

# Unit 1: Home Practice

## Part 1 Variables and Values

1. **A.** David asks each of his family members what their favorite vegetable is. Is he collecting data on a numerical or categorical variable?  
  
**B.** List four possible values for this variable.
  
2. **A.** Alexis asks her classmates how long it takes them to get to school. What variable is she studying? Is it numerical or categorical?  
  
**B.** List four possible values for this variable. (*Hint:* How long does it take you to get to school? How long does it take your friends?)
  
3. **A.** Brandon asks his friends what type of sandwiches they are going to order at the restaurant. Is he collecting data on a numerical or categorical variable?  
  
**B.** List four possible values for this variable.

**Part 2 Find the Median**

**Find the median for each set of data given below. Show how you decided.**

1. Roberto, David, Nila, Lee Yah, and Romesh compare the number of movies their families own. Roberto owns 47 movies while David only owns 4. Nila owns 23 movies, Lee Yah owns 18 movies, and Romesh owns 15 movies. What is the median number of movies? (*Hint:* First list the number of movies owned by each family in order from smallest to largest. You should list five numbers.)
2. Brandon compares five different types of basketball shoes. His favorite brand has 24 eyelets. His least favorite has 32 eyelets. Two brands have pairs of shoes with 20 eyelets. Another brand has 28 eyelets. What is the median number of eyelets? (*Hint:* List the number 20 twice since two pairs of shoes have 20 eyelets.)
3. There are seven people in Felicia's family. Four members of her family have 5 pairs of shoes. Two members of her family have 3 pairs of shoes. Her mother has 15 pairs of shoes. What is the median number of pairs of shoes in Felicia's household? What is the mode?
4. Four people in David's family celebrate birthdays in September. David buys 4 cards. The card for his mother costs \$2.25. The cards for his two brothers are \$1.25 and \$1.40. The card for his cousin is \$1.50. What is the median price of the birthday cards?
5. What is the median height in your household? How did you decide?

**Part 3 Sums and Differences**

1. Solve the following problems using paper-and-pencil or mental math. Use the *Addition* and *Subtraction Strategies Menus* in the *Student Guide* Reference section. Estimate to make sure your answers are reasonable.

A.  $75 + 39 =$       B.  $167 + 74 =$       C.  $254 - 118 =$

D.  $7046 + 856 =$       E.  $9233 - 560 =$       F.  $8570 + 2545 =$

G.  $5649 - 1850 =$       H.  $5503 + 7098 =$       I.  $6800 - 4874 =$

- J. Explain how you used mental math to solve one of the problems.

- K. Explain how you used estimation to make sure your answer for Question F is reasonable.

2. Solve the following problems in your head.

A.  $30 + 90 =$  \_\_\_\_\_      B.  $50 + 60 =$  \_\_\_\_\_      C.  $160 - 90 =$  \_\_\_\_\_

D.  $148 - 50 =$  \_\_\_\_\_      E.  $240 + 80 =$  \_\_\_\_\_      F.  $100 - 32 =$  \_\_\_\_\_

G.  $650 + 250 =$  \_\_\_\_\_      H.  $732 + 632 =$  \_\_\_\_\_      I.  $389 + 11 =$  \_\_\_\_\_

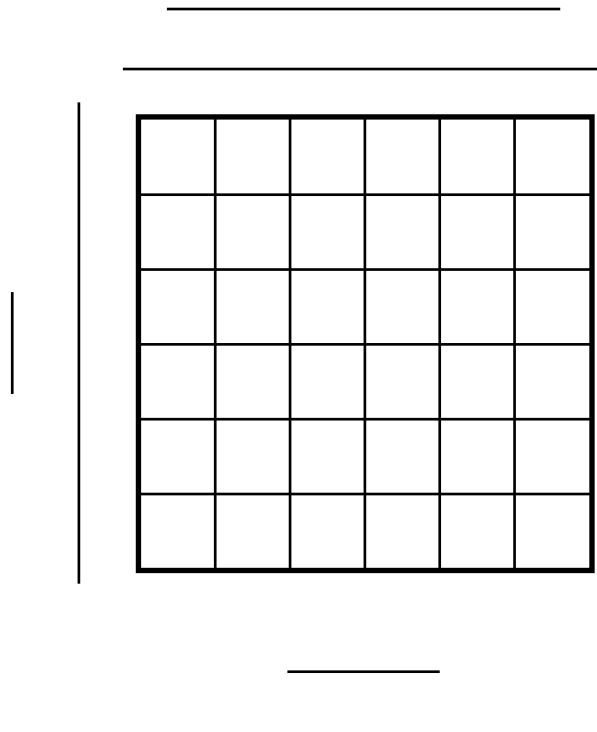
3. On another sheet of paper, choose two of the problems and then explain how you solved them using mental math.

**Part 4** Brandon's Data

Brandon collected data on the number of windows in each room of his home. His data is shown below. Make a bar graph of Brandon's data. Label the horizontal axis with the variable, Number of Windows. Then answer the questions.

