Name $\qquad$ Date $\qquad$


1. Shade the first 7 units of the tape diagram. Count by tenths to label the number line using a decimal for each point.
Circle the decimal that represents the shaded part.

2. Write the total amount of water in fraction form and decimal form.

3. Write the total weight of the food on each scale in fraction form

4. Write the length of the bug in centimeters. (Drawing is not to scale.)


Fraction form: $\qquad$ cm

Decimal form: $\qquad$ cm

How far does the bug need to walk to put its nose is at the 1 cm mark? $\qquad$ cm
5. Fill in the blank to make the sentence true in both fraction form and decimal form.
a. $\frac{8}{10} \mathrm{~cm}+$ $\qquad$ $\mathrm{cm}=1 \mathrm{~cm}$
$0.8 \mathrm{~cm}+$ $\qquad$ $\mathrm{cm}=1.0 \mathrm{~cm}$
b. $\frac{2}{10} \mathrm{~cm}+$ $\qquad$ $\mathrm{cm}=1 \mathrm{~cm}$ $0.2 \mathrm{~cm}+\ldots \ldots \mathrm{cm}=1.0 \mathrm{~cm}$
C. $\frac{6}{10} \mathrm{~cm}+$ $\qquad$ $\mathrm{cm}=1 \mathrm{~cm}$
$0.6 \mathrm{~cm}+$ $\qquad$ $\mathrm{cm}=1.0 \mathrm{~cm}$
6. Match each amount expressed in unit form to its equivalent fraction and decimal forms.


Name $\qquad$ Date $\qquad$

1. Write each decimal as a mixed number.

Put an arrow where the number is found on the ruler.
(The centimeter ruler is not to scale.)
a. $2.6 \mathrm{~cm}=$ $\qquad$

b. $3.4 \mathrm{~cm}=$ $\qquad$

c. $3.7 \mathrm{~cm}=$ $\qquad$

d. $4.2 \mathrm{~cm}=$ $\qquad$

e. $2.5 \mathrm{~cm}=$ $\qquad$

## 

2. Write the following as equivalent decimals. Then, model and rename the number as shown below.
a. 2 ones and 6 tenths $=$ $\qquad$

b. 3 ones and 2 tenths = $\qquad$

C. $3 \frac{4}{10}=$ $\qquad$
 How much more is needed to get to 3 ? $\qquad$
d. $2 \frac{5}{10}=$ $\qquad$


e. $\frac{37}{10}=$ $\qquad$ How much is needed to get to 4?


Name $\qquad$ Date $\qquad$

1. Circle groups of tenths to make as many ones as possible.

| a. How many tenths in all? <br> There are $\qquad$ tenths. | Write and draw the same number using ones and tenths. <br> Decimal Form: $\qquad$ <br> How much more is needed to get to 3 ? $\qquad$ |
| :---: | :---: |
| b. How many tenths in all? <br> There are $\qquad$ tenths. | Write and draw the same number using ones and tenths. <br> Decimal Form: $\qquad$ <br> How much more is needed to get to 4 ? $\qquad$ |

2. Show the expanded form of the number in fraction form and decimal form.

| a. 4 tens 2 ones 6 tenths | b. 1 ten 7 ones 5 tenths |
| :---: | :--- |
| Fraction Expanded Form | Fraction Expanded Form |
| $(4 \times 10)+(2 \times 1)+\left(6 \times \frac{1}{10}\right)=42 \frac{6}{10}$ |  |
| Decimal Expanded Form | Decimal Expanded Form |
| $(4 \times 10)+(2 \times 1)+(6 \times 0.1)=42.6$ | Fraction Expanded Form |
| c. 2 tens 3 ones 2 tenths |  |
| Fraction Expanded Form |  |

3. Complete the chart.

|  | Point on Number Line | Decimal Form | Mixed <br> Number | Expanded Form (fraction or decimal form) | How much to get to the next one? |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. | $\|$   <br>  $\mid$ $\|l\| l\|l\|$ |  | $3 \frac{9}{10}$ |  | 0.1 |
| b. |  |  |  |  |  |
| c. |  |  |  | $(7 \times 10)+(4 \times 1)+\left(7 \times \frac{1}{10}\right)$ |  |
| d. |  |  | $22 \frac{2}{10}$ |  |  |
| e. |  |  |  | $(8 \times 10)+(8 \times 0.1)$ |  |

