, these services are all grouped together. However, in spite of the problems, this method of simplifying the jobs found in Canada is still useful.

Let's see how well you have understood these ideas.

1. In your notebook, draw the following chart. For each of these semi-finished products, list the natural resources, a finished good, and a type of service connected with the finished good.

Natural Resources	Semi-finished Product	Finished Good	Type of Service
	flour lumber fox fur aluminum ingots		

2. Divide the products listed below into two lists, one titled 'Primary Industry' and the other 'Secondary Industry'.

1. Blue jeans and jackets
2. Cattle
3. Fresh fish
4. Shoes
5. Video games
6. Bread and baked products
7. Aluminum pots and pans
8. Raw sugar
9. Cement
10. Steel building beams

3. In the square below are hidden ten jobs that are considered service occupations. Find and list in your notebook these ten occupations.

Find-A-Word Exercise

C	T	M	O	F	T	F	W	M
L	S	I	N	G	E	R	T	D
E	I	L	J	N	A	E	X	R
R	T	B	U	K	C	T	L	I
K	N	K	R	R	H	S	G	V
L	E	O	R	A	E	I	Q	E
Z	D	O	T	S	R	N	V	R
M	E	C	H	A	N	I	C	I
Y	W	N	J	O	C	M	A	B
P	U	S	L	E	S	R	U	N

Mining of the Shield

(A Resource Dependent Simulation Game)

Pre-Game Activity

1. Copy the list of terms from the following page leaving three to four lines between each one.
2. Obtain a sentence, sketch picture or graph which illustrates (defines) one of the terms and reproduces it.
3. Match the definition to the appropriate term and share your information with all the other students to produce a complete set of terms and definitions for everyone.

Introduction to Mining

- |                |                      |
|----------------|----------------------|
| 1. Geography   | 17. Geology          |
| 2. Sedimentary | 18. Specific gravity |
| 3. Magma       | 19. Radio active     |
| 4. Tectonic    | 20. Stratified       |
| 5. Era         | 21. Elastic          |
| 6. Mineral     | 22. Crystal          |
| 7. Lustre      | 23. Element          |
| 8. Volcano     | 24. Rock             |
| 9. Weathering  | 25. Metamorphic      |
| 10. Core       | 26. Crust            |
| 11. Hardness   | 27. Mantle           |
| 12. Igneous    | 28. Fossils          |
| 13. Streak     | 29. Cleavage         |
| 14. Strip      | 30. Shaft            |
| 15. Outcrop    | 31. Ore              |
| 16. Royalty    | 32. Smelting         |

Mining Game

1. Form groups of three to five persons to correspond with the roles required for the game. Try to select group members who have the appropriate skills as outlined in the job description.
2. For each person in the group, decide on a primary role and a secondary role which would be assumed in the event of an absence.
3. With your company members select a colour and design a logo. Transfer them to your name tags, company files and the Master Map. This map is used to illustrate ownership with coloured flags.
4. Review all rules as outlined on the accompanying sheets.

A. Rules of the Game

1. Each team should have three to five members. Each member should perform one or more of the following functions:

- (a) Chairman: - lead discussions
  - ensure that everyone has an opportunity to express opinions
- (b) Economist: - buy and sell land
  - record land ownership on the master map
  - bid on lands that two or more teams want
  - sell railroad privileges to other teams
- (c) Secretary: - record briefly and accurately the events of each round for your team
- (d) Treasurer: - keep a balance sheet to record profits
  - calculate the profits per shipment of ore for each mine that the team owns
- (e) Geologist: - obtain maps of bedrock and depths of overburden in order to determine where to mine
- (f) Observer: - observe and report on the actions of other teams.

All decisions should be made as a team, while consulting with the "expert" in the field. Some of the roles may be combined, such as Secretary-Treasurer.

2. The object of the game is to have the greatest profit at the end of the game.
3. The game is divided into rounds. Each round represents one year's activities. A round is complete when all teams have completed their designated number of turns.
4. A turn is made up of a "Company (team) Action"; plus an evenly third round the drawing of a "Chance Card" or teams only draw one Chance Card during those rounds, regardless of the number of teams, that are in the round.

(a) Company Actions - during each turn a team may do only one of the following activities for each operating mine (an operating mine is one from which at least one shipment has been made):

- obtain and study a geologic survey of the bedrock of a 16 grid-unit square ( $4 \times 4$ ). This action costs 5 units
- buy or sell land
- produce and sell one shipment of ore (profit = total value - production costs - transport costs)
- build a railway across one grid square (the cost of building a railway is 1 unit per grid square, and 2 units if you cross a river or provincial boundary. Railways cannot cross lakes. You must have railway connections from the centre of your grid square to the market.

(b) One Chance Card is drawn each round. If the instructions



are applicable to your team then they must be carried out before entering the next round. The Chance Card is then placed back in the deck.

(c) If your team starts a round with a bank balance of 30 units or more, you are entitled to one extra activity in that round.

EXAMPLE: Your team has 2 operating mines and a balance of 33 units. Therefore, you may do  $2 + 1 = 3$  of the activities listed in 4. If you have 2 operating mines, you cannot take two shipments from one mine unless you also make one shipment from the other.

5. Each team starts with 15 units of money.
6. Each team receives an automatic income of 2 units per round from the company shareholders.
7. If a company cannot afford to continue operations in a round it may suspend operations until enough units are gained from shareholders to continue.
8. If a company has an expense which it cannot meet (from a Chance Card or taxes owed) then it is bankrupt. A bankrupt company must wait for two rounds, then it can borrow another 15 units from the government and begin again. It may also sell some of its assets to pay off debts, thus avoiding bankruptcy.
9. A company may sell information to the other companies at any time.
10. Geological surveys cost 5 units each.

11. Ore values, transport costs and production costs are given out when land is purchased.
12. The only markets are Toronto and Montreal.
13. At any time a company may agree to rent the use of a company-owned railway to another team for a share in the profits of the ore shipped by the other team.
14. Taxes are charged by the government so that it may build the railroads which are "under construction." Taxes are listed as an expense.
15. Government auditors will be periodically checking the company balance sheets. If errors are found your company is suspended from play for 1 round.

B. Government Loan Interest Rates

<u>Amount Borrowed</u>	<u>Interest Rates</u>
< \$ 50 million	20% per year
\$ 51-75 "	15% "
> \$ 75 "	10% "

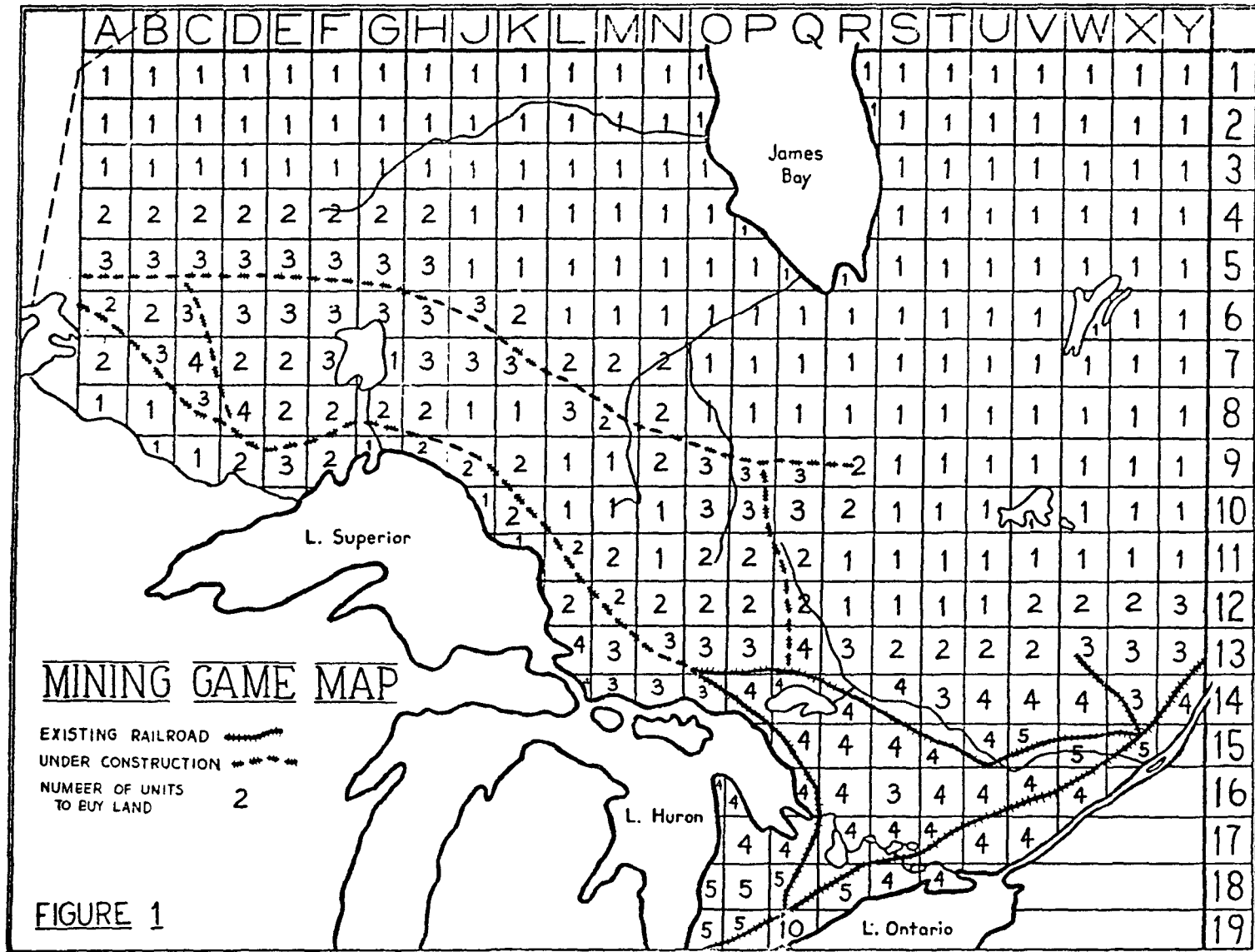
C. Tax Schedule

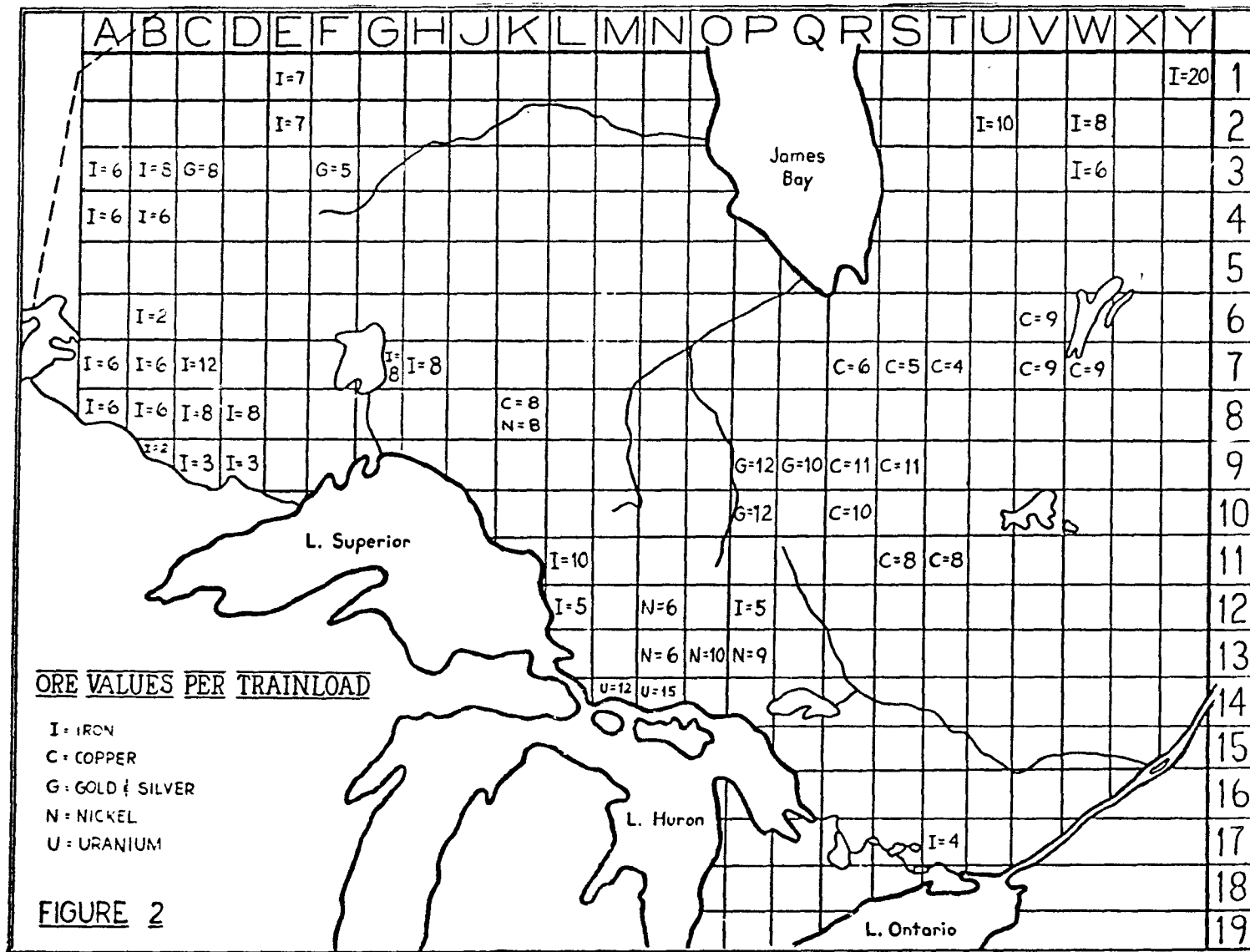
<u>Balance</u>		<u>Tax</u>
\$ 5- 10 million	-	\$ 1 million
\$ 11- 20 "	-	\$ 4 "
\$ 21- 30 "	-	\$ 10 "
\$ 31- 40 "	-	\$ 20 "
\$ 41- 50 "	-	\$ 40 "
\$ 51-100 "	-	\$ 75 "
\$101-200 "	-	\$185 "
>\$500 "	-	80%

