



Activity 5

Name _____

Date _____

Keeping up with Trash

On an average day, people in the U.S. recycle the following amounts of trash:

- ◆ 5,479,452 pounds of aluminum
- ◆ 16,986,301 pounds of glass
- ◆ 178,630,137 pounds of paper products

Answer each question. When possible, write each answer as a multi-digit number and in scientific notation. Otherwise, write the answer only in scientific notation. Record the keystrokes you used to find each answer.

1. How many pounds of aluminum are recycled in:

a week?	_____	Keystrokes: _____
a 30-day month?	_____	Keystrokes: _____
a 365-day year?	_____	Keystrokes: _____

2. If trash is recycled evenly through the day, how many pounds of aluminum are recycled in:

an hour?	_____	Keystrokes: _____
a minute?	_____	Keystrokes: _____
a second?	_____	Keystrokes: _____

3. In 1996, there were 265,284,000 people living in the U.S. On average, how much aluminum did each person recycle per day?

Answer	_____	Keystrokes: _____
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4. What is similar about the keystrokes you used to answer questions 1 and 2? What is different?

5. If you wanted to compute the same values for glass, how would your keystrokes change?

6. How could you compute the values for glass with fewer keystrokes than you used for questions 1 - 3?

7. How many pounds of glass are recycled in:

a week? _____ Keystrokes: _____

a 30-day month? _____ Keystrokes: _____

a 365-day year? _____ Keystrokes: _____

8. If trash is recycled evenly through the day, how many pounds of glass are recycled in:

an hour? _____ Keystrokes: _____

a minute? _____ Keystrokes: _____

a second? _____ Keystrokes: _____

9. In 1996, there were 265,284,000 people living in the U.S. How many pounds of glass, on the average, did each person recycle per day?

Answer _____ Keystrokes: _____

10. How many pounds of paper products are recycled in:

a week? _____ Keystrokes: _____

a 30-day month? _____ Keystrokes: _____

a 365-day year? _____ Keystrokes: _____

11. If trash is recycled evenly through the day, how many pounds of paper products are recycled in:

an hour? _____ Keystrokes: _____

a minute? _____ Keystrokes: _____

a second? _____ Keystrokes: _____

12. In 1996, there were 265,284,000 people living in the U.S. How many pounds of paper products, on the average, did each person recycle per day?

Answer _____ Keystrokes: _____

13. If recycling happens evenly throughout the year, on what day during the year does the total amount of trash recycled so far first involve a two-digit exponent?

aluminum: _____

glass: _____

paper products: _____

Explain how you found these answers.
