Name _____ Class _____ Date _____

Puzzle 1-5

Understanding Decimals

Making the Rounds

The following numbers round to the same number. In the blank, write the number to which they round.

1. _____ 4.65 4.74

2. _____ 3.45 3.54

3. _____ 15.945 15.954

The following numbers are rounded to the nearest **tenth**. Write lesser and greater numbers that would round to the given number.

4. _____ 0.8 _____

5. _____ 0.1 _____

6. _____ 13.2 _____

The following numbers are rounded to the nearest **hundredth**. Write lesser and greater numbers that would round to the given number.

7. _____ 6.17 _____

8. _____ 0.34 _____

9. _____ 17.06 _____

The following numbers are rounded to the nearest **thousandth**. Write lesser and greater numbers that would round to the given number.

10. _____ 45.018 _____

11. _____ 9.001 _____

12. _____ 0.035 _____

Name _____ Class _____ Date _____

Practice 1-6

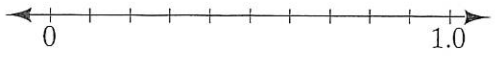
Comparing and Ordering Decimals

Use <, =, or > to complete each statement.

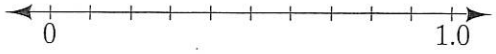
1. 0.62 ☐ 0.618
2. 9.8 ☐ 9.80
3. 1.006 ☐ 1.02
4. 41.3 ☐ 41.03
5. 2.01 ☐ 2.011
6. 1.400 ☐ 1.40
7. 5.079 ☐ 5.08
8. 12.96 ☐ 12.967

Order each set of decimals on a number line.

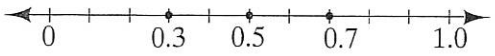
9. 0.2, 0.6, 0.5



10. 0.26, 0.3, 0.5, 0.59, 0.7



11. Three points are graphed on the number line below. Write statements comparing 0.3 to 0.5 and 0.5 to 0.7.



_____

12. Draw a number line. Use 11 tick marks. Label the first tick mark 0.6 and the eleventh tick mark 0.7. Graph 0.67 and 0.675.

    a. Which is greater, 0.67 or 0.675?

    _____

    b. How does the number line show which number is greater?

    _____

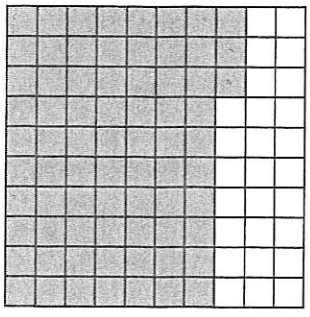
13. Models for three decimals are shown below.

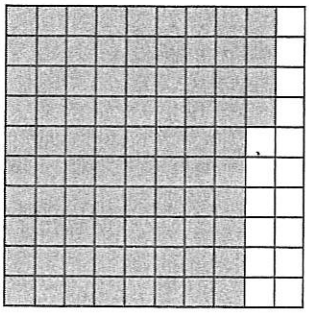
    a. Write the decimal that each model represents.

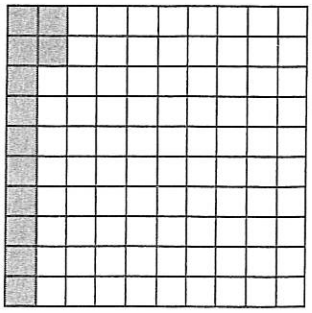
    _____

    b. Order the decimals from least to greatest.

    _____







Name _____ Class _____ Date _____

1-6 • Guided Problem Solving

GPS Student Page 30, Exercise 27:

Population About 11.4 million people live in Jakarta, Indonesia. Roughly 13.0 million people live in Delhi, India. About 10.4 million people live in Karachi, Pakistan. Order the cities from least to greatest population.