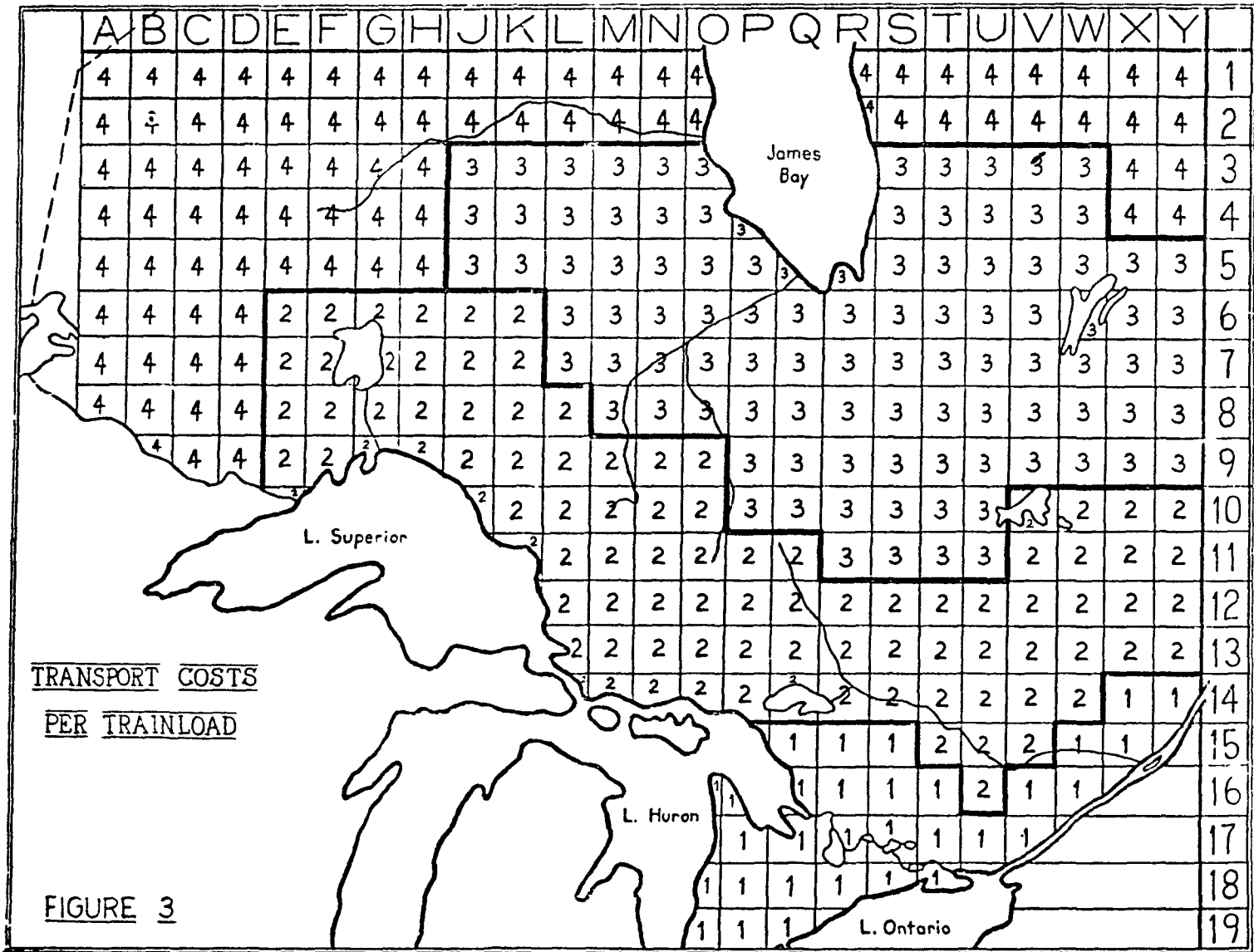
D. Chance Cards

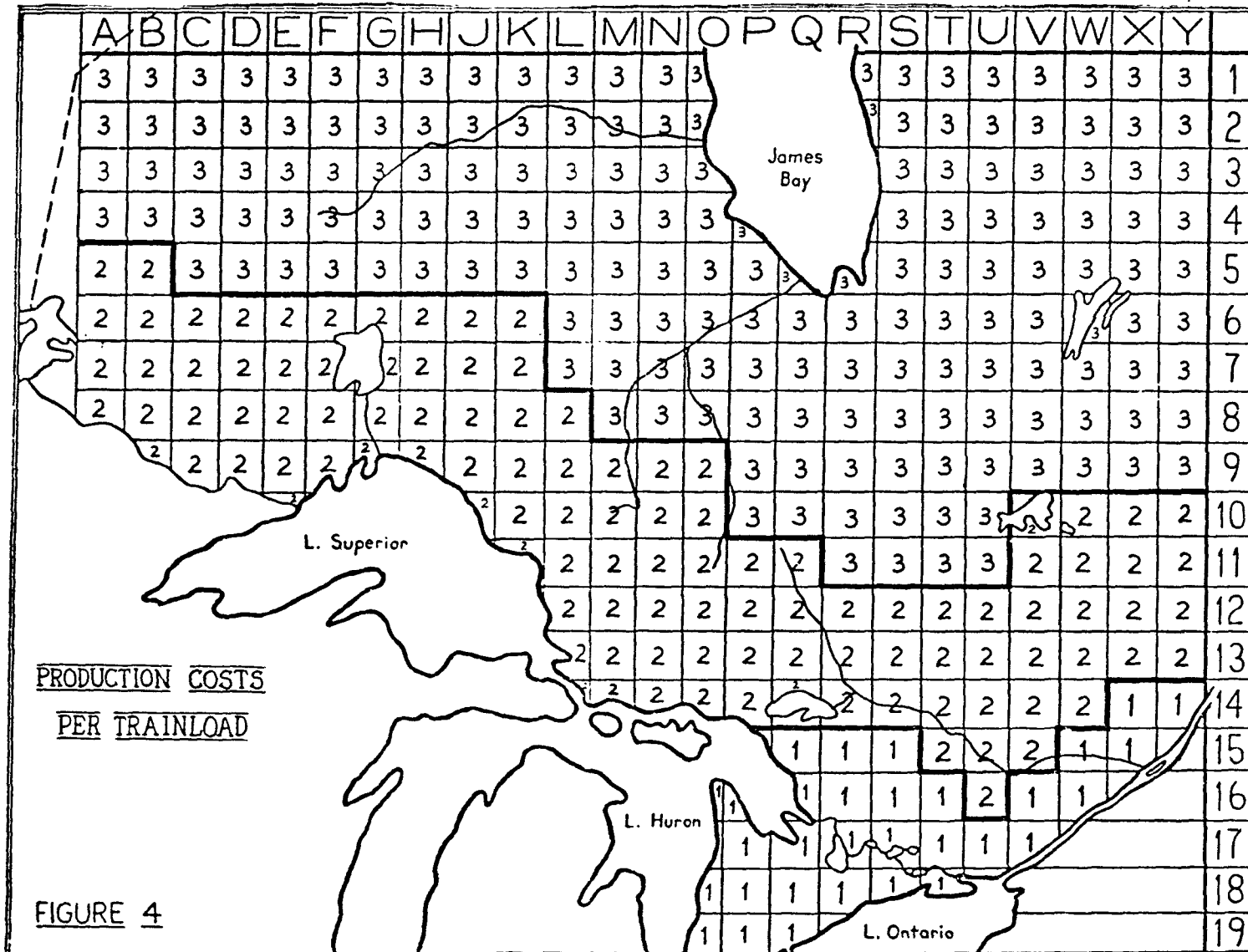
The following are examples of Chance Cards which will be drawn every 3rd round. Study each one and plan how you would deal with the results.

1. Your oldest mine runs out. Abandon mine. No further shipping from that piece of property.
2. Decrease in demand for copper. You may only make half a shipment in this round while paying full production and transportation costs.
3. Nickel production in the world exceeds demand. You can only ship half loads this round while paying full production and transportation costs.
4. Government grant supplied to all silver mining companies. Add 2 units to your balance in this round.
5. Production workers go on strike this round. No shipping from your best mine and wage and salary settlement costs you 4 units in this round only.











E. Mining Game - Evaluation

1. Complete an accurate set of company records at the end of the game (30 marks).
2. Questions to be answered after the game is finished (20 marks).
3. Bonus - for position of company at the end of the game (50 marks).

<u>5 teams</u>		<u>7 teams</u>	
<u>Posn.</u>	<u>Bonus Marks</u>	<u>Posn.</u>	<u>Bonus Marks</u>
1st	+ 10	1st	+ 10
2nd	+ 7	2nd	+ 8
3rd	+ 4	3rd	+ 5
		4th	+ 2

F. Shield Mining Game

Mining Knowledge

1. Write 10 statements about mining on the Canadian Shield.
2. Write about aspects of the industry that you learned by playing the game and which you think are important.

Playing the Game

1. What kinds of observable behaviour (things that you can see) helped your group work better?
2. What kinds of behaviour got in the way? How might you have overcome them?
3. (a) What skills or strengths did you have to offer to your group?  
(b) Were they made use of? If so, how? If not, why not?
4. What new skills did you acquire as a result of this activity?
5. Will they be useful in other situations? Explain.
6. Was your company successful? Why? Why not?
7. In what ways could you have been of greater service to your group?

Industrial Development

1. Make a list of 10 resource related industries.
2. Make a second list of the items which would be required to make these industries successful in a particular location.
3. Choose the five most important and adjust them so they can be measured and mapped. Make a grid map of Canada (about 100 squares)
4. Form a group of five and assign each person one of the factors.
5. Using the grid map "Development Potential in Canada" each person must rank each square according to the system.

0 - factor is negligible (none)

1 - factor is moderate (some)

2 - factor is abundant (lots)

6. On a blank map, collate and record the results of all five persons.
7. Develop a colour scheme to match this legend:

<u>Score</u>	<u>Development Potential</u>
0 - 3	low
4 - 7	medium
8 - 10	high

and colour your map, one for each person.

8. Compare your distribution with that shown on pages 10-11 in your atlas by enclosing and filling in this chart.

Same $h_i/h_i, l_o/l_o, med/med$	Different $hi/med, med/lo$	Opposite $hi/lo$

9. Choose one area from each of the "Different" and "Opposite" columns and explain why our system failed.
10. Predict where the next large scale development will take place. Explain your choice using sketch maps and diagrams.
11. Choose an area rated as a zero and explain what would have to be done to raise its potential to at least medium.

Resource Independent (Tertiary) Industries

1. How do you decide what kind of job would be best for you? Here are some criteria which could be important. Check the areas that are important to you and add any that are missing
  1. Working inside or outside
  2. Amount of travelling required
  3. Job requirements - education  
- experience
  4. Job benefits e.g. OHIP, Dental Plan
  5. Job availability
  6. Chance of injury
  7. Hours of work
  8. Is job unionized?
  9. Average beginning yearly salary
  10. Chances of promotion
  11. Amount of physical work
  12. Working mostly with things/people.
2. Using your own set of criteria, design and make a questionnaire that will provide you with information about jobs.
3. Have someone who has a job in the tertiary sector fill in the questionnaire.
4. Share the results of your questionnaire with your classmates and decide whether or not this is the kind of work for you.

5. On a blank map of Canada divide up the country into three regions where tertiary jobs are:

1. Common
2. Occasional
3. Rare.

# PROJECT CANADA

Travelling is fun and educational. Design a trip across Canada which includes stops at the places listed below.