$\qquad$ Date $\qquad$


1. a. What is the length of the shaded part of the meter stick in centimeters?

b. What fraction of a meter is 1 centimeter? $\qquad$
c. In fraction form, express the length of the shaded portion of the meter stick.

d. In decimal form, express the length of the shaded portion of the meter stick.
$\qquad$
e. What fraction of a meter is 10 centimeters? $\qquad$
2. Fill in the blanks.
a. 1 tenth $=$
b. $\frac{1}{10} \mathrm{~m}=\frac{?}{100} \mathrm{~m}$
c. $\frac{2}{10} \mathrm{~m}=\frac{20}{?} \mathrm{~m}$
$\qquad$ hundredths

$$
\ldots=? \quad \quad=\text { ? }
$$

3. Use the model to add the shaded parts as shown. Write a number bond with the total written in decimal form and the parts written as fractions.


$$
\frac{1}{10} m+\frac{3}{100} m=\frac{13}{100} m=0.13 m
$$

b.

## 1 meter


$\qquad$ $+$ $\qquad$ = $\qquad$ $=$ $\qquad$
c.

## 1 meter


$\qquad$ $+$ $\qquad$ $=$ $\qquad$ $=$ $\qquad$
4. On each meter stick, shade in the amount shown. Write the equivalent decimal.
a. $\frac{8}{10} \mathrm{~m}=$ $\qquad$

b. $\frac{7}{100} \mathrm{~m}=$ $\qquad$

1 meter
c. $\frac{19}{100} \mathrm{~m}=$

|  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

5. Write each fraction as a decimal.

Write each decimal as a number bond showing tenths and hundredths.
Number Bond
a. $\frac{19}{100} \mathrm{~m}=$ $\qquad$ b. $\frac{28}{100} \mathrm{~m}=$
c. $\frac{77}{100} \mathrm{~m}=$ $\qquad$
d. $\frac{94}{100} \mathrm{~m}=$ $\qquad$

Number Bond

Name $\qquad$ Date $\qquad$


1. Find the equivalent fraction using multiplication or division. Shade the area models to show the equivalency. Record it as a decimal.
a. $\frac{3 \times}{10 \times}=\frac{}{100}$
b. $\quad \frac{50 \div}{100 \div}=\frac{}{10}$

2. Complete the number sentences. Shade the equivalent amount on the area model, drawing horizontal lines to make hundredths.
a. 37 hundredths $=$ $\qquad$ tenths + $\qquad$ hundredths

Fraction form: $\qquad$ Decimal form: $\qquad$

3. Circle hundredths to compose as many tenths as you can. Complete the number sentences. Represent each with a number bond as shown.
a.

b.

$\qquad$ hundredths = $\qquad$ tenths + $\qquad$ hundredths


## Number Bond:

4. Write the equivalent number in decimal, fraction, and unit form.

| a. $\frac{3}{100}=0$. $\qquad$ hundredths | b. $\frac{15}{100}=0$. $\qquad$ <br> tenth $\qquad$ hundredths |
| :---: | :---: |
| c. $-=0.72$ $\qquad$ hundredths | d. $\qquad$ $\qquad$ tenths |

Name $\qquad$ Date $\qquad$


1. Shade the area models to represent the number. Write the number as a decimal.

Estimate to locate the point on the number line
a. $1 \frac{15}{100}=-\longrightarrow$


b. $2 \frac{47}{100}=\ldots . \ldots$|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |


2. Estimate to locate the points on the number lines.
a. $2 \frac{95}{100}$
b. $7 \frac{52}{100}$

3. Write the equivalent fraction and decimal for each of the following numbers.

| a. 1 one 2 hundredths | b. 1 one 17 hundredths |
| :--- | :--- |
| c. 2 ones 8 hundredths | d. 2 ones 27 hundredths |
| e. 4 ones 58 hundredths | f. 7 ones 70 hundredths |

4. Draw lines from dot to dot to match the decimal form to both the unit form and fraction form. All unit forms and fractions have at least one match, and some have more than one match.


Name $\qquad$


1. Write a decimal number sentence to identify the total value of the number disks.
a.


2 tens


5 tenths
0.010 .010

3 hundredths
$\qquad$
b.

$\qquad$
2. Use the place value chart to answer the following questions.