Understand

1. How many cities are discussed in the problem? _____
2. What are you asked to do?

   _____
3. Circle the populations that you need to order.

Plan and Carry Out

4. Use placeholders to write the three numbers with the same number of decimal places.

   _____
5. Which number is the least?

   _____
6. Which number is the greatest?

   _____
7. Write the numbers in order from least to greatest.

   _____
8. Order the cities from least to greatest population.

   _____

   _____

Check

9. Do the least and middle populations have smaller decimal values than the greatest number?

   _____

Solve Another Problem

10. Jessie ran 3 miles in 20.53 minutes. Anne ran the same distance in 20.02 minutes. Kara ran the same distance in 20.96 minutes. Order the runners from fastest to slowest.

    _____

Name _____ Class _____ Date _____

Practice 1-6

Comparing and Ordering Decimals

Use <, =, or > to complete each statement.

1. 0.62 ☐ 0.618
2. 9.8 ☐ 9.80
3. 1.006 ☐ 1.02
4. 41.3 ☐ 41.03
5. 2.01 ☐ 2.011
6. 1.400 ☐ 1.40
7. 5.079 ☐ 5.08
8. 12.96 ☐ 12.967
9. 15.8 ☐ 15.800

Order each set of decimals on a number line.

10. 0.2, 0.6, 0.5

11. 0.26, 0.3, 0.5

12. Draw a number line. Use 11 tick marks. Label the first tick mark 0.6 and the eleventh tick mark 0.7. Graph 0.67 and 0.675.

    a. Which is greater, 0.67 or 0.675? _____

    b. How does the number line show which number is greater?

    _____

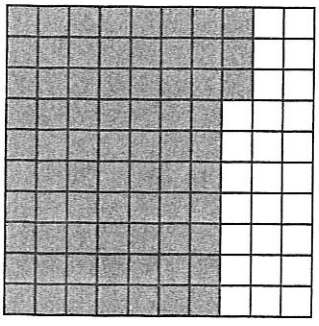
13. Models for three decimals are shown below.

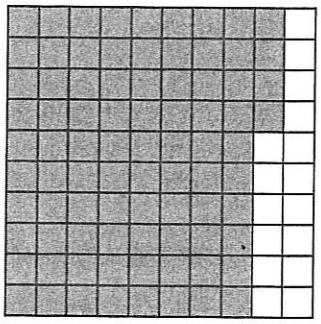
    a. Write the decimal that each model represents.

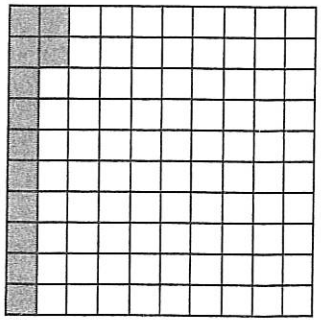
    _____

    b. Order the decimals from least to greatest.

