

Names: \_\_\_\_\_ Date: \_\_\_\_\_

## Population Density Worksheet

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

Length = \_\_\_\_\_ meters                      Width = \_\_\_\_\_ meters

Area (length x width) = \_\_\_\_\_ square meters

Population = \_\_\_\_\_ people in the classroom

How much space does each person have? \_\_\_\_\_ 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?
3. Calculate the population density.

Population density = \_\_\_\_\_

*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	
1995	130	10	
2000	80	10	
2005	2	10	

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