

Names: _____ Date: _____

Population Density Worksheet **Answers**

1. **Record** the classroom dimensions and population below. Then, **calculate** the area and amount of classroom space per person.

Length = 11 meters

Width = 6 meters

Area (length x width) = 66 square meters

Population = 30 people in the classroom

Answers for #1, 2 and 3 are example calculations: Students' answers will vary depending on the classroom size and number of people.

How much space does each person have? 2.2 square meters

Hint: space = area (length x width) divided by (# of people)

2. **Prediction:** How much space would each person have if the number of people in the class doubled? 1.1 square meters

3. Calculate the population density.

Population density = .47 per square meter

Hint: population density = (# of people) divided by area (length x width)

4. Perform and record the population density calculations for the prairie dog population below.

| Year | # Prairie Dogs | Area (square meters) | Population Density |
|------|----------------|-------------------------|----------------------------------|
| 1985 | 10 | 10 | 1 prairie dog per square meter |
| 1990 | 30 | 10 | 3 prairie dogs per square meter |
| 1995 | 130 | 10 | 13 prairie dogs per square meter |
| 2000 | 80 | 10 | 8 prairie dogs per square meter |
| 2005 | 2 | 10 | 2 prairie dogs per square meter |

5. Why would an engineer want to know about how populations change over time?

Example answers: for city planning, for planning use of natural and human-made resources, etc.

Population Density And Distribution Worksheet Answers

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Whispering the Secrets of Language: An Psychological Quest through **Population Density And Distribution Worksheet Answers**

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