    _____







Name _____ Class _____ Date _____

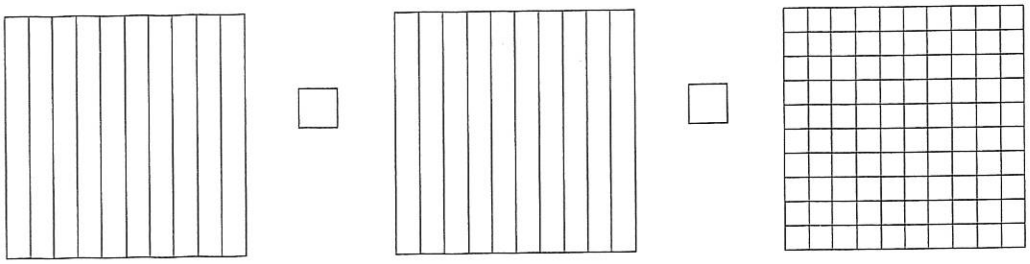
Enrichment 1-6

Comparing and Ordering Decimals

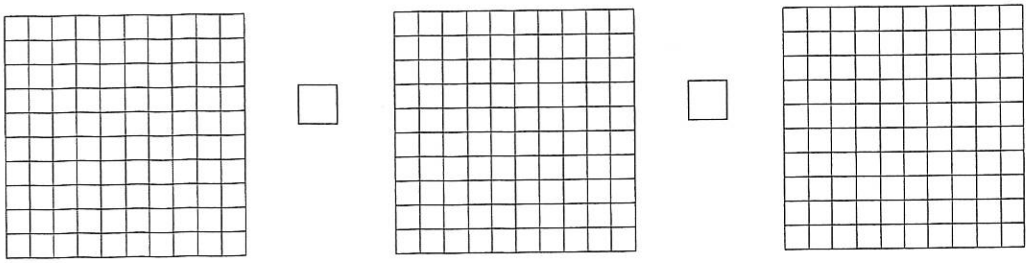
Drawing Models

Draw models to represent each decimal. Then use <, =, or > to compare values.

1. 0.7 0.5 0.50



2. 0.62 0.26 0.60



3. Order all of the decimals modeled in Exercises 1–2 from least to greatest.

_____

4. The United States won the Olympic women's 100-meter run in all the years listed in the table.

Year	Time(s)
1984	10.97
1988	10.54
1992	10.82
1996	10.94
2000	10.75

   a. Order the times from least to greatest.

   _____

   b. Which year had the fastest time?

   _____

   c. One of the athletes who competed in the 1996 Olympics predicted that she could beat the time set in the previous Olympics by 0.5 second. Did the athlete predict correctly? Explain.

   _____

   _____

   _____

Division (A)

Find each quotient.

$4\overline{)236}$	$5\overline{)165}$	$7\overline{)518}$	$6\overline{)516}$	$8\overline{)448}$
$8\overline{)720}$	$8\overline{)304}$	$9\overline{)774}$	$3\overline{)162}$	$5\overline{)285}$
$4\overline{)244}$	$9\overline{)765}$	$8\overline{)480}$	$8\overline{)192}$	$2\overline{)76}$
$6\overline{)312}$	$8\overline{)544}$	$5\overline{)50}$	$7\overline{)427}$	$4\overline{)108}$

Subtracting 2-Digit Numbers (H)

Name: _____ Date: _____

Calculate each difference.

83 − 63	17 − 11	88 − 79	86 − 18	86 − 72
77 − 55	33 − 33	52 − 36	46 − 34	75 − 17
67 − 55	33 − 27	35 − 19	58 − 36	96 − 37
33 − 31	57 − 42	76 − 21	92 − 13	65 − 16
78 − 17	83 − 82	94 − 30	83 − 70	41 − 32

Multiplication Facts (H)

Find each product.

$6 \times 1 =$	$7 \times 6 =$	$11 \times 6 =$	$6 \times 10 =$
$6 \times 5 =$	$6 \times 3 =$	$0 \times 6 =$	$8 \times 6 =$
$6 \times 9 =$	$6 \times 12 =$	$4 \times 6 =$	$6 \times 6 =$
$2 \times 6 =$	$6 \times 6 =$	$6 \times 6 =$	$4 \times 6 =$
$8 \times 6 =$	$1 \times 6 =$	$7 \times 6 =$	$9 \times 6 =$
$10 \times 6 =$	$6 \times 12 =$	$2 \times 6 =$	$6 \times 5 =$
$6 \times 3 =$	$6 \times 0 =$	$6 \times 0 =$	$4 \times 6 =$
$1 \times 6 =$	$6 \times 2 =$	$6 \times 9 =$	$6 \times 12 =$
$6 \times 5 =$	$10 \times 6 =$	$6 \times 6 =$	$11 \times 6 =$
$7 \times 6 =$	$6 \times 3 =$	$8 \times 6 =$	$6 \times 3 =$
$6 \times 0 =$	$6 \times 4 =$	$2 \times 6 =$	$6 \times 10 =$
$6 \times 6 =$	$1 \times 6 =$	$6 \times 8 =$	$6 \times 9 =$
$6 \times 5 =$	$12 \times 6 =$	$6 \times 11 =$	$6 \times 7 =$
$10 \times 6 =$	$3 \times 6 =$	$6 \times 2 =$	$8 \times 6 =$
$6 \times 9 =$	$5 \times 6 =$	$6 \times 6 =$	$6 \times 0 =$
$12 \times 6 =$	$6 \times 4 =$	$6 \times 1 =$	$7 \times 6 =$
$11 \times 6 =$	$6 \times 3 =$	$6 \times 3 =$	$6 \times 5 =$
$6 \times 11 =$	$8 \times 6 =$	$6 \times 1 =$	$6 \times 4 =$
$6 \times 2 =$	$10 \times 6 =$	$6 \times 7 =$	$12 \times 6 =$
$6 \times 0 =$	$9 \times 6 =$	$7 \times 6 =$	$6 \times 6 =$
$6 \times 10 =$	$6 \times 11 =$	$3 \times 6 =$	$12 \times 6 =$
$6 \times 4 =$	$0 \times 6 =$	$6 \times 8 =$	$5 \times 6 =$
$1 \times 6 =$	$2 \times 6 =$	$9 \times 6 =$	$6 \times 1 =$
$6 \times 12 =$	$8 \times 6 =$	$0 \times 6 =$	$7 \times 6 =$
$10 \times 6 =$	$6 \times 11 =$	$3 \times 6 =$	$6 \times 2 =$

