# Whole Numbers: Rounding, Estimation, and Ordering

## Vocabulary

Rounding Expressing numbers to the nearest hundreds, thousand, and so on

#### **Process of Rounding:**

| Round                       | 1. Look at the digit to the right of the 100's place. (Look at the 4.)                                   |
|-----------------------------|--|
| 17,648 to the nearest 100.  | <ol> <li>Since the digit is less than 5, make it and all other digits to the<br/>right zeros.</li> </ol> |
| Rounded answer: 17,600      |  |
|                             |  |
| Round                       | 1. Look at the digit to the right of the 1000's place.   |
| 17,648 to the nearest 1000. | (Look at the 6.)   |
|                             | 2. Since the digit is 5 or more, increase the 7 (the 1000's place) by                                    |
| Rounded answer: 18,000      | 1 and make the 6 and all other digits to the right zeros.  |

TRY:

| Round each to the | Nearest thousand | Nearest hundred | Nearest tens |
|-------------------|------------------|-----------------|--------------|
| 83,238            |                  |                 |              |
| 149,794           |                  |                 |              |
| 50,783            |                  |                 |              |

### Vocabulary

Estimating Using rounded numbers to quickly predict an answer

#### **Process of Estimating:**

SD would like to have some idea what lunch will cost. Estimate the total bill to the nearest whole dollar.

| ltem  | Original Cost | Estimated C     | Cost              |
|-------|---------------|-----------------|-------------------|
| Salad | 4.95          | 5               |                   |
| Soup  | 2.88          | 3               |                   |
| Fish  | 8.25          | 8               |                   |
| Drink | 1.59          | 2               |                   |
|       |               | Estimated cost: | E = 5 + 3 + 8 + 2 |
|       |               |                 | E = \$18          |

#### TRY:

Jay is shopping at the local market and is concerned that enough money is available to purchase the items in the cart. Estimate the total bill to the nearest whole dollar.

| Item  | Original Cost | Estimated Cost |
|-------|---------------|----------------|
| Bread | 2.39          |                |
| Meat  | 7.23          |                |
| Chips | 1.79          |                |
| Рор   | 4.79          |                |

#### Vocabulary

| Inequality signs                              | Signs used to indicate the relationship of one number or value to another |   |
|---|---|---|
| 5 is less than 8 writ                         | ten 5<8   | -4 is greater than -6 written -4 > -6                       |
| -2 is less than or eq                         | ual to 3 written -2 $\leq$ 3  | 25 is greater than or equal to 20+5 written $25 \ge (20+5)$ |
| 6 is <b>not equal to</b> 5 written $6 \neq 5$ |   |   |

#### TRY:

Indicate if the following statements are true or false.

| 17      | <    | 25       | True or False |
|---------|------|----------|---------------|
| 36      | >    | 39       | True or False |
| (5 + 3) | ≤    | (3+5)    | True or False |
| (14 – 6 | 5) ≥ | (13 – 2) | True or False |

Use the < or > symbol to make each statement true.

| (5+6-3) | <br>25        |
|---------|---------------|
| 36      | <br>(27-9+10) |
| 17      | <br>(25–9)    |
| 36      | <br>(39–2)    |