Express the value of the digit in unit form.

| hundreds | tens | ones | tenths | hundredths |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | 1 | 6 | 8 | 3 |

a. The digit $\qquad$ is in the hundreds place. It has a value of $\qquad$ .
b. The digit $\qquad$ is in the tens place. It has a value of $\qquad$ .
c. The digit $\qquad$ is in the tenths place. It has a value of $\qquad$ .
d. The digit $\qquad$ is in the hundredths place. It has a value of $\qquad$ .

| hundreds | tens | ones | tenths | hundredths |
| :---: | :---: | :---: | :---: | :---: |
| 5 | 3 | 2 |  | 1 |
| 6 |  |  |  |  |

e. The digit $\qquad$ is in the hundreds place. It has a value of $\qquad$ .
f. The digit $\qquad$ is in the tens place. It has a value of $\qquad$ .
g. The digit $\qquad$ is in the tenths place. It has a value of $\qquad$ .
h. The digit $\qquad$ is in the hundredths place. It has a value of $\qquad$ .
3. Write each number in expanded form, using both decimal and fraction notation. The first one has been done for you.

| Decimal and <br> Fraction <br> Form | Expanded Form |  |  |
| :--- | :--- | :--- | :---: |
|  | Fraction Notation | Decimal Notation |  |
| $15.43=15 \frac{43}{100}$ | $(1 \times 10)+(5 \times 1)+\left(4 \times \frac{1}{10}\right)+\left(3 \times \frac{1}{100}\right)$ | $(1 \times 10)+(5 \times 1)+(4 \times 0.1)+(3 \times 0.01)$ |  |
| $10+5+\frac{4}{10}+\frac{3}{100}$ | $10+5+0.4+0.03$ |  |  |
| $38.09=$ |  |  |  |
|  |  |  |  |

Name $\qquad$ Date $\qquad$


1. Use the area model to represent $\frac{250}{100}$. Complete the number sentence.
a. $\frac{250}{100}=$ $\qquad$ tenths = $\qquad$ ones $\qquad$ tenths $=$ $\qquad$ . $\qquad$



2. Draw number disks to represent the following decompositions:

2 ones = $\qquad$ tenths

2 tenths = $\qquad$ hundredths

| ones | $\cdot$ | tenths | hundredths |
| :---: | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |


| ones | $\cdot$ | tenths | hundredths |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

1 one 3 tenths = $\qquad$ tenths 2 tenths 3 hundredths $=$ $\qquad$ hundredths

| ones | $\cdot$ | tenths | hundredths |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |


| ones | $\cdot$ | tenths | hundredths |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

3. Decompose the units to represent each number as tenths.
a. $1=$ $\qquad$ tenths
b. $2=$ $\qquad$ tenths
c. $1.7=$ $\qquad$ tenths
d. $2.9=$ $\qquad$ tenths
e. $10.7=$ $\qquad$ tenths
f. $20.9=$ $\qquad$ tenths
4. Decompose the units to represent each number as hundredths.
a. $1=$ $\qquad$ hundredths
b. $2=$
c. $1.7=$ $\qquad$ hundredths
e. $10.7=$ $\qquad$ hundredths
$\qquad$ hundredths
d. $2.9=$ $\qquad$ hundredths
f. $20.9=$ $\qquad$ hundredths
$\qquad$ Date $\qquad$

5. Express the lengths of the shaded parts in decimal form. Write a sentence that compares the two lengths. Use the expression shorter than or longer than.
a.
1 meter


c. List all four of the above lengths from least to greatest.
6. 

a. Examine the mass of each item as shown below on the 1 kilogram scales. Put an $X$ over the items that are heavier than the avocado.

0.2 kg

0.12 kg

0.6 kg

0.61 kg
b. Express the mass of each item on the place value chart.

|  | ones (kilograms) |  | tenths | hundredths |
| :---: | :---: | :---: | :---: | :---: |
| avocado |  |  |  |  |
| apple |  |  |  |  |
| bananas |  |  |  |  |
| potato |  |  |  |  |

c. Complete the statements below using the words heavier than or lighter than.

The avocado is $\qquad$ the apple.