Adding 2-Digit Numbers (H)

Name: _____ Date: _____

Calculate each sum.

41 + 29	45 + 67	26 + 19	65 + 76	62 + 88
33 + 96	78 + 67	89 + 73	12 + 12	86 + 13
17 + 56	21 + 43	88 + 47	56 + 67	63 + 78
39 + 21	88 + 73	68 + 98	75 + 19	88 + 83
23 + 97	10 + 11	42 + 77	55 + 46	39 + 50

Name _____ Class _____ Date _____

Skills Worksheet

Chapter Review

USING KEY TERMS

The statements below are false. For each statement, replace the underlined term to make a true statement.

1. A liquid mixture of complex hydrocarbon compounds is called natural gas.

_____

2. Energy that is released when a chemical compound reacts to produce a new compound is called nuclear energy.

_____

For each pair of terms, explain how the meanings of the terms differ.

3. *solar energy* and *wind power*

_____

_____

4. *biomass* and *gasohol*

_____

_____

UNDERSTANDING KEY IDEAS

Multiple Choice

_____ **5.** Which of the following resources is a renewable resource?
- **a.** coal
- **b.** trees
- **c.** oil
- **d.** natural gas

_____ **6.** Which of the following fuels is NOT made from petroleum?
- **a.** jet fuel
- **b.** lignite
- **c.** kerosene
- **d.** fuel oil

_____ **7.** Peat, lignite, and anthracite are all forms of
- **a.** petroleum.
- **b.** natural gas.
- **c.** coal.
- **d.** gasohol.

_____ **8.** Which of the following factors contributes to smog?
- **a.** automobiles
- **b.** sunlight
- **c.** mountains surrounding urban areas
- **d.** All of the above

_____ **9.** Which of the following resources is produced by fusion?
- **a.** solar energy
- **b.** natural gas
- **c.** nuclear energy
- **d.** petroleum

_____ **10.** To produce energy, nuclear power plants use a process called
- **a.** fission.
- **b.** fusion.
- **c.** fractionation.
- **d.** None of the above

_____ **11.** A solar-powered calculator uses
- **a.** solar collectors.
- **b.** solar panels.
- **c.** solar mirrors.
- **d.** solar cells.

Short Answer

12. How does acid precipitation form?

13. If sunlight is free, why is electrical energy from solar cells expensive?

14. Describe three ways that humans use natural resources.

15. Explain how fossil fuels are found and obtained.

CRITICAL THINKING

16. Concept Mapping Use the following terms to create a concept map: *fossil fuels*, *wind energy*, *energy resources*, *biomass*, *renewable resources*, *solar energy*, *nonrenewable resources*, *natural gas*, *gasohol*, *coal*, and *oil*.

