



# Activity 17 Assessment

## Using Estimation for Multiplication and Division

### Multiplying and Dividing Larger Numbers (cont'd)

Estimates to determine if answer to multiplication or division problem is reasonable

$$258 \times 15 = 3870$$

"258 is close to 250.

$$\begin{aligned} 250 \times 15 &= (250 \times 10) + (250 \times 5) \\ &= 2500 + 1250 \\ &= 3750 \end{aligned}$$

3870 is close to 3750.

So, my answer is reasonable."

Expresses a quotient with or without a remainder according to context

There are 114 students going on field trip.

Each bus holds 9 students.

How many buses are needed?

$$\begin{array}{r} 12 \\ 9 \overline{) 114} \\ \underline{- 9} \phantom{0} \\ 24 \\ \underline{- 18} \\ 6 \end{array}$$

$$114 \div 9 = 12 \text{ R}6$$

"Since 6 students cannot be left behind, 13 buses are needed."

Creates and solves multiplication and division problems flexibly using a variety of strategies

5 elephants share 748 kg of food.

How much food does each elephant get?

$$\begin{aligned} 748 \div 5 &= (500 \div 5) + (200 \div 5) + (45 \div 5) + (3 \div 5) \\ &= 100 + 40 + 9 + (3 \div 5) \\ &= 149 \text{ R}3, \text{ or } 149\frac{3}{5} \text{ or } 149\frac{6}{10}, \text{ or } 149.6 \end{aligned}$$

Each elephant got 149.6 kg of food.

### Observations/Documentation