The bunch of bananas is $\qquad$ the potato.
2. Record the volume of water in each cylinder on the place value chart below.


| Cylinders | ones (Liters) | . | tenths | hundredths |
| :---: | :---: | :---: | :---: | :---: |
| A |  |  |  |  |
| B |  |  |  |  |
| C |  |  |  |  |
| D |  |  |  |  |
| E |  |  |  |  |
| F |  |  |  |  |

Compare the values using $>,<$, or $=$.
a. 0.9 L $\qquad$ 0.6 L
b. 0.48 L $\qquad$ 0.6 L
c. 0.3 L $\qquad$ 0.19 L

Name $\qquad$ Date $\qquad$

1. Shade the area models below, decomposing tenths as needed, to represent the pairs of decimal numbers. Fill in the blank with $<,>$, or $=$ to compare the decimal numbers.
a.
0.23
0.4

b. $\quad 0.6$ 0.38

c. 0.09
0.9

d. $\quad 0.70$
0.7

2. Locate and label the points for each of the decimal numbers on the number line. Fill in the blank with $<,>$, or $=$ to compare the decimal numbers.
a. 10.03 $\qquad$ 10.3

b. 12.68 12.8

3. Use the symbols <, >, or = to compare.
a. 3.42 $\qquad$ 3.75
b. 4.21 $\qquad$ 4.12
c. 2.15
3.15
d. 4.04
6.02
e. 12.7 12.70
f. 1.9 $\qquad$ 1.21
4. Use the symbols <, >, or = to compare.
a. 23 tenths $\qquad$ 2.3
b. 1.04 $\qquad$ 1 one and 4 tenths
c. 6.07 $\qquad$ $6 \frac{7}{10}$
d. 0.45 $\qquad$
e. $\frac{127}{100}$
1.72
f. 6 tenths $\qquad$ 66 hundredths

Name $\qquad$ Date $\qquad$
2. 1 penny = \$ $\qquad$ $100 \$=\frac{}{\mathbf{1 0 0}}$ dollar

1. 100 pennies $=\$$ $\qquad$ . . .

$$
1 \phi=\frac{}{\mathbf{1 0 0}} \text { dollar }
$$

3. 6 pennies $=\$$ $\qquad$ $6 \$=\frac{}{\mathbf{1 0 0}}$ dollar
4. 10 pennies $=\$$ $\qquad$ ._-_ $10 \$=\frac{}{\mathbf{1 0 0}}$ dollar
5. 26 pennies $=\$$ $\qquad$ $26 ¢=\frac{}{100}$ dollar


6. 10 dimes $=\$$ $\qquad$ . $\ldots 100 \$=\frac{}{10}$ dollar
7. 1 dime $=\$$ . $10 \$=\frac{}{10}$ dollar
8. 3 dimes $=\$ \ldots$. . $30 \$=\frac{}{10}$ dollar
9. 5 dimes $=\$$ $\qquad$ $50 \$=\frac{}{10}$ dollar
10. 6 dimes $=\$$ $\qquad$ $60 \$=\frac{}{10}$ dollar
11. 4 quarters $=\$$ $\qquad$

$$
100 \Phi=\frac{}{\mathbf{1 0 0}} \text { dollar }
$$

12. 1 quarter $=\$$ $\qquad$ $25 \$=\frac{}{100}$ dollar
13. 2 quarters $=\$$ .

$$
50 \$=\frac{}{\mathbf{1 0 0}} \text { dollar }
$$

14. 3 quarters $=\$$ $\qquad$

$$
75 ¢=\frac{}{\mathbf{1 0 0}} \text { dollar }
$$

Solve. Give the total amount of money in fraction and decimal form.
15. 3 dimes and 8 pennies
16. 8 dimes and 23 pennies
17. 3 quarters, 3 dimes, and 5 pennies
18. 236 cents is what fraction of a dollar?

Name $\qquad$ Date $\qquad$


Use the RDW process to solve. Write your answer as a decimal.

1. Miguel had 1 dollar bill, 2 dimes, and 7 pennies. John had 2 dollar bills, 3 quarters, and 9 pennies. How much money did the two boys have in all?
2. Sue needed 7 dollars 13 cents to buy a book. In her wallet, she found 3 dollar bills, 4 dimes, and 14 pennies. How much more money does Sue need to buy the book?
3. Vanessa has 6 dimes and 2 pennies. Jonah has 1 dollar, 3 dimes, and 5 pennies. Jimmy has 5 dollars and 7 pennies. They want to put their money together to buy a game that cost $\$ 8.00$. Do they have enough money to buy the game? If not, how much more money do they need?
4. A pen costs $\$ 2.29$. A calculator costs 3 times as much as a pen. How much do a pen and a calculator cost together?