Brandon's Data

<i>W</i> Number of Windows	<i>R</i> Number of Rooms
0	0
1	2
2	3
3	0
4	1



1. What is the most common number of windows in the rooms in Brandon's home? \_\_\_\_\_
2. How many windows are in Brandon's home altogether? Show or tell how you know.

**Part 5** Problem Solving

Choose an appropriate method to solve each of the following problems. For some questions you may need to find an exact answer, but for others you may need only an estimate. For each question, you may choose to use paper and pencil, mental math, or a calculator. Be prepared to tell the class how you solved each problem.

1. Michael's mother baked 3 dozen cookies for Michael's birthday party. If seven friends are coming to the party, how many cookies can each child have if they share the cookies equally? (*Hint: Don't forget to give Michael some cookies.*)
2. The gym teacher bought 50 balls for the high school. He bought 35 tennis balls which cost 60¢ each. The rest of the balls were golf balls which cost \$1.25 each. How much money did he spend altogether?
3. Mr. Moreno went to Springfield for a four-day weekend. He stayed at a hotel for three nights. The bill was \$267. What was the rate for each night?
4. Irma is shopping with her cousin Maria, who recently got married. As a wedding gift, Maria received a \$100 gift certificate to a department store. She finds the following items that she wants to buy: a comforter for \$48, two pillows for \$23 each, a waffle maker for \$39, three picture frames for \$5.95 each, and a cookbook for \$12. Make a list of the items she can purchase with her gift certificate. Explain your thinking.

Name \_\_\_\_\_ Date \_\_\_\_\_

## Unit 1: Home Practice

### Part 1 Variables and Values

1. **A.** David asks each of his family members what their favorite vegetable is. Is he collecting data on a numerical or categorical variable?
  - B.** List four possible values for this variable.
  
2. **A.** Alexis asks her classmates how long it takes them to get to school. What variable is she studying? Is it numerical or categorical?
  - B.** List four possible values for this variable. (*Hint:* How long does it take you to get to school? How long does it take your friends?)
  
3. **A.** Brandon asks his friends what type of sandwiches they are going to order at the restaurant. Is he collecting data on a numerical or categorical variable?
  - B.** List four possible values for this variable.

Copyright © Kendall Hunt Publishing Company

TG • Grade 5 • Unit 1 • Home Practice |

### Teacher Guide - Page 1

## Teacher Guide

### Home Practice

#### Part 1. Variables and Values (TG p. 1)

##### Questions 1–3

1. **A.** Type of vegetable; categorical  
**B.** Answers will vary. Possible responses: carrots, broccoli, celery, cauliflower
2. **A.** Time in minutes or hours; numerical  
**B.** Answers will vary. Possible responses: 15 minutes, 20 minutes, 1 hour, 5 minutes
3. **A.** Type of sandwich; categorical  
**B.** Answers will vary. Possible responses: ham, turkey, tuna, cheese

Name \_\_\_\_\_ Date \_\_\_\_\_

### Part 2 Find the Median

Find the median for each set of data given below. Show how you decided.

1. Roberto, David, Nila, Lee Yah, and Romesh compare the number of movies their families own. Roberto owns 47 movies while David only owns 4. Nila owns 23 movies, Lee Yah owns 18 movies, and Romesh owns 15 movies. What is the median number of movies? (*Hint:* First list the number of movies owned by each family in order from smallest to largest. You should list five numbers.)
  
2. Brandon compares five different types of basketball shoes. His favorite brand has 24 eyelets. His least favorite has 32 eyelets. Two brands have pairs of shoes with 20 eyelets. Another brand has 28 eyelets. What is the median number of eyelets? (*Hint:* List the number 20 twice since two pairs of shoes have 20 eyelets.)
  
3. There are seven people in Felicia's family. Four members of her family have 5 pairs of shoes. Two members of her family have 3 pairs of shoes. Her mother has 15 pairs of shoes. What is the median number of pairs of shoes in Felicia's household? What is the mode?
  
4. Four people in David's family celebrate birthdays in September. David buys 4 cards. The card for his mother costs \$2.25. The cards for his two brothers are \$1.25 and \$1.40. The card for his cousin is \$1.50. What is the median price of the birthday cards?
  
5. What is the median height in your household? How did you decide?

Copyright © Kendall Hunt Publishing Company

2 TG • Grade 5 • Unit 1 • Home Practice

### Teacher Guide - Page 2

#### Part 2. Find the Median (TG p. 2)

##### Questions 1–5

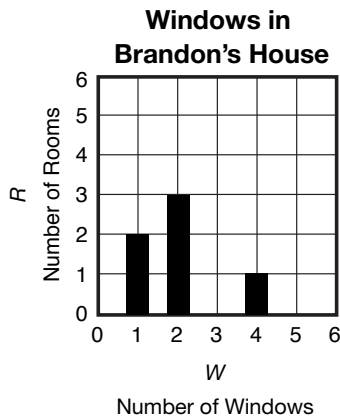
1. 18 movies
2. 24 eyelets
3. 5 pairs of shoes, 5 pairs of shoes
4. \$1.45
5. Answers will vary. Everyone in the family can line up by height, then measure the person with the middle height.