## General Conditions

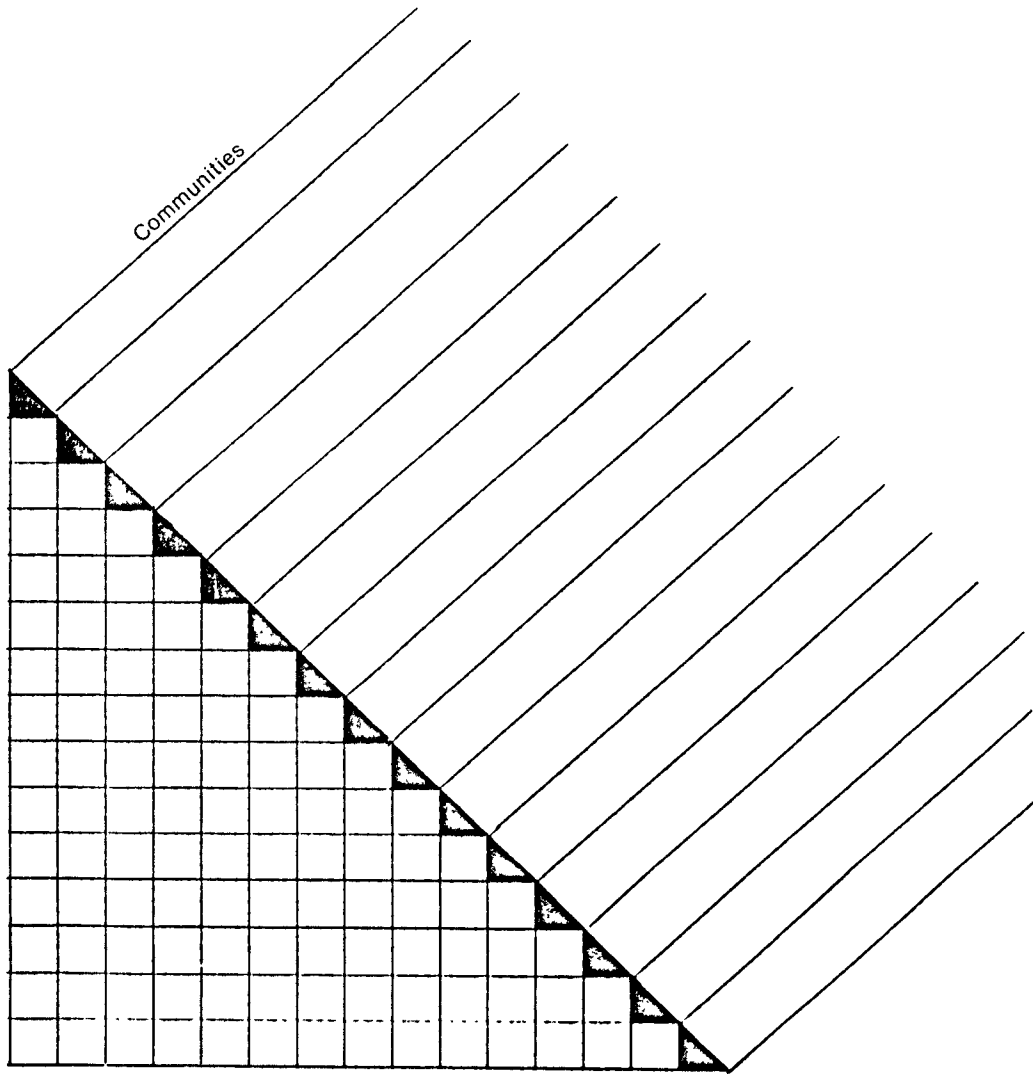
- trip to last a maximum of 3 months, scheduled for any time of the year.
- trip may start and stop anywhere.
- trip details (itinerary) will be organized in chart form as outlined below.

Day	Attractions Visited	Distance Travelled	Travel Time	Travel Mode	Additional Information
1.					
2.					
3.					
4.					
⋮					
⋮					
⋮					

4. a large map plus smaller maps (optional) must also be submitted with the chart.
5. use the work record sheet to organize time and tasks.
6. spend the first period planning your work, dividing up tasks, finding out where resources are and imagining what your finished product will look like.

1. large pulp and paper mill
2. large iron ore mine
3. all capital cities (13)
4. large hydro electric power installation
5. important fruit growing area
6. large steel factory
7. large automobile factory
8. a canal lock
9. large container port
10. tobacco growing area
11. largest city in Canada
12. large oil and gas producing region
13. large nickel mine
14. a national park
15. large uranium mine
16. site of 1976 Olympics
17. important cod fishing port
18. dairy farming area
19. place having an elevation higher than 6,000 m.
20. place having annual precipitation less than 500 mm.
21. place having annual precipitation greater than 2,000 mm.
22. large potash mine
23. large coal mine (open pit)
24. region having continuous permafrost
25. province having highest percentage urban population
26. province having highest percentage rural population
27. nuclear generating station
28. large military base
29. alpine ski resort
30. a city located in the Tar Sands

### KILOMETRIC DISTANCE TABLE





Choosing a Place to Live

1. Review your list of locational factors as to order and completeness. Make any changes necessary.
  
2. (a) Apply your list by choosing:
  - i) a physiographic region; and then
  - ii) a province; and then
  - iii) a community in which to live.  
(b) Define each level of your decision.
  
3. (a) Make a list of all the events that could happen which could cause you to change locations.  
  
(b) Choose two events which you consider most likely to happen and make a plan for yourself which would get you comfortably re-established.

## CANADA AND THE WORLD

5.1 Rationale

It is difficult today for even the most discerning adult to effectively process all of the information beamed at us. We are saturated with media coverage of even the most mundane and transitory information. International relationships are particularly liable to media excesses. Wars are usually presented in a Hollywood fashion with the theme alternating between battlefield valour and refugee camp horror. It is little wonder that fourteen year olds have difficulty realistically perceiving Canada's role on the world stage. It is the intention in this chapter to help overcome the complete ignorance or rigid single mindedness so often encountered in this group of students.

By relating global relations to their own endeavours to satisfy needs, students find a framework which organizes the vast array of confusing details into a manageable pattern. International trading relations are translated into the mutually advantageous exchange of goods and services to meet needs which are beyond the scope of resources of individual countries. Immigration comes to be understood as the inability of a particular country to satisfy the needs of some of its citizens. In other words, the mystery and fatalism often attributed to the world by people unable to make sense of it, is stripped away. This

attribute is replaced by a perspective which sees the world as a collection of rational humans trying to make the best of their particular situation.

In a similar fashion, individual prejudices and biases are exposed as irrational interpretations of perfectly normal human responses to different environments. An awareness of the extent of multiculturalism present in Canadian society is the first step in developing in these students an acceptance of this reality. Further development will hopefully result in students seeing the values of cultural diversity and an appreciation of the universal bond which encompasses us all.

The scope of this chapter is very much abbreviated in comparison to the previous ones. Only two activities are provided in the "Student Activity" pages, whereas it is predicted by the author that a successful treatment of the theme would require many more. It is left to the reader to use the preceding activities as curriculum models to develop learning experiences which could be tailored to his/her own situation.

## 5.2 Activities and Objectives

Students will:

1. Learn to recognize the necessity and value of international cooperation in a general sense by participating in the "Geometrica" activity.

2. Learn to understand the motives behind global occurrences as responses to need which they can recognize and understand.
3. Critically evaluate the political structure of North America in terms of the countries' abilities to meet the needs of their citizens.
4. Develop a heightened awareness and acceptance of multiculturalism.

### 5.3 Strategies

1. "Geometrica" and "Building a Team" are learning experiences which will introduce this section of the course. Both require extensive work to establish them within a curriculum framework which is comprehensible to the students.
2. These two activities may be used as models for the rest of the unit.
3. To be of maximum value, concepts and knowledge from previous chapters should be drawn upon as frequently as possible.
4. Either activity could be done on its own.

### 5.4 Suggestions

1. Establish with the students the ways in which Canada is connected to the rest of the world. Table 5.1 provides an example of possible topics and how the relationships may be categorized.
2. Once this material has been introduced there are at least four ways of organizing these relationships into a format which is

TABLE 5.1: Student Ideas on How Canada Interacts with the Rest of the World.

TOPIC	SUBTOPIC	IMPORTED	EXPORTED	
Travel		+ International + + Hosteling +		
Employment		Ford, Volkswagen	Bell	
Food	Ingredients	Fresh fruit	Wheat	
	Products	Wine	Cheese	
	Preparation	Pizza	Pancakes	
Sports	Amateur	+ Olympics +		
	Professional	+ NHL +		
Culture	Music	Rolling Stones	Paul Anka	
	Films	E.T.	N.F.B.	
	Clothing	Taiwon	Montreal	
	Faith	+ R. Catholicism +		
	Language	+ French +		
	Education	Text Books		Teaching
		Foreign Students		Overseas D.N.D.
Raw Materials	Mineral (metallic)		Zinc, Copper	
	Mineral (non-metallic)		Coal	
	Other		Pulp & Paper	
		Immigration	Foreign Aid	
Security		+ NATO +		
		+ UN +		
Technology		Stereo, Camera	Space	

Note: + + means a two way relationship.

consistent with the theme of this program:

- (a) A series of activities drawn from the topics focussing on a particular skill as developed from the initial seven introductory activities and evaluated in a similar fashion (Table 5.2).
- (b) Each student assumes responsibility for one topic or subtopic from Table 5.1.
- (c) Each group assumes responsibility for one set of Canadian/international relations using the topics in Table 5.1 as a guideline. This approach could develop into a multicultural day for the whole school involving other disciplines such as family studies, history and business.
- (d) A teacher-directed introduction followed by student-directed independent research.

- 3. There is a wealth of agencies eager to visit schools to present and discuss multiculturalism from a variety of perspectives.

#### 5.5 Follow-Up

It is my very firm belief that strategies which deal directly with the dilemma of social/ethnic prejudice will be the most important items in this unit.

#### 5.6 Instructions

Review the following "Student Activity" pages and prepare other suitable learning experiences to successfully complete this unit.

TABLE 5.2: Suggestions for the Arrangement of a Series of Activities to Complete the Year.

---

<u>ACTIVITY TITLE</u>	<u>SUGGESTIONS (TOPICS/TECHNIQUES)</u>
Slides	A comparison of housing types from around the world.
Sketching	Tourist highlights from other countries, agricultural techniques, clothing.
Topographic Maps	Planning trips using foreign topographic maps.
Using an Atlas	Comparing international birth and death rates, longevity, nutrition and literacy.
What's Geography	Recognizing the geographical component of current world problems e.g. arms race.
Graphing	Amount and recipients of foreign aid or international demographic flows.
Scale	A comparison of the military strength of various countries or vulnerability to attack by various weapons.
Problem Solving	Creating research questions (e.g. purpose of Canadian immigration point system). Collecting data (e.g. percentage foreign owned industry). Synthesis (e.g. employment and the environment in the mining industry).
Expression	Suitability of various forms of expression (e.g. essay, sketches, maps).

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### The World of Geometrica

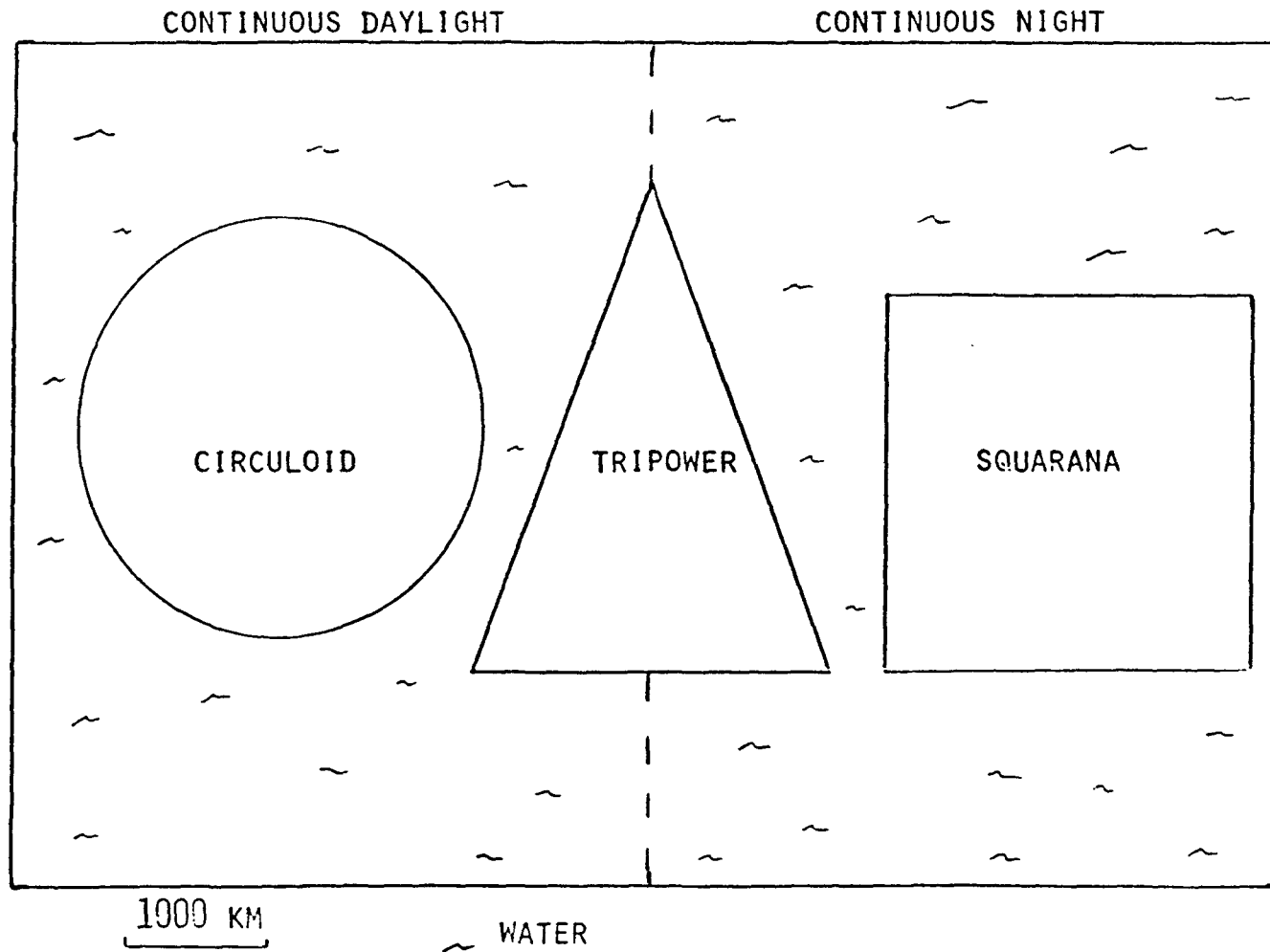
Imagine a world, Geometrica, about the same size as the earth with a sun and a moon. This planet has only three continents each of which is united into one country - Circuloid, Tripower and Squarana. One of the ways in which this planet is very different from earth is that it doesn't spin around on its axis like a top (rotate) or travel around the sun (revolve). As a result, half of Geometrica is in sunshine all the time and half is always in darkness. This difference has a very strong effect on the people who live in each of the three countries.