17. Predicting Consequences How would your life be different if fossil fuels were less widely available?

18. Evaluating Assumptions Are fossil fuels nonrenewable? Explain.

19. Evaluating Assumptions Why do we need to conserve renewable resources even though they can be replaced?

20. Evaluating Data What might limit the productivity of a geothermal power plant?

21. Identifying Relationships Explain why the energy we get from many of our resources ultimately comes from the sun.

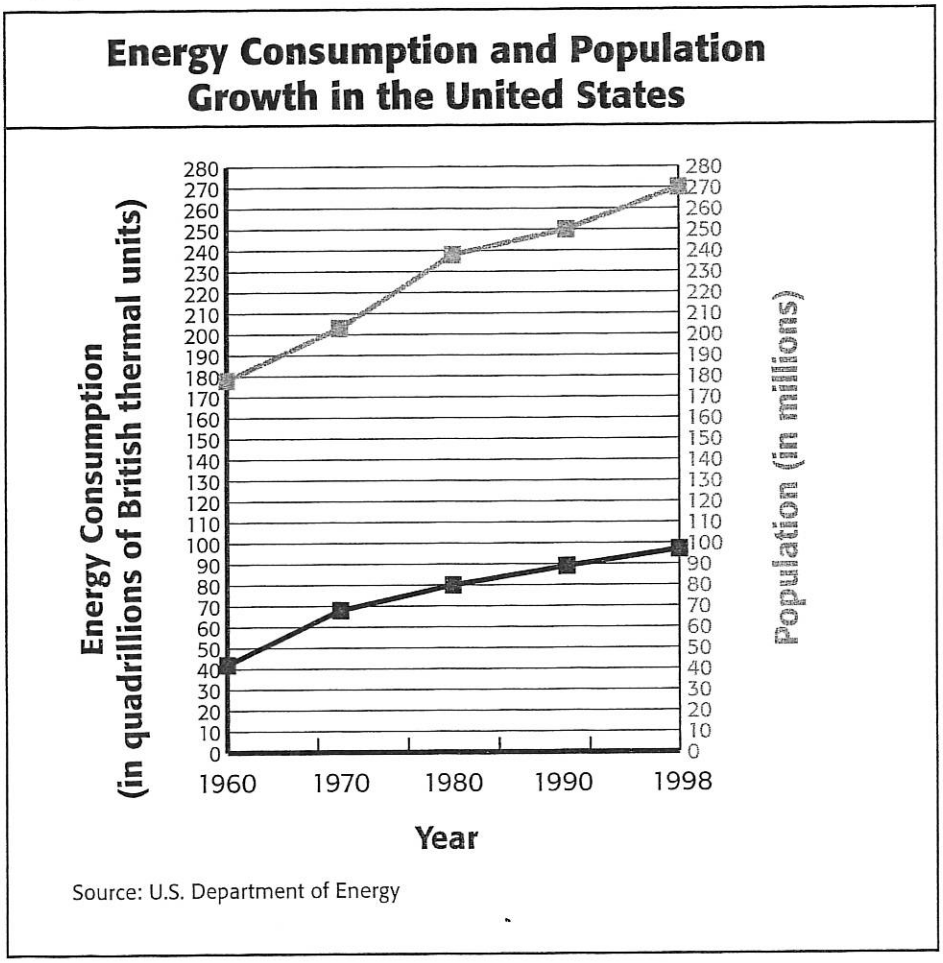
22. Applying Concepts Describe the different ways you can conserve natural resources at home.

23. Identifying Relationships Explain why coal usually forms in different locations from where petroleum and natural gas form.

24. Applying Concepts Choose an alternative energy resource that you think should be developed more. Explain the reason for your choice.

INTERPRETING GRAPHICS

Use the graph below to answer the questions that follow.



25. How many British thermal units were consumed in 1970?

_____

26. In what year was the most energy consumed?

_____

27. Why do you think that energy consumption has not increased at the same rate as the population has increased?

_____

_____

_____

_____