Anoka Hennepin K-12 Curriculum Unit Plan

Department: Social Studies	Grade Level: 4
Unit Title: Geographic Investigations	Trimester: 2 and 3 (16) 55 minute lessons (can be (32) 25 minute lessons)

**Unit Summary:** Students will use the inquiry process to investigate questions about agriculture using maps and other geographic resources. They will collect, record, and analyze data from maps, aerial photos, satellite images, charts, and graphs. They will look for patterns and relationships in order to answer questions about geographic issues. They will learn about economics of agricultural by investigating methods of increasing productivity and how markets work. They will apply the information gathered in order to make a reasoned decision.

## **Program Understandings or Big Ideas:**

- III. PEOPLE, PLACES, & ENVIRONMENTS SWUT the five themes of geography (location, place, human-environment interactions, movement and regions) are interrelated and influence history.
- II. TIME, CONTINUITY, AND CHANGE SWUT significant people, events, and ideas influence the development of the world's civilizations.
- VII. PRODUCTION, DISTRIBUTION, & CONSUMPTION SWUT people organize for production, distribution and consumption of goods and services.
- **IX. GLOBAL CONNECTIONS** *SWUT* the relations among nations, cultures and global economies result in both interdependence and tensions.

# **Stage 1: Desired Results**

# Established Goals/Standards

# Acquisition ⇔ Meaning Making ⇔ Transfer

MN Academic Standards in Social Studies:

#### **GEOGRAPHY**

4.3.1.1.1 Create and use various types of maps, including overlaying thematic maps, of places in the United States, and also Canada or Mexico; incorporate TODALS as well as points, lines and colored areas to display spatial information. (Ongoing skill) For Example: "TODALS" map basics - title, orientation, date, author, legend/key, and scale. Spatial information - cities, roads, boundaries, bodies of water, regions.

**4.3.1.2.1** Choose the most

and graphs in an atlas to answer specific questions about geographical issues in the United States, and Canada or Mexico. (Ongoing skill)

For Example: How has human activity had an impact on the environment? Which region has the largest population? Where are the manufacturing centers of a country? Which languages are

spoken in different places? Other

appropriate data from maps, charts

### **Transfer**

## Students will be able to independently use their learning to...

• Analyze data from maps and other geographic tools to choose a location for a farm by using the PACED decision-making process, describe the location, and justify their decision by explaining how the geographic characteristics of the area will support a successful crop.

# **Meaning Making**

#### **UNDERSTANDINGS**

#### Student will understand that...

What specifically do you want students to understand? For 40 years (overarching from course framework), 4 years (about unit topic). What inferences should they make?

## **Overarching (Framework)**

- 1. SWUT the five themes of geography (location, place, human-environment interaction, movement, region) provide information about North America 4.3.4.10.1, 4.3.4.9.1, 4.3.3.6.1
- 2. SWUT various types of maps may be used to draw conclusions and to compare similarities and differences of regions.4.4.1.2.1
- 3. SWUT maps may be used to compare and contrast regions at different points in history. 4.4.1.2.1
- 4. SWUT the economy of a region is based on its available resources. 4.2.3.3.1, 4.2.4.5.1, 4.3.4.10.1

#### **ESSENTIAL QUESTIONS**

## Students will keep considering:

For 40 years (overarching from course framework), 4 years (about unit topic). What thought-provoking questions will foster inquiry, meaning-making and transfer?

## **Overarching (Framework)**

- 1. How do the five themes of geography provide information about North America? 4.3.4.10.1, 4.3.4.9.1, 4.3.3.6.1
- 2. How can various types of maps be used to draw conclusions about a region? 4.3.4.10.1, 4.3.4.9.1, 4.3.3.6.1
- 3. How can various types of maps be used to compare and contrast regions at different points in history? 4.4.1.2.1
- 4. How do the available resources of a region affect its economy? 4.2.3.3.1, 4.2.4.5.1, 4.3.4.10.1

questions might relate to environmental concerns, transportation issues, flood control.

4.3.2.3.1 Locate and identify the physical and human characteristics of places in the United States, and also Canada or Mexico.

**4.3.3.5.1** Use data to analyze and explain the changing distribution of population in the United States and Canada over the last century.

**4.3.3.6.1** Explain how geographic factors (climate, landforms, availability of natural resources) affect population distribution and the growth of cities in the United States and Canada.

For example: Geographic factors-climate, landforms, availability of natural resources.

**4.3.4.9.1** Explain how humans adapt to and/or modify the physical environment and how they are in turn affected by these adaptations and modifications.

For example: Humans cut down a forest to clear land for farming, which leads to soil erosion.

Consequently, humans have to use more fertilizer to supplement the nutrients in the soil.

**4.3.4.10.1** Describe how the location of resources and the distribution of people and their various economic activities has created different regions of the United States and Canada.