#### Circuloid People

These people have the advantage of sun all day, every day of the year. Vegetation is very plentiful and the people can easily grow more than they can eat. However, because of the tremendous heat many of the people and the resources of the country are directed towards building and repairing air conditioners. Many people are worried that unless new sources of energy and new ways of doing things are discovered their air conditioners will run out of power and everyone will sweat to death. Little is known about the rest of the planet and this causes great fear among the people. As a result, the Circuloids spend lots of their time and energy training and equipping soldiers to defend their country.



# GEOMETRICA



### Squarana

The people of this country live in the dark all the time. It is very cold so naturally one of the most important jobs in this country is building fire places and supplying them with coal. Coal is beginning to run short and this makes the people very nervous. Squarana has lots of other mineral resources. Many of the people of Squarana go to bed hungry because everyone is so busy trying to keep warm. Little is known of the rest of Geometrica and so the people keep a large and expensive army for defence.

### Tripower

This country is located right on the dividing line between the hot and cold parts of Geometrica. The people of this country don't enjoy really hot weather or really cold weather so they spend most of their time travelling back and forth from the cold side to the hot and vice versa. As a result they have become very clever with machines of all sorts and make excellent use of the few resources that they have. They are aware of the large resources available in the other two countries and hence keep a large number of soldiers to attack when the time is right.

### Improving Things

Your assignment is to make changes in the organization of this

planet which will improve the life of all the people in all the countries for ever. To begin with, make a chart for each country which summarizes in point form the advantages and disadvantages of living in that country. Then draw arrows matching up strength and weakness and explain in words what each of your arrows means. There are also a number of changes which could be made which would apply to all of the countries. For example, how might travel improve the quality of life on Geometrica?

### Building a Team

Whenever people get together they have a shared idea, whether it be listening to music or winning a field hockey game. They are trying to meet one or more of the 5 basic needs:

1. Shelter (protection from the weather).
2. Employment/education (getting enough education to get a job that you would like).
3. Security (belonging in a safe place).
4. Nutrition (getting enough food, clean air and water to be healthy).
5. Leisure (enjoying your spare time).

Everyone is part of a team. In fact, we're all part of several teams. For many of these teams, you didn't pick them; they picked you! You may not even see yourself as a team player yet; but as you get older you will have new ideas and the ones you have now will change.

For example, as a student you are involved with many small friendship groups that you probably didn't think of as a team. Using one of your friends as an example, enlarge and complete the following chart.

Team Name + Your Position	Reasons for Joining	What must you do to get in	What your Duties are
Mary + Janet - friend	have fun to- gether	be a nice per- son who likes the same things	listen to records, go swimming to- gether
Classroom			
Sports/Hobbies			
Job			
Family			

Different teams meet different needs. Different teams may also meet the same need but in a variety of ways. For example, the shelter provided by a friend may be the loan of an umbrella. The shelter provided by your family is quite different - a bedroom to keep you warm and comfortable. Security can be thought about in a variety of ways also. Your membership in the camera club can provide you with that happy feeling of being a part of a group; in other words - secure. The security from danger as provided by the fire department is of another kind but it still has the same name. Try to give examples of different ways of meeting the other basic needs.

As the size of the teams gets larger there are two things which are also changing:

1. Larger teams seem to have more problems than smaller ones.
2. Larger teams have more ways of solving those same problems and are able to take on bigger, more difficult jobs.

You and your friend probably find it easy to solve your problems by talking them over and giving in a little each way. With a larger team, like your classroom, think how hard it would be to have everyone as friends. The talking and arguing would go on and on. If on the other hand you wanted to raise money to support a foster child, think of how much easier it would be for the whole class.

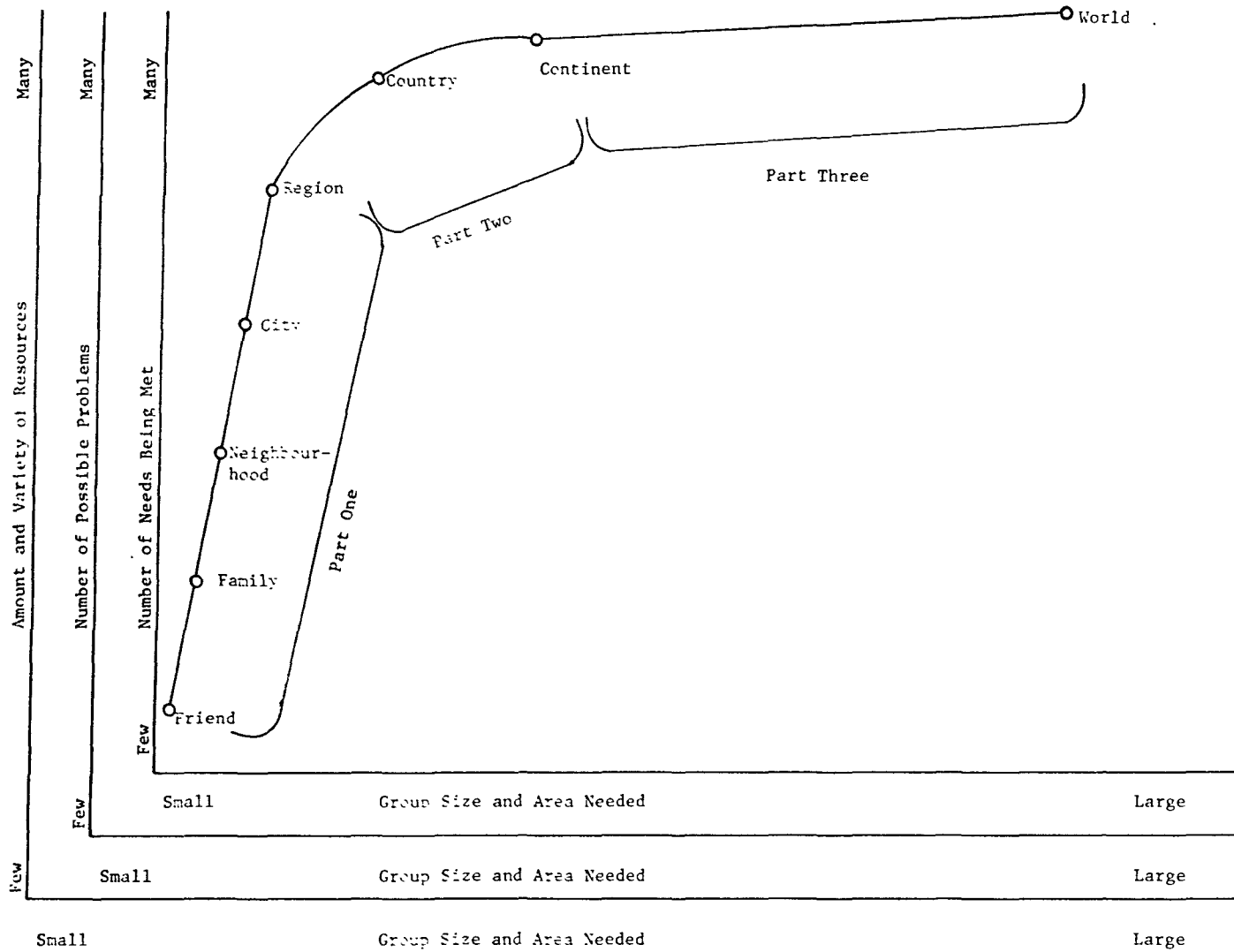
Things get even more complicated when your team is trying to meet many needs at once. Small teams that are made to achieve one or two main things (e.g. curling team) are much easier to belong to than larger teams that are trying to meet several needs at once (e.g. home-room). Trying to organize a whole school and have everyone happy is a very difficult job for everyone involved - principal, teachers and students. But think of all the wonderful projects your school could do. It isn't easy even deciding on what needs are to be met or how to work towards them. Once they have been decided on and are supported by the whole team what can be done is many times what is possible for a smaller group.

As you get older you will join other, larger groups. With the help of an older member of your household enlarge and complete this chart

Team Name	Your Position	Reason for Joining	Three Important Rules	What your Duties are
	Employee			
	Family Members			
	Citizen of Community			
	Citizen of Prov./Terr.			
	Citizen of Canada			

All of these thoughts can be shown by a graph, "Small Teams and Large Teams". Notice that the x and y axes are labelled with the same ideas that we have been thinking about. The line on the graph shows how the ideas join together - in other words, the relationship between them. This graph is a little different from most in that it is really showing three relationships at once:

1. Between size (x axis) and number of possible problems (y axis).
2. Between size (x axis) and amount or variety of resources (y axis).



Small Teams and Large Teams



3. Between size (x axis) and number of needs being met (y axis).

That is why there are three different y axes. Write a sentence that describes what happens to all three measurements as marked on the y axis as the size increases (x axis).

To get a better understanding of the relationship the graph has been divided into three parts. Read the sentences which follow and match these interpretations to the chart by putting a check in the correct location. Notice that the kind of relationship in Part Two is given as an example.

1. Part One: The number of problems you and your friend are likely to have is a lot less than your family even though the family group may only be a little bigger.

2. Part Two: As the size of a region increases, its ability to meet the needs of the people living there usually increases too.

3. Part Three: Even though the world is much larger than any single continent, the variety of resources available on any one continent is not much less.

Changing Relationships on the Graph

---

y increases faster than x	y increases about the same as x	y increases slower than x
------------------------------	------------------------------------	------------------------------

---

Part One

Part Two



Part Three

---

As a result of these relationships we can say that even though large teams can do a lot more than smaller ones they have many more problems - especially in keeping the team together. As a result, special groups have been created to keep up the teams' spirit. Your school probably has pep rallies and school dances to help the students to feel that they belong. Name five ways in which our country has tried to do the same thing and rate them as excellent, average or poor. What would you suggest?

From what we now know about the size of teams and the difficulty they have in meeting many needs at the same time, it may be surprising that some countries seem to be doing a good job. How can you tell when a country is being successful? Make a list of five characteristics of a country which is doing a good job for the people. Give three examples of successful countries and three examples of countries which are not.

Sometimes it helps to understand what is wrong with a team if we think about what an ideal or perfect one might be like. When countries

are established, the people who are responsible have to make the best use of the information that they have. No person, group of people or machine knows everything that might be of help.

From the list that follows choose the eight kinds of information that you and your group think would give the best chance of meeting the needs of the people who would live within the borders of an imaginary country by matching them to the five basic needs. (Note: some kinds of information may allow you to plan to meet more than one need at one time).

1. Landforms
2. Combat aircraft
3. National parks
4. Vegetation
5. Climate
6. Territories claimed in 1700
7. Agriculture
8. Human racial groups
9. Industry
10. Language families
11. Energy
12. Religion
13. Population

Choose the eight maps that match your list and share them among the group members. Study the maps by dividing the land into three general parts:

1. Areas that have lots "of the material which would be helpful in meeting the needs of people living in a country".
2. Areas that have some "of the material which would be helpful in meeting the needs of people living in a country".
3. Areas that have some, little or none "of the material which would be helpful in meeting the needs of people living in a country".

Each person should then divide up the land into countries, all of which you think would be successful. While doing this, think of the following:

1. Should countries try to meet all of their needs by themselves or is it better if they have to trade with others?
2. Should countries be planned to be successful for a long time or a short time?
3. Should the countries be about the same in strength or is it better to have one or two powerful ones and several weaker ones?

As a group bring all your ideas together and divide up the area into successful countries. Draw sketch maps of each country and put labels on them which show their strong points.

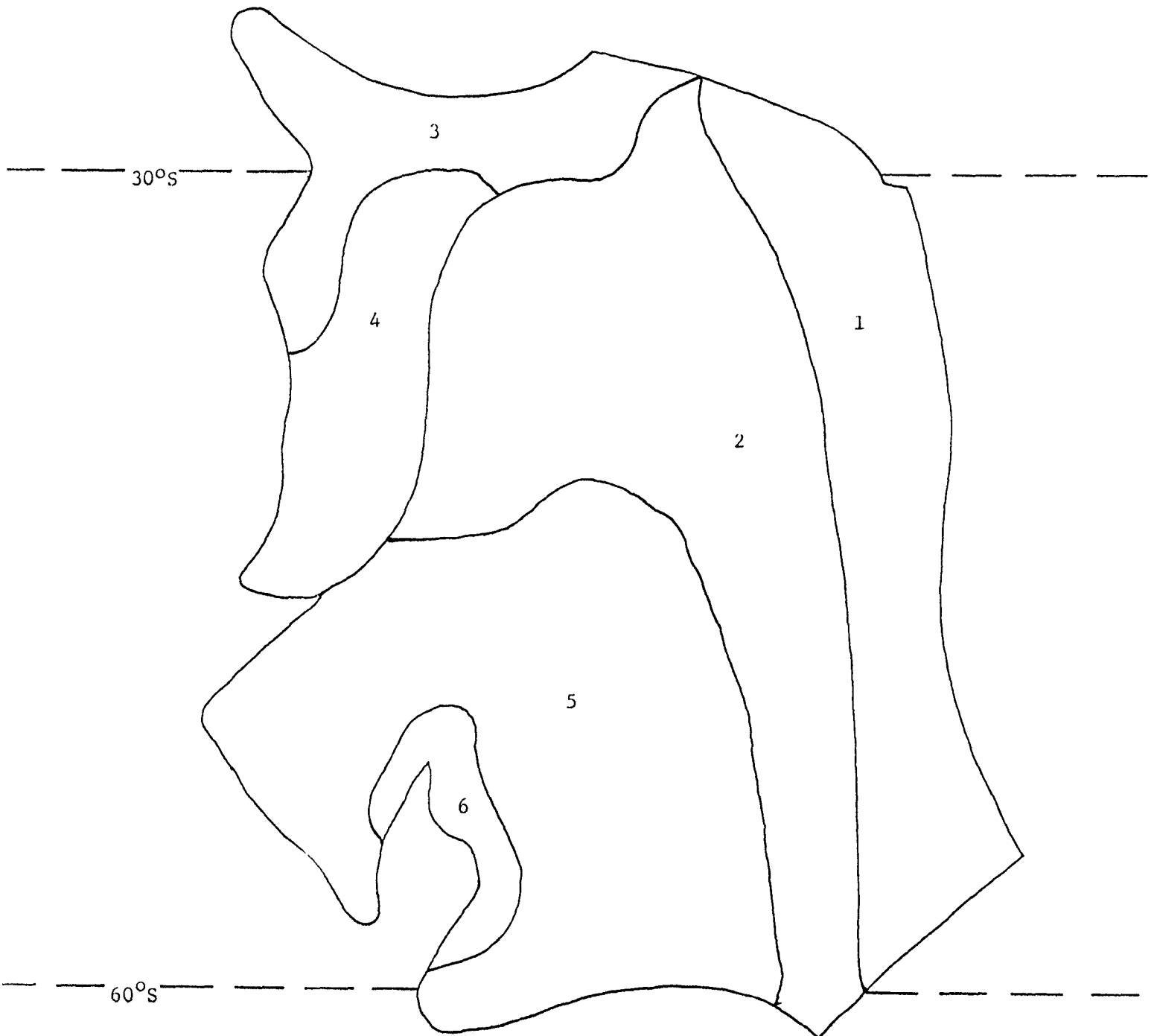
Turn one of the maps upside down and label it as North America. Change the latitude lines so that they are correct. Mark on the national boundaries as they exist today. Compare your group division with the countries of North America by enlarging and completing the following chart.

