

# SIGNIFICANT FIGURES IN CALCULATIONS

## EVIDENCE NOTEBOOK TEACHER'S KEY

### KEY IDEAS

- Significant Figures when **Adding and Subtracting**

Rule:

Example:  $83.26 \text{ g}$   
 $+ \underline{24.9 \text{ g}}$

- Significant Figures when **Multiplying and Dividing**

Rule:

Example:  $38.65 \text{ m} \times 105.93 \text{ m} =$

### GUIDED PRACTICE

1.  $550 \text{ L} - 27.4 \text{ L}$

2.  $\frac{1.80 \text{ L}}{36 \text{ s}}$

3.  $12.5 \text{ cm} \times 10.4 \text{ cm}$

4.  $0.028228 \text{ g} + 0.002372 \text{ g}$

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_ PERIOD: \_\_\_\_\_

5. Kevin has 4 bowling balls which weigh 23.0 kg together. What is the average mass of one bowling ball?

### CHECKPOINTS

6. Calculate the area of a rectangle that has the lengths of 58.3  $\mu\text{m}$  and 41  $\mu\text{m}$ .
7. Density is a measurement of the mass of an object divided by its volume. What would be the density of a substance that has a volume of 63.00 mL and a mass of 272.22 g?
8. 1 inch is exactly 2.54 centimeters. Convert 10.75 inches into centimeters.
9.  $42.5 \text{ km} \times 167.8 \text{ km}$
10.  $662.3 \text{ L} - 21.34 \text{ L}$
11.  $6.782 \text{ Gm} + 5.5 \text{ Gm}$
12.  $\frac{47.280 \text{ g}}{0.5621 \text{ mol}}$

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_ PERIOD: \_\_\_\_\_

13.  $0.156 \text{ dm} \times 3.200 \text{ dm} \times 53.481 \text{ dm}$

14.  $\frac{625.8 \text{ Km}}{4.81 \text{ hr}}$

15.  $0.086 \text{ g} + 8.32 \text{ g} - 0.856 \text{ g}$

16.  $4 \text{ cm} \times 3 \text{ cm}$