**4.3.4.10.2** Analyze the impact of

## Topical (Unit)

- 1. Geographic factors affect decisions on where people choose to live.
- 2. There are many parts of a map.
- 3. Maps can help us compare and contrast the way regions change over time.
- 4. Where people live in the U.S. and Canada has changed over time.
- 5. The location of resources and the distribution of people and their various economic activities has created different regions in the United States and Canada.
- 6. Increased productivity could result from division of labor, specialization, and improvements in technology.
- 7. Geographic factors have impacted the development of modern agricultural regions in Minnesota and the United States.
- 8. Humans adapt to and/or modify the physical environment and are in turn affected by these adaptations and modifications.
- 9. Markets are places or manners in which buyers and sellers interact to make exchanges.

## Topical (Unit)

- 1. How do climate, landforms, and availability of resources affect where people choose to live? 4.3.3.6.1, 4.3.4.10.1
- 2. How do TODALS and spatial information help people understand a map? 4.3.1.1.1
- 3. How can the information on a map be used to answer specific questions? 4.3.1.2.1
- 4. How can maps help compare and contrast the way regions change over time? 4.4.1.2.1
- 5. How have the locations where people lived in the U.S. and Canada changed over time? 4.3.3.5.1
- 6. What geographic factors impact agricultural production? 4.2.3.3.1, 4.3.4.10.1, 4.3.4.10.2
- 7. How do humans and the environment impact each other? 4.3.4.9.1
- 8. How do people use strategies to make decisions? 4.2.1.1.1
- 9. How does a market work? 4.2.4.5.1

# Acquisition

#### Students will know...

What facts and basic concepts should students know and be able to recall?

- the environment affects how people live and people affect the environment.
- geographers use TODALS to create maps.
- the United States has many different

#### Students will be able to...

What discrete skills and processes should students be able to use?

• give examples showing how humans affect the environment and how the environment affects how people live. (Example from the multicultural read aloud <u>Baseball Bats for</u>

geographical factors on the development of modern agricultural regions in Minnesota and the United States.

For example: Agricultural regions-"Corn Belt," "Dairy Belt," crop regions.

#### **HISTORY**

**4.4.1.2.1** Use maps to compare and contrast a particular region in the United States, and also Canada or Mexico, at different points in time. For example: The United States, Canada, or Mexico in 1800 versus 1900; population centers over time; natural resource use over time.

#### **ECONOMICS**

4.2.1.1.1 - Apply a reasoned decision-making process to make a choice (e.g. PACED: What are the alternative routes to move from Point A to Point B? What route would you choose when - insert a particular situation - and why?) \*practice multiple times
4.2.3.3.1 Define the productivity of

increase it.

For example: Productivity equals
the amount of output divided by the
amount of input (resource). Things
that can increase
productivity-division of labor,

a resource and describe ways to

- agricultural regions.
- there are geographical factors that impact the development of modern agricultural regions in the U.S such as precipitation, physical features, and climate.
- a market is any place or manner in which buyers and sellers interact to make exchanges.
- regions develop and change over time.
- people use decision making processes to make choices.
- states and territories of the United States
- major cities and capitals in the United States.
- that there are ways to both increase and decrease productivity.

## Essential Vocabulary:

- resources
- climate
- agriculture
- vegetation
- precipitation
- region
- production tools
- productivity
- market
- prices

To view all vocabulary words for grade 4 social studies, see "Grade 4 Social Studies Vocabulary" (pink document in front of binder.)

To access the "Grade 4 Social Studies Vocabulary Cards," google link here Link to Vocabulary Cards Student Vocabulary Reference Page

- <u>Christmas</u>: Inuit people living in Repulse Bay in 1955)
- use TODALS to create and interpret a map.
- create a map showing features such as precipitation patterns, climate, landforms, and major cities.
- choose the appropriate data from a map to answer a specific question
- make connections between temperatures, precipitation, and natural vegetation in MN.
- identify steps that take place before a crop is ready for consumption, which of those steps the farmer completes, and what products come from the crops.
- analyze the impact of geographical factors on the development of modern agricultural regions in the U.S.
- choose appropriate steps to increase the productivity of a resource
- explain how and why regions change over time.
- name and locate states and territories, major cities and state capitals in the United States.
- name and locate countries neighboring the United States and their major cities: Canada, Mexico; Toronto, Montreal, Winnipeg, Vancouver, Mexico City.

specialization, improvements in technology (the way things are made). The productivity of a corn farmer (resource) has been improved by the use of specialized equipment, development of new varieties of seeds and fertilizers and improved farming techniques.

4.2.4.5.1 Describe a market as any

4.2.4.5.1 Describe a market as any place or manner in which buyers and sellers interact to make exchanges; describe prices as payments of money for items exchanged in markets.

For example: Markets-mall stores, online shopping, mail orders, garage sales, employment center. Prices-\$40 for a video game, \$15 for one hour of a worker's labor.

## Common misunderstanding(s):

- Ocean water can be interchanged for fresh water.
- I can make a decision based on how I feel (rather than considering criteria).
- All information on a map is equally useful in any situation.
- Agriculture includes only plant crops.