	Successful Countries (meet all 5)	Less Successful (meet 3 or 4)	Unsuccessful (meet only 1 or 2)
<u>Your Division</u>			
<u>North America</u>			

In your opinion, which countries (teams) will change their position on the chart in the next few years? Choose one and explain the causes for the change.

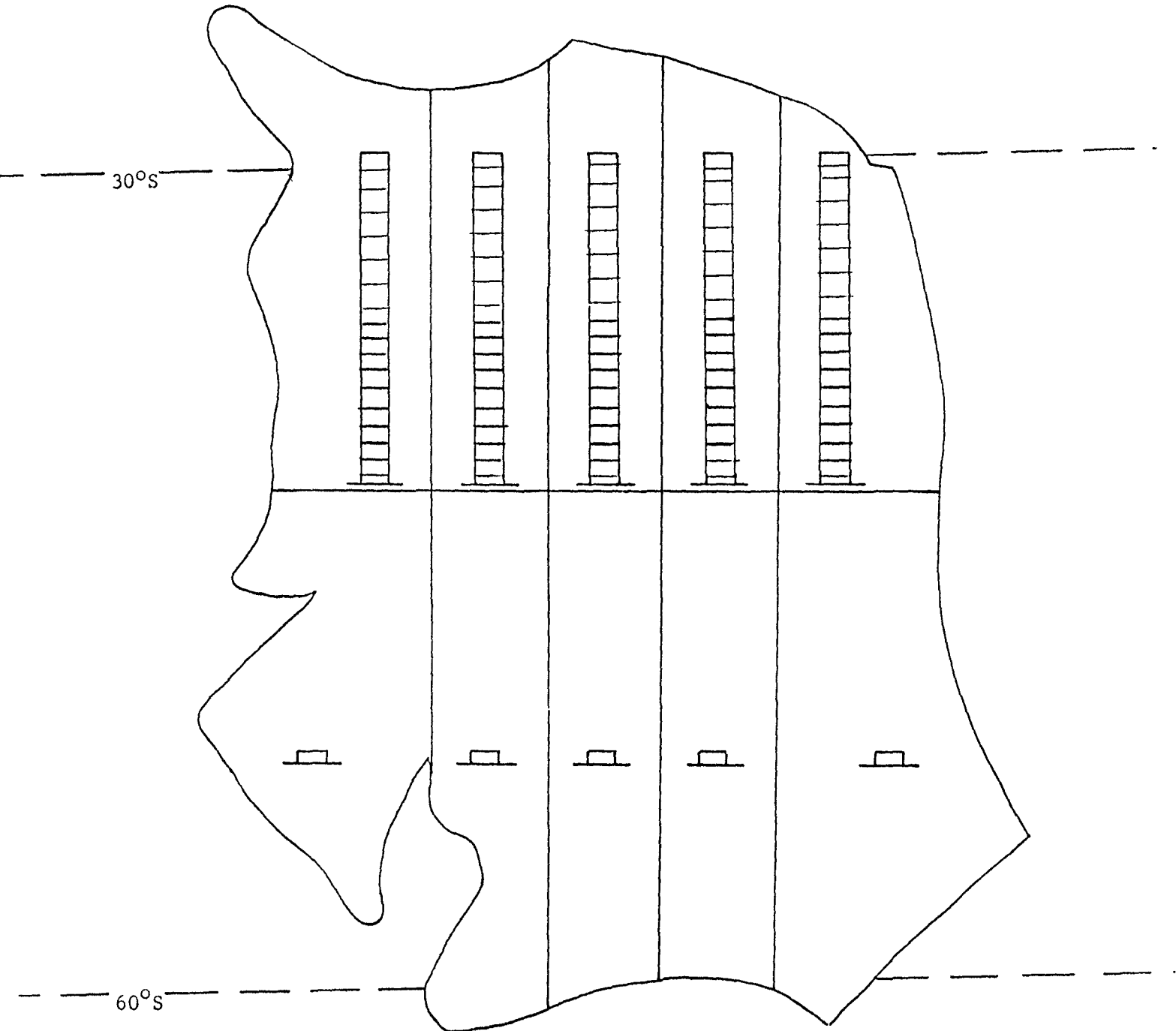
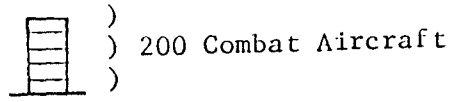
Landforms

- |                           |                             |
|---------------------------|-----------------------------|
| 1. Jagged high mountains  | 4. medium rounded mountains |
| 2. flat plains (interior) | 5. low rounded mountains    |
| 3. flat coastal plain     | 6. flat lowland             |



1000 km

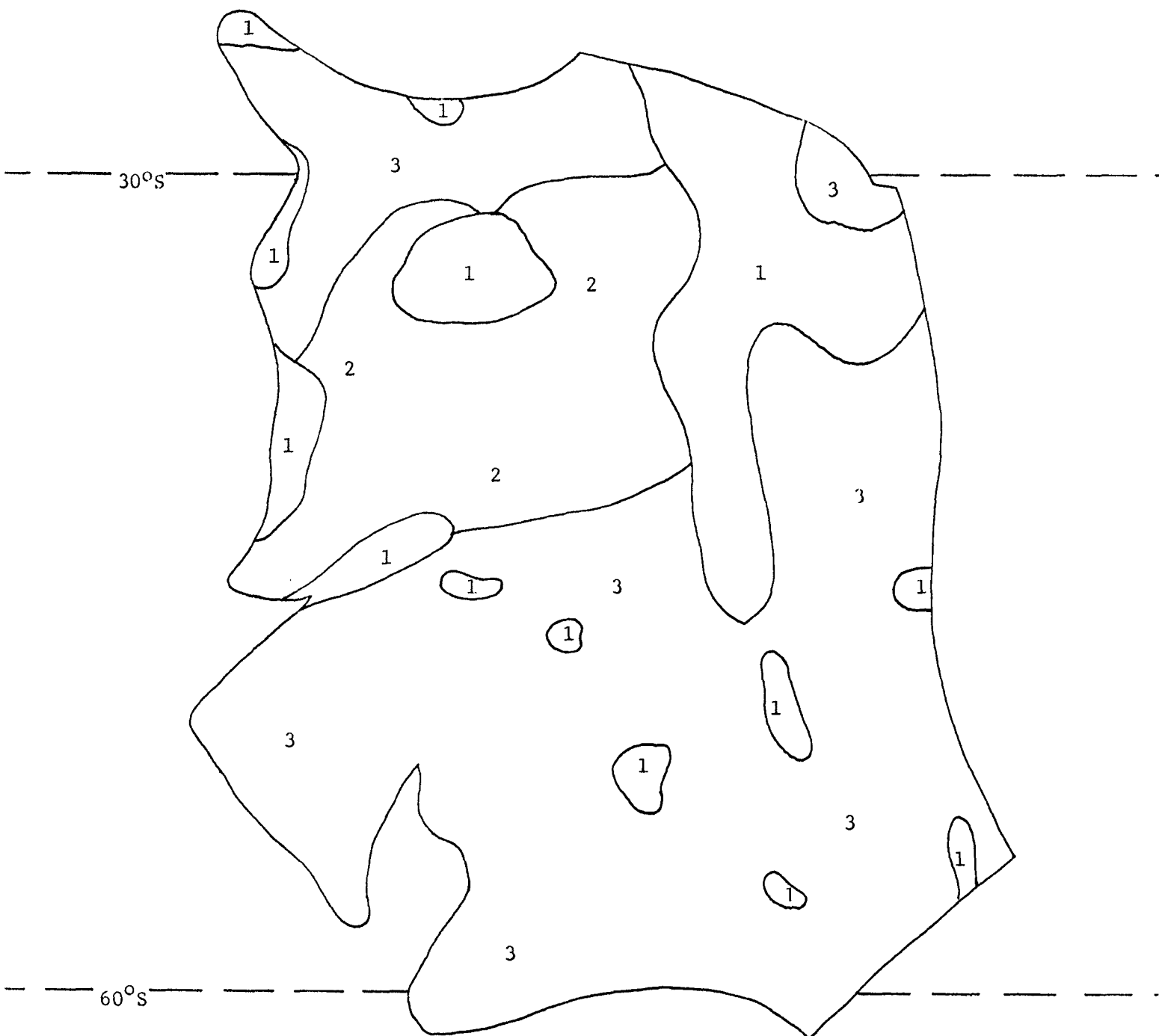
Combat Aircraft



1000 km

National Parks

1. Well Serviced - lots of parks and/or large ones
2. Average Service - some parks - farther apart and smaller
3. Poorly Serviced - few parks or none at all

