Purpose:

To help students to understand that physical geography affects population density.

Target Grade Level: 6-9

Essential Questions:

- 1. How does geography affect population density?
- 2. How does high population density affect the life of the people who live in that country?
- 3. How does population density affect the price of land?

Objective:

Given a physical map of Japan, students will predict areas of heaviest population density.

Materials:

• Blank physical map of Japan with mountain areas shaded (Handouts A & B).

Activities:

- 1. Present problem: Does geography affect population density?
- 2. Review what is meant by the term "population density" *The average number of people living within a square mile or square kilometer.*
- 3. Working individually, pass out a copy of the physical map of Japan to each student. Students are to shade in the areas they believe would have the heaviest population.
- 4. Students then get together in groups to compare their maps. Put a copy of the map on the overhead and let groups shade in areas they believe have the heaviest population. They need to support their predictions. Put the map showing areas of heaviest population on the overhead and make comparisons.

Question: Why might these areas have a heavier population than other coastal areas?

Possible Conclusions: People have settled in the plains. Kanto Plain, the largest and the most populous area, includes the cities of Tokyo, Yokahama, Kawasaki, and Chiba. The Nobi Plain is located around the city of Nagoya. The Osaka Plain includes the major population areas of Kyoto, Kobe, and Osaka. The Tsukushi Plain is on Kyushu, which is the most densely populated of the four major islands. Climate is another factor. The southern part of Japan has a much milder climate than the northern part. There is also a large industrial belt along the Inland Sea that is heavily populated.

- 5. Class discussion based on the following questions:
 - Given Japan's population density and geography, how do you think Japan produces its food? *Much of the food must be imported.*
 - In what ways do you think Japan's population density and geography affect housing? *Many people live in condominiums and apartments especially in the city. Houses are very small compared to houses in the United States.*
 - How might Japan's population density and geography affect manners and behavior? Due to high population density and crowded conditions, people must get along. People must be polite and well-mannered or there would be constant conflicts.

Assessment:

- Class discussion
- Student Written Response Students write a paragraph about the impact of population density on food production, the cost of housing, and social behavior.

Grade Adaptation:

This lesson is targeted for middle school and high school. To adapt to intermediate grades - Review a map key. Students work in pairs to write a

paragraph. Students pick one area to write about or discuss orally - food production, cost of housing, social behavior.

Relationship to Social Studies Standards:

Grade 6, Geography, Grade-level Indicator 5

Describe ways human settlements and activities are influenced by environmental factors and processes in different places and regions including: (a) bodies of water, (b) landforms, (c) climates, (d) vegetation, (e) weathering, and (f) seismic activity.

Grade 6, Geography, Grade-level Indicator 6

Describe ways in which human migration has an impact on the physical and human characteristics of places including: urbanization, (b) desertification, and (c) deforestation.

Grade 7, Geography, Grade-level Indicator 4

Use physical and historical maps to analyze the reasons that human features are located in particular places.

Grade 9, Geography, Grade-level Indicator 3

Explain how political and economic conditions, resources, geographic locations and cultures have contributed to cooperation and conflict.

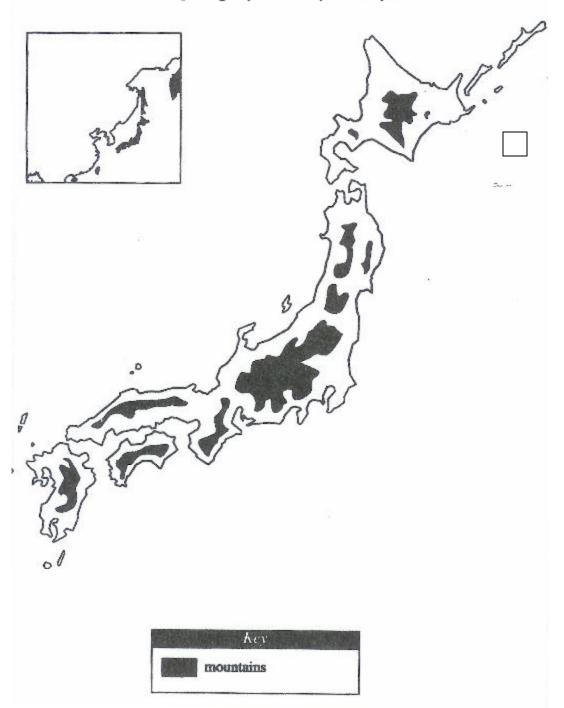
Grade 9, Geography, Grade-level Indicator 4

Explain the causes and consequences of urbanization including economic development, population growth and environmental change.

This lesson was developed by Kay Tomesek, teacher, Gahanna Middle School West, Gahanna-Jefferson City Schools.

Handout A

Physiographic Map of Japan



Handout B