Copyright © Kendall Hunt Publishing Company

**Part 3. Sums and Differences (TG p. 3)**  
**Questions 1–3**

- I. A. 114      B. 241      C. 136  
 D. 7902      E. 8673      F. 11,115  
 G. 3799      H. 12,601      I. 1926
- J. Possible responses: To solve C, subtract 4 from 254; add 2 to 118.  $250 - 120 = 130$ . Add back in the 4 and 2 to get 136. To solve I,  $6800 - 4800 = 2000$ .  $2000 - 70 = 1930$ .  $1930 - 4 = 1926$
- K. Possible response: I used the thousands and the hundreds.  
 $8000 + 2000 = 10,000$   
 $500 + 500 = 1,000$   
 $10,000 + 1,000 = 11,000$   
 11,115 is reasonable.
2. A. 120      B. 110      C. 70  
 D. 98      E. 320      F. 68  
 G. 900      H. 1364      I. 400
3. Explanations will vary.

**Part 4. Brandon's Data (TG p. 4)**  
**Questions 1–2**



1. 2 windows  
 2. 12 windows; Possible response:  
 $2 + 6 + 4 = 12$  windows

Copyright © Kendall Hunt Publishing Company

Name \_\_\_\_\_ Date \_\_\_\_\_

**Part 3 Sums and Differences**

1. Solve the following problems using paper-and-pencil or mental math. Use the *Addition* and *Subtraction Strategies Menus* in the *Student Guide* Reference section. Estimate to make sure your answers are reasonable.

A.  $75 + 39 =$       B.  $167 + 74 =$       C.  $254 - 118 =$   
 D.  $7046 + 856 =$       E.  $9233 - 560 =$       F.  $8570 + 2545 =$   
 G.  $5649 - 1850 =$       H.  $5503 + 7098 =$       I.  $6800 - 4874 =$

J. Explain how you used mental math to solve one of the problems.

K. Explain how you used estimation to make sure your answer for Question F is reasonable.

2. Solve the following problems in your head.

A.  $30 + 90 =$  \_\_\_\_\_      B.  $50 + 60 =$  \_\_\_\_\_      C.  $160 - 90 =$  \_\_\_\_\_  
 D.  $148 - 50 =$  \_\_\_\_\_      E.  $240 + 80 =$  \_\_\_\_\_      F.  $100 - 32 =$  \_\_\_\_\_  
 G.  $650 + 250 =$  \_\_\_\_\_      H.  $732 + 632 =$  \_\_\_\_\_      I.  $389 + 11 =$  \_\_\_\_\_

3. On another sheet of paper, choose two of the problems and then explain how you solved them using mental math.

TG • Grade 5 • Unit 1 • Home Practice 3

**Teacher Guide - Page 3**

Name \_\_\_\_\_ Date \_\_\_\_\_

**Part 4 Brandon's Data**

Brandon collected data on the number of windows in each room of his home. His data is shown below. Make a bar graph of Brandon's data. Label the horizontal axis with the variable, Number of Windows. Then answer the questions.

W Number of Windows	R Number of Rooms
0	0
1	2
2	3
3	0
4	1

1. What is the most common number of windows in the rooms in Brandon's home? \_\_\_\_\_

2. How many windows are in Brandon's home altogether? Show or tell how you know.

Copyright © Kendall Hunt Publishing Company

4 TG • Grade 5 • Unit 1 • Home Practice

**Teacher Guide - Page 4**

Name \_\_\_\_\_ Date \_\_\_\_\_

**Part 5** Problem Solving

Choose an appropriate method to solve each of the following problems. For some questions you may need to find an exact answer, but for others you may need only an estimate. For each question, you may choose to use paper and pencil, mental math, or a calculator. Be prepared to tell the class how you solved each problem.

1. Michael's mother baked 3 dozen cookies for Michael's birthday party. If seven friends are coming to the party, how many cookies can each child have if they share the cookies equally? (*Hint:* Don't forget to give Michael some cookies.)
2. The gym teacher bought 50 balls for the high school. He bought 35 tennis balls which cost 60¢ each. The rest of the balls were golf balls which cost \$1.25 each. How much money did he spend altogether?
3. Mr. Moreno went to Springfield for a four-day weekend. He stayed at a hotel for three nights. The bill was \$267. What was the rate for each night?
4. Irma is shopping with her cousin Maria, who recently got married. As a wedding gift, Maria received a \$100 gift certificate to a department store. She finds the following items that she wants to buy: a comforter for \$48, two pillows for \$23 each, a waffle maker for \$39, three picture frames for \$5.95 each, and a cookbook for \$12. Make a list of the items she can purchase with her gift certificate. Explain your thinking.

Copyright © Kendall Hunt Publishing Company

TG • Grade 5 • Unit 1 • Home Practice 5

**Part 5. Problem Solving (TG p. 5)  
Questions 1–4**

1. 4 cookies each with 4 cookies left over or  $4\frac{1}{2}$  cookies each.
2. \$39.75
3. \$89.00 per night
4. Answers will vary. One possible purchase is a comforter and two pillows. The comforter is almost \$50, and the pillows are just under \$25. So,  $50 + 25 + 25 = 100$ . The actual cost will be less than \$100.