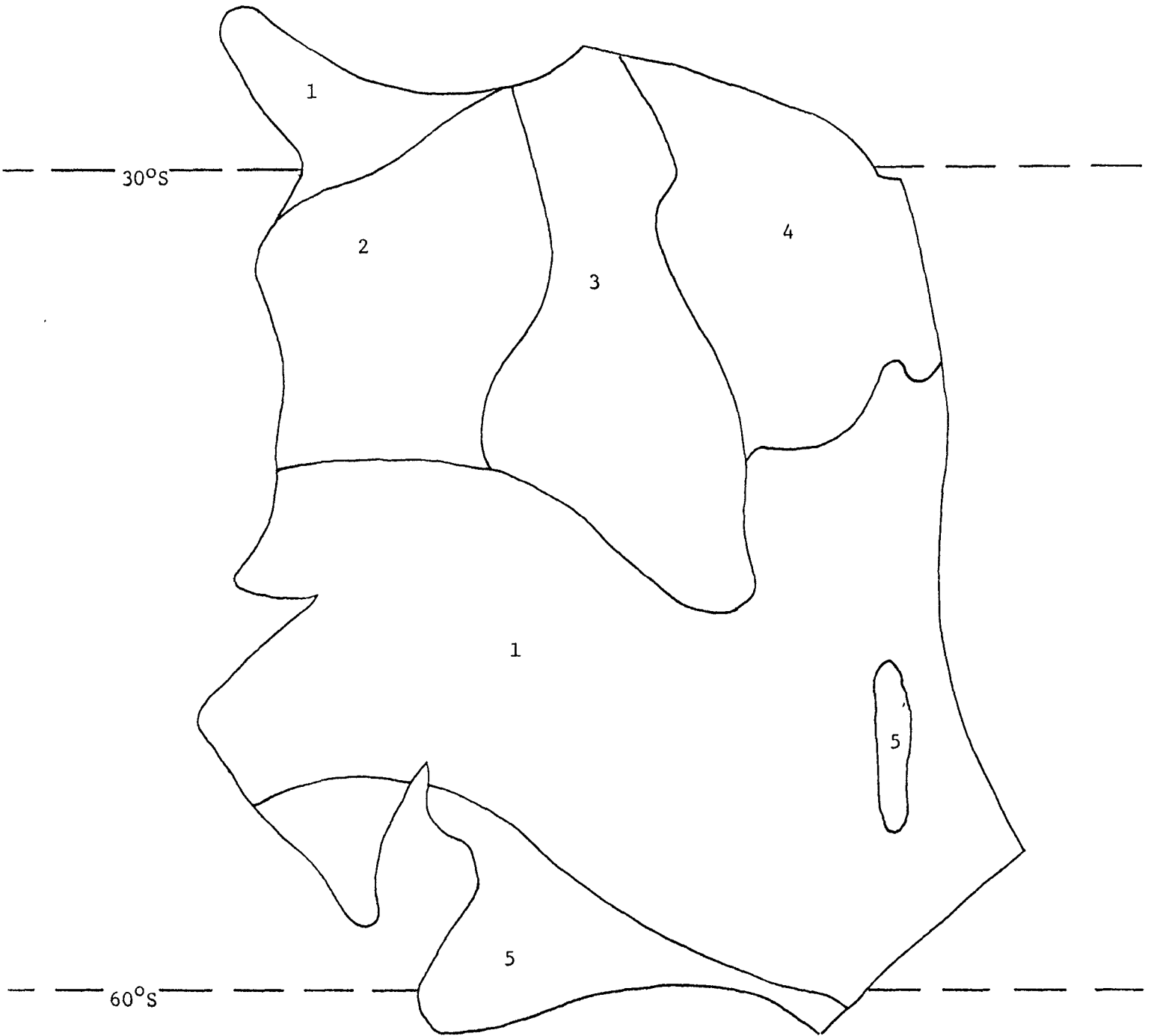


1000 km



Vegetation

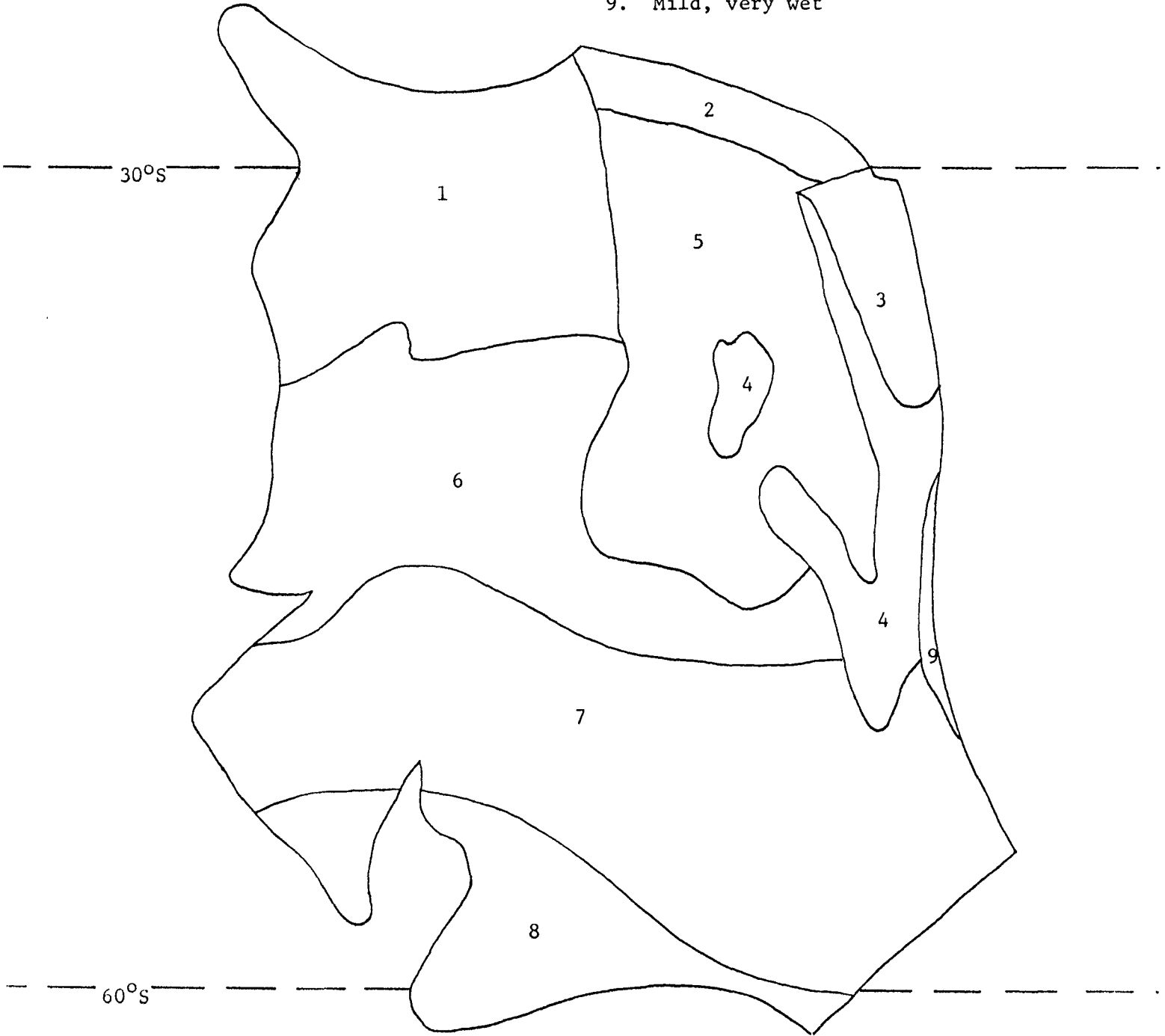
- |   |                                  |
|---|----------------------------------|
| 1. Coniferous forest                                  | 4. Desert shrub and desert waste |
| 2. Broadleaf and mixed<br>broadleaf coniferous forest | 5. Tundra                        |
| 3. Prairie and steppe                                 |                                  |



1000 km

Climate

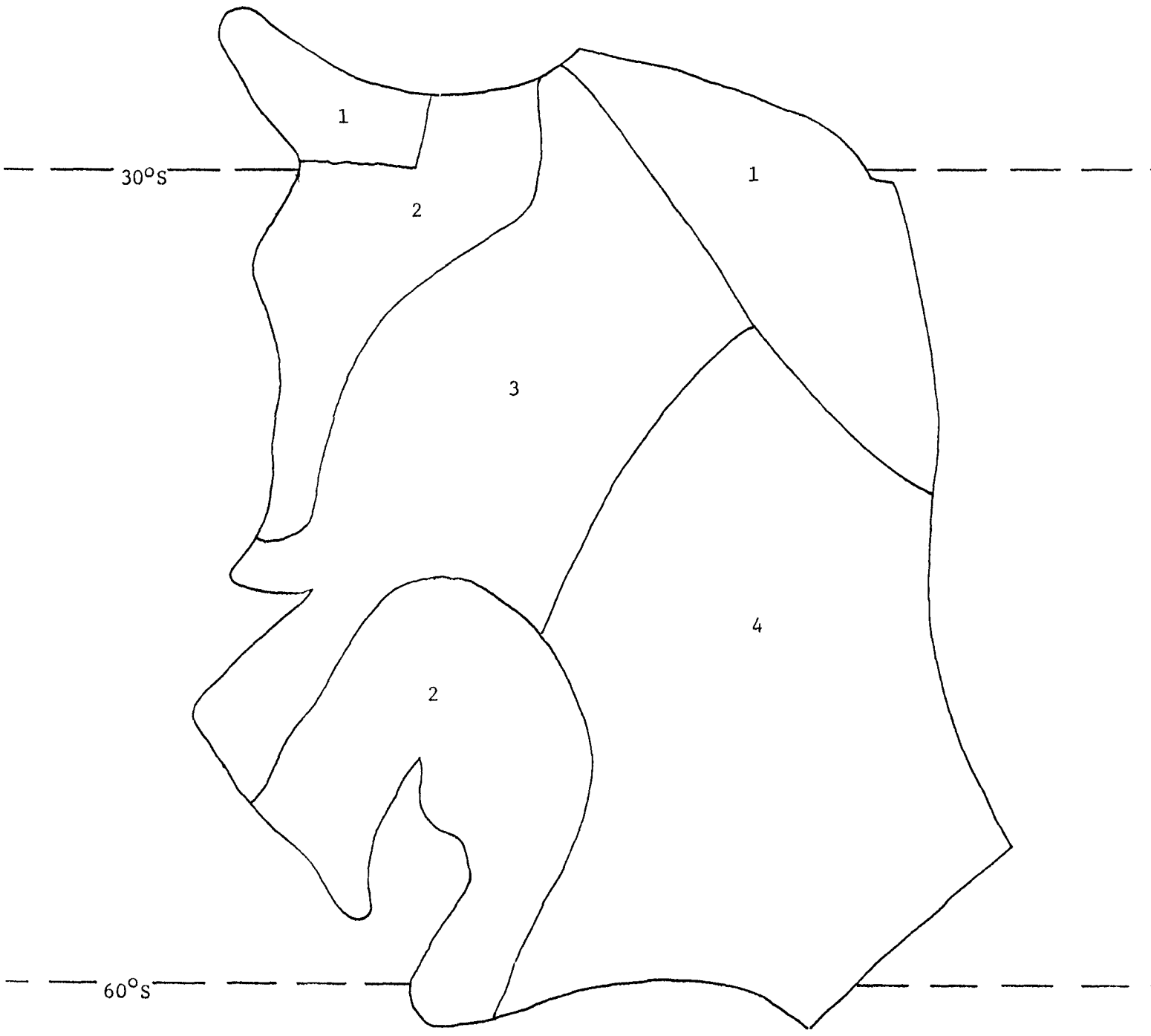
- |                        |                      |
|------------------------|----------------------|
| 1. Wet, hot all year   | 5. Hot, cold, dry    |
| 2. Desert              | 6. Moist, cold, warm |
| 3. Hot, dry, sunny     | 7. Dry, cool, cold   |
| 4. Mountain - variable | 8. Tundra            |
|                        | 9. Mild, very wet    |



1000 km

Territories claimed in 1700

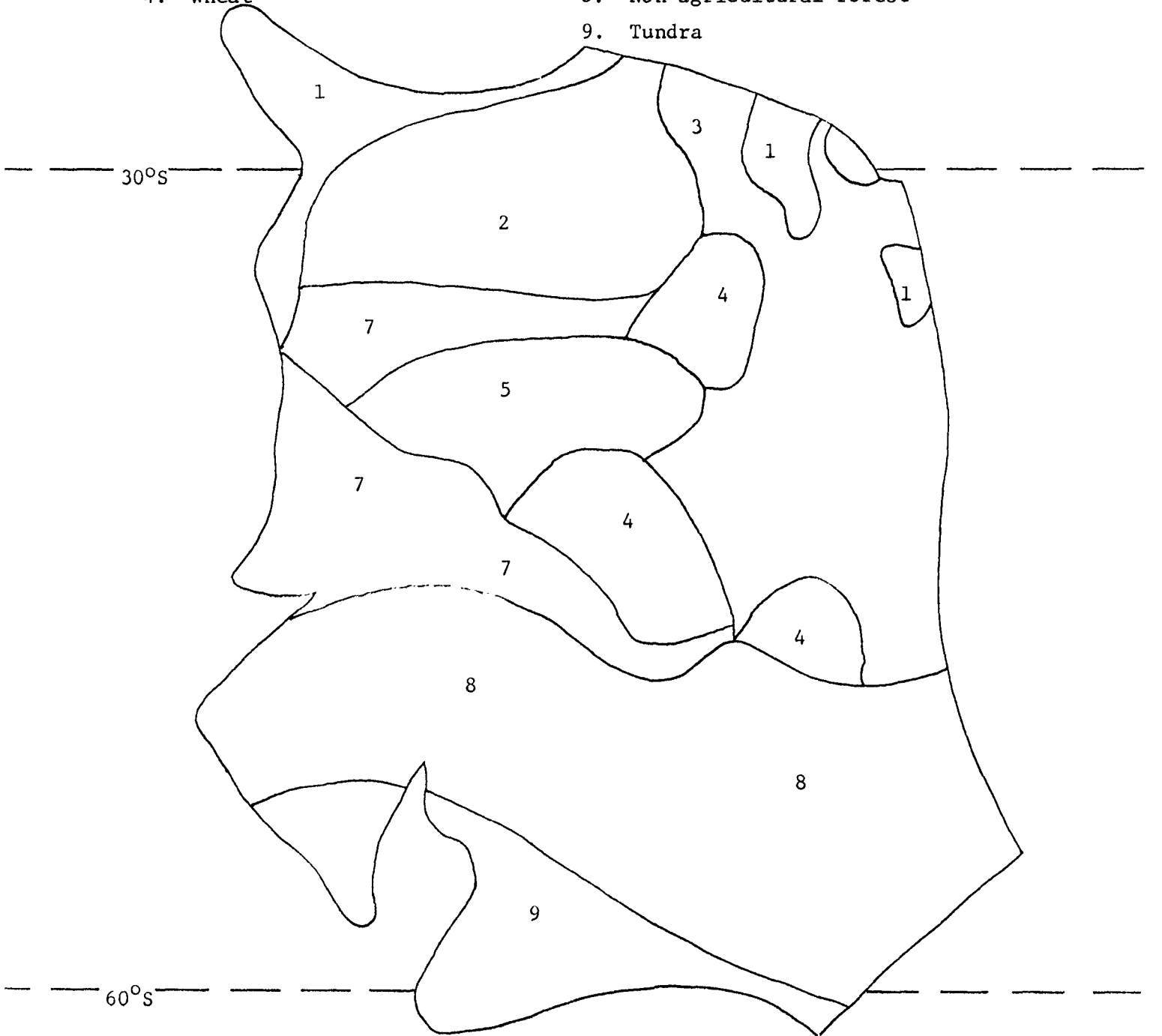
- |            |              |
|------------|--------------|
| 1. Spain   | 3. France    |
| 2. England | 4. unclaimed |



1000 km

Agriculture

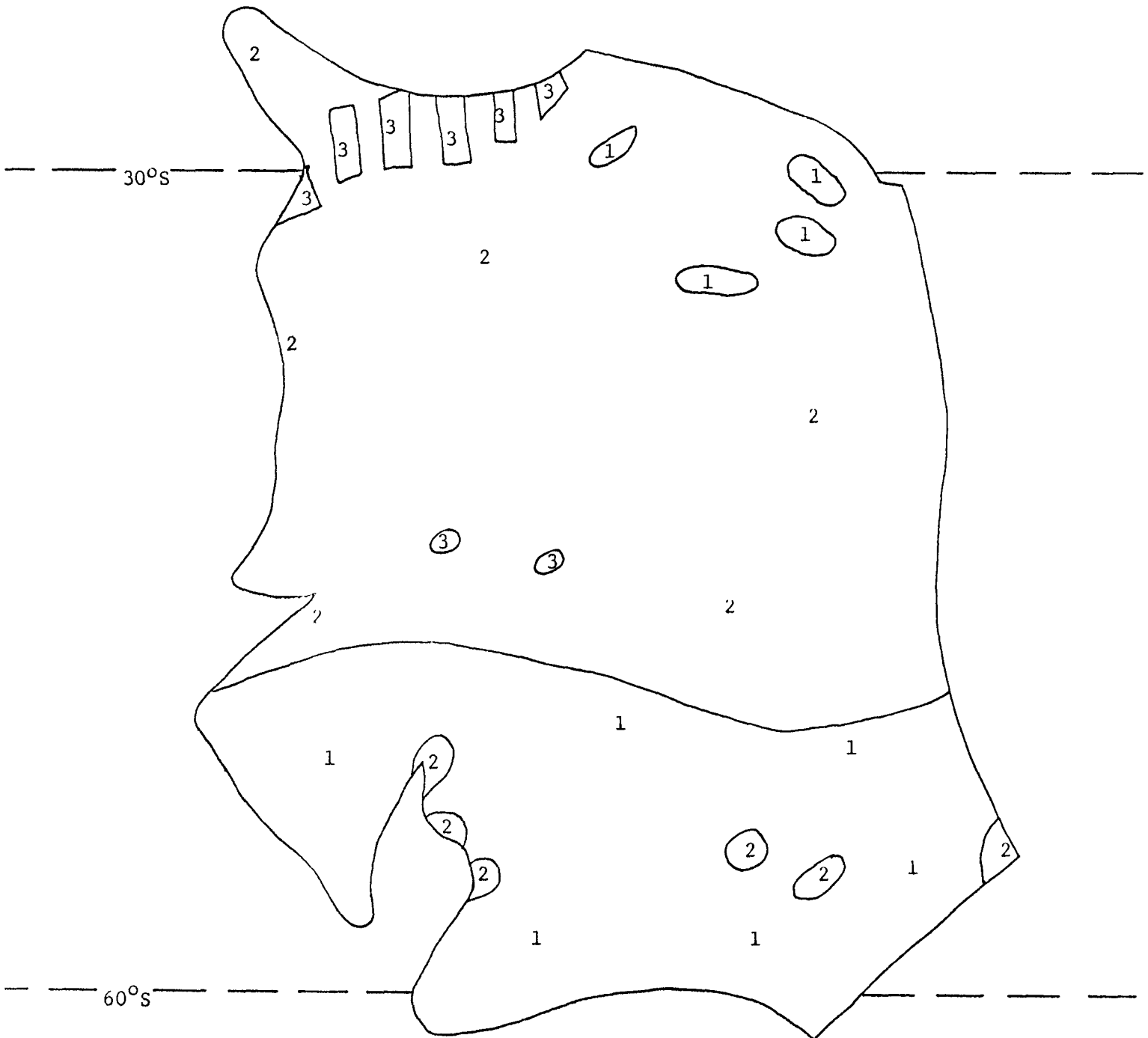
- |                              |                            |
|------------------------------|----------------------------|
| 1. Sub-tropical (eg. citrus) | 5. Corn                    |
| 2. Cotton                    | 6. Grazing and irrigation  |
| 3. Desert                    | 7. General Farming         |
| 4. Wheat                     | 8. Non-agricultural forest |
|                              | 9. Tundra                  |



1000 km

Human Racial Groups

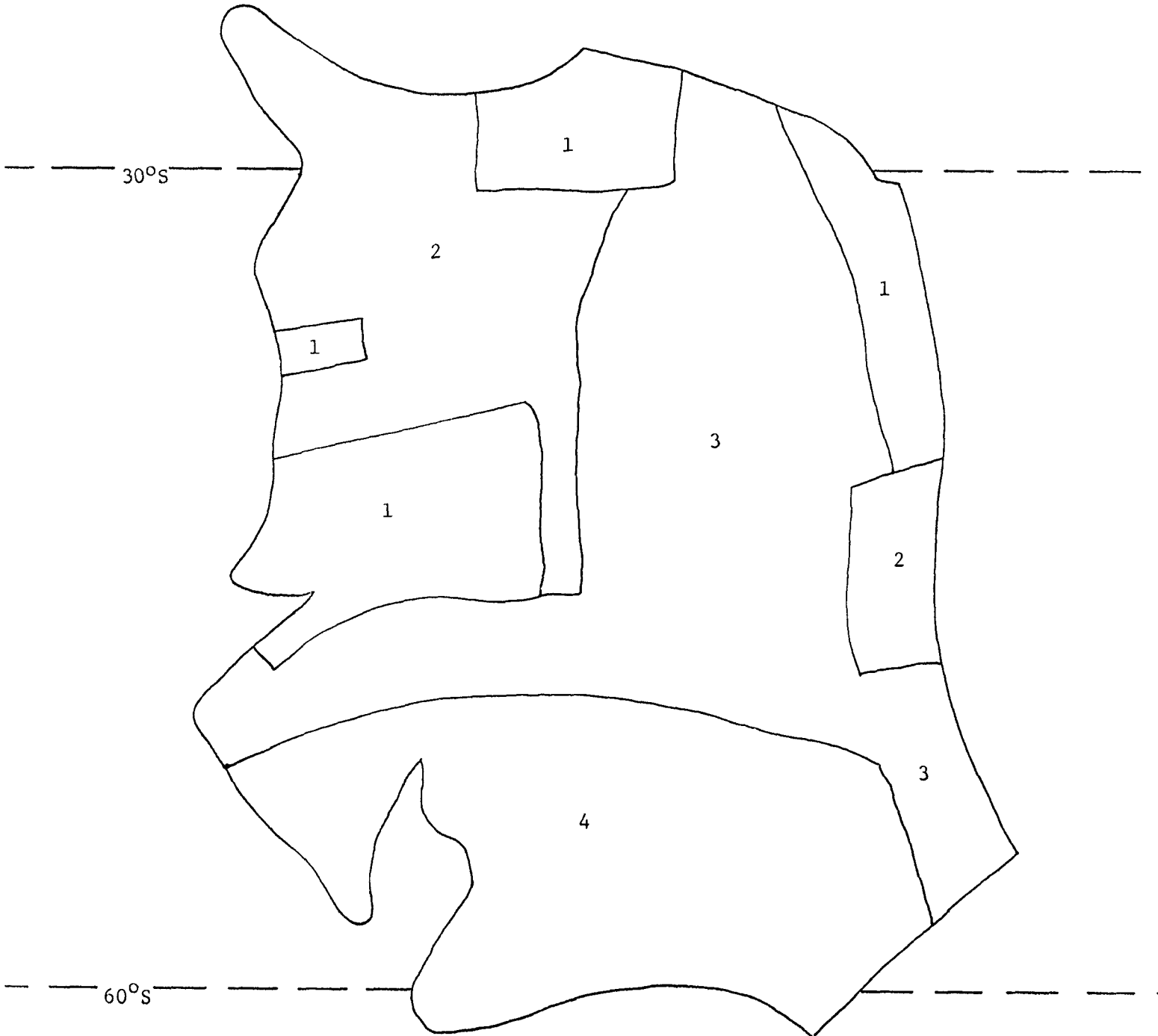
- 1. Indigenous American - Indian, Eskimo
- 2. European
- 3. African



1000 km

Industry

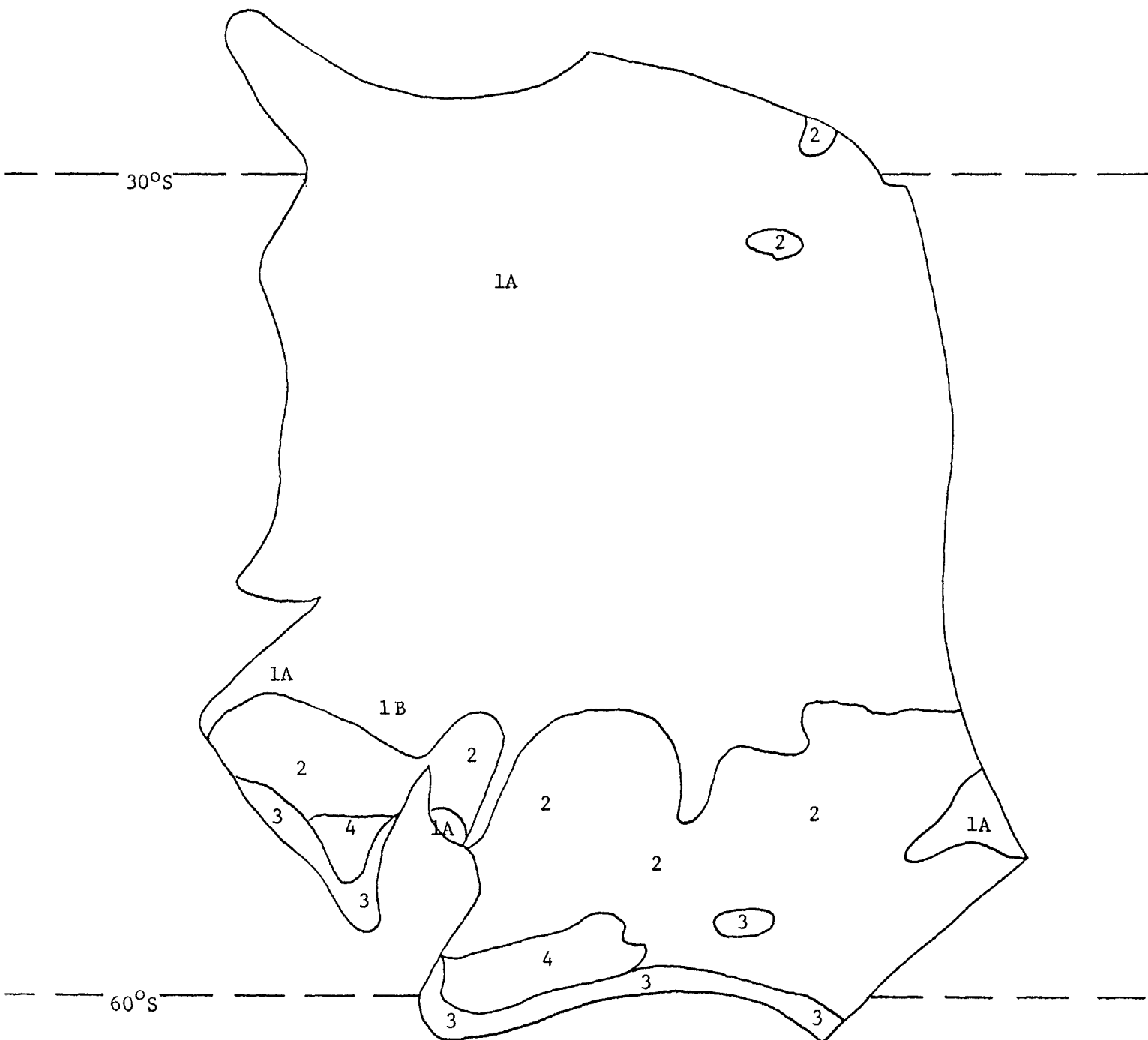
- 1. very concentrated
- 2. moderate concentration
- 3. slight concentration
- 4. none



1000 km

Language Families

- 1. Indo-European
  - A - Germanic-english
  - B - Romance-french
- 2. American Indian
- 3. Eskimo - Alenit
- 4. Unpopulated

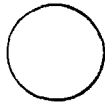


1000 km

Building Some Big Teams

Energy

Gas & Oil reserves



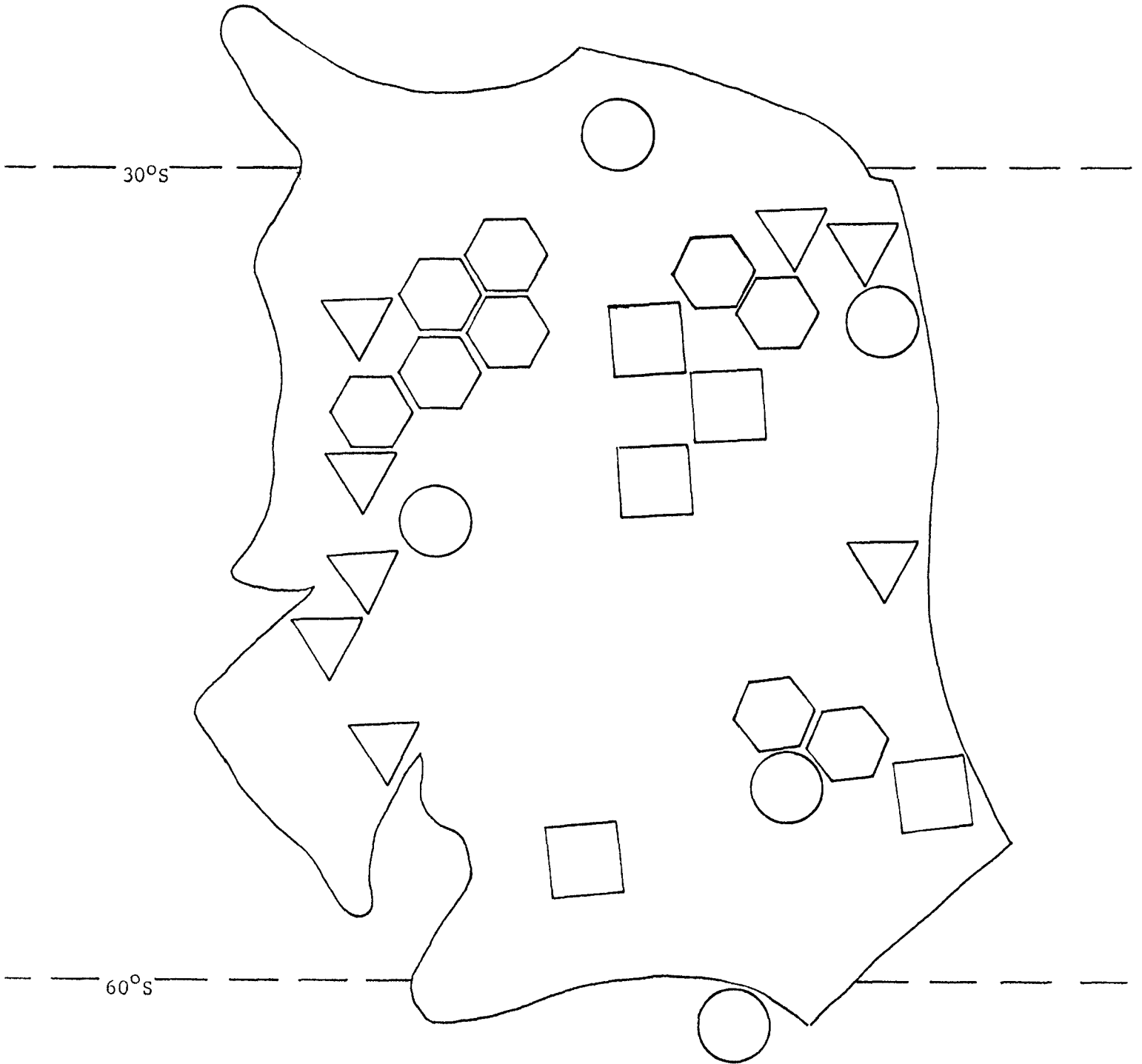
Uranium



Coal production



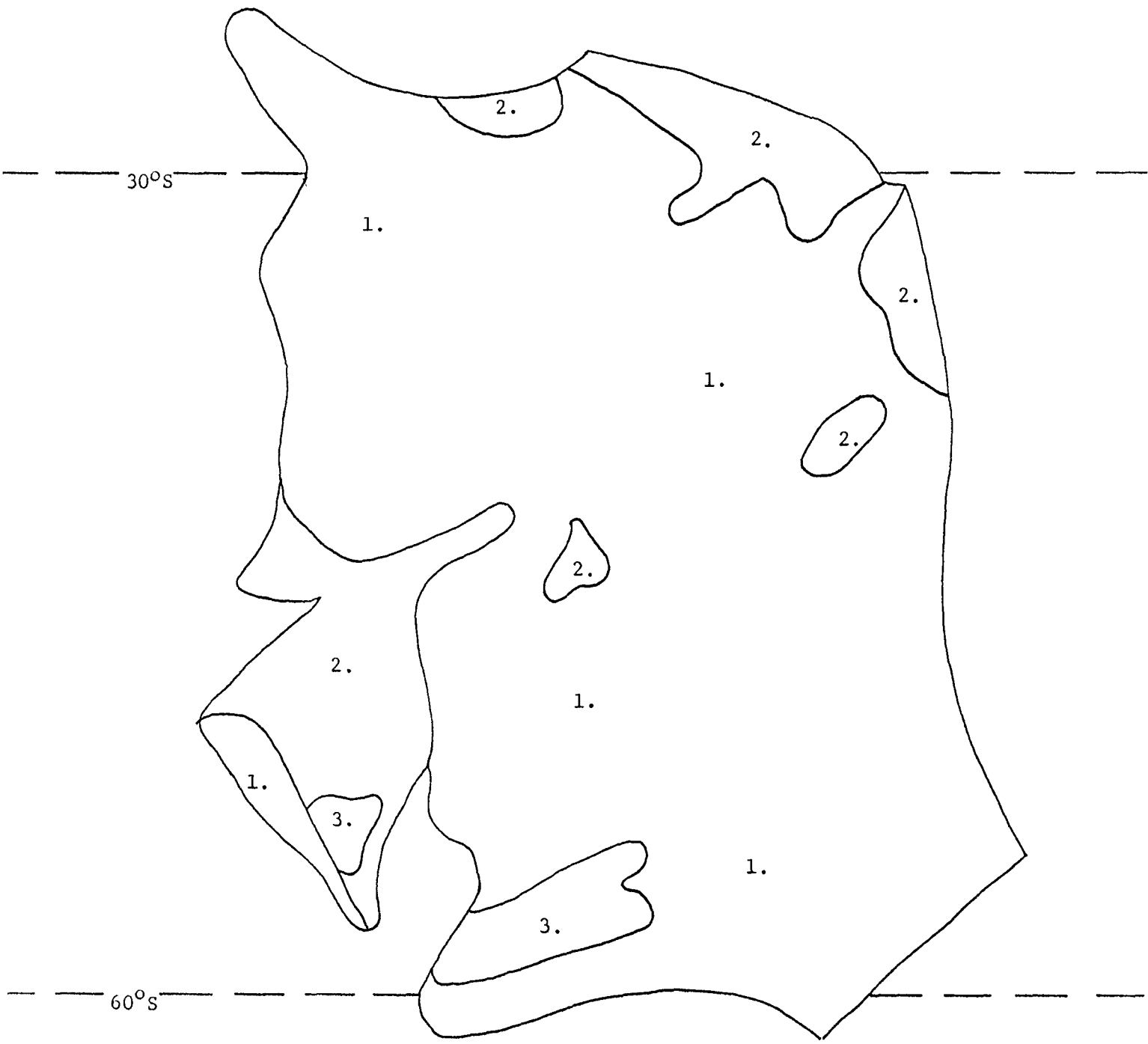
Hydro





Religion

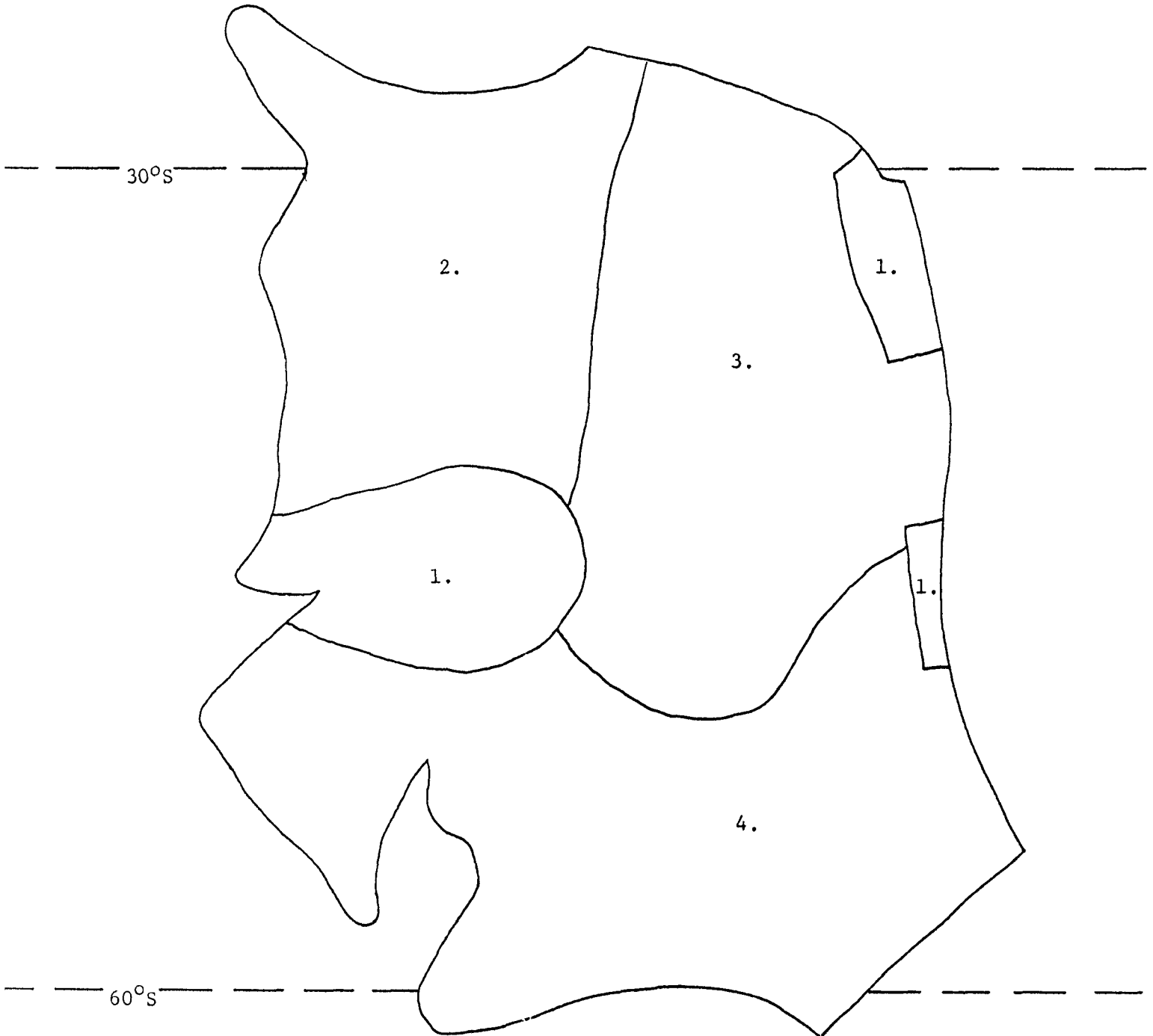
- 1. Mostly Protestant
- 2. Mostly Catholic (Roman)
- 3. Unpopulated



1000 km

Population

- |                      |                    |
|----------------------|--------------------|
| 1. Densely populated | 3. Low density     |
| 2. Moderate density  | 4. Virtually empty |



1000 km

## CONCLUSIONS

The aim of this study has been to create a curriculum framework which would be more successful in meeting the needs of general level students than traditional offerings. By addressing the various concerns raised in the introduction, the author has created a series of student activities and provided criteria for the creation of additional learning experiences. Both have been tested in the classroom and amended over the last two years in my position as Head of Geography at Sir John A. MacDonald.

The results are encouraging. The students have responded with enthusiasm, failure rates are lower and attendance rates have improved. By improving the self-esteem of this maligned group, the students' vitality and their desire to succeed within a nurturing environment have taken a distinctive upward swing.

The quality of the work by the students has continued to improve. Also, once the overall task has been successfully broken up into a logical series of attainable steps, the complexity with which these students can successfully cope is impressive. These achievements are due in large part to two facets of the classroom. First, by displaying most of their work, students have an opportunity of seeing high quality material. Second, by devoting a portion of the time to learning

how to work more effectively in groups, the expertise of these students is raised to a level where the sharing of human resources has raised the sophistication of the whole group. Everyone has benefited in some capacity or other. If people are taught to regard their neighbours as resources rather than competitors, the amount of energy released is astounding.

In order to be successful as a teacher/facilitator in an activity-centred, group-work classroom, teachers and students must be taught. As the author discovered through personal experience, simply placing desks together will not create successful groups. Patience and training are essential for the approach to work and I believe that students working effectively in groups is an integral part of the program.

In a similar manner, students can become better problem solvers if they are taught how to do it. They can learn to manage their time more maturely if they are provided with the opportunity to practise without being humiliated. Their first attempts at planning even three or four periods will be woefully lopsided. If they are given the chance to try again with non-judgemental feedback, they will become more realistic. It takes time to learn and if it's important then the time must be given. I am confident that the students have the ability to learn these methods of organization.

If we really want to achieve the stated goals, then we have to learn to manage our own time more efficiently. It is not possible to 'teach' all the material identified as core by the Ontario Ministry of

Education. Drastic reductions in core content must be made if any real progress in curriculum development is to be made.

Successfully evaluating student work within this program means giving the students accurate information about the strengths and weaknesses of the product and the opportunity to improve. Consequently, many assignments are designed wholly or in part to be checked for completion and returned for upgrading until the standard is met. Lengthy units are broken up into relatively short independent sections that are not completely sequential in nature. Bonus work is always available to accommodate the complex needs of a fairly large group of people. The number of situations that may arise which prevent the student from completing a unit are such that an equally varied range of responses is called for. Students must see the 'system' as working for them if we expect them to want to be a part of it.

The units are not perfect by any means, but they have demonstrated to me that this group of learners can be successful in an academically rigorous classroom. The units require tailoring to meet the special needs of each user group. Students need to see this flexibility from their teachers if we wish them to gain confidence in an institution which purportedly is functioning in their interest.

Successful implementation of this program requires an ongoing revitalization program. More current data need to be infused as time goes on if credibility and interest are to be maintained. As the complexity of our world unfolds with the increasing sophistication of our

communication industries, it will become more difficult to preserve coherence for the students. The danger of an evolution of this program into a series of only tenuously connected activities is a very real one for me. Perhaps in a world exploding with information this is an unavoidable development.

Maintaining the vigour of the teacher is also an important consideration. Teaching in an activity-centred classroom puts very heavy demands on teachers, both within and beyond the official working hours. The physical work required to assist a lively group of adolescents is no mean effort. Marking and preparation will be more onerous. Trying to work in isolation within an indifferent environment would create tremendous stress. Consequently, a supportive group of departments, staff and administrative members is essential for continued success. As teachers within other disciplines develop similar programs, the interaction and support within the school will lead to increased learning, in the true sense, for the general level student.

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APPENDIX

The following exercises were adapted from "Building from Strength", (Andrew, et al., 1981)

1. Size and Shape of Canada
2. Distribution - Exercise A
3. Density - Exercise B
4. The Distribution of Canada's Population
5. Urbanization in Canada
6. Project Canada
7. Hodge City.