## (6ayd Writing Time in Different Ways page 1 of 2

|  | Word Bank |  |  |
| :---: | :---: | :---: | :---: |
| 1 one | 2 two | 3 three | 4 four |
| 6 six | 7 seven | 8 eight | 9 nine |

1 Write the time shown on each clock with numbers. Write it again with words.

| ex <br> 3:55 <br> three fifty-five | a |  |
| :---: | :---: | :---: |
| b <br> 2:35 two thirty-five | C |  |
| d <br> 1:15 one fifteen | e | $4: 40$ <br> four forty |

2 How many minutes are there in an hour? $\qquad$ 60

Writing Time in Different Ways page 2 of 2

|  | Word Bank |  |
| :---: | :---: | :---: |
| 15 fifteen | 30 thirty | 45 forty-five |
| quarter past | half past | quarter 'til |

3 Write the time shown on each clock with number words. Write it again with time telling words.

| ex <br> four forty-five quarter 'til five | a | six thirty half past six |
| :---: | :---: | :---: |
| b <br> three fifteen quarter past three | C | eight forty-five quarter 'til nine |
| two fifteen quarter past two | e | four forty-five quarter 'til five |

4 ChALLENGE How many minutes are there in the following fractions of an hour?

| $\frac{2}{4}$ of an hour 30 | $\frac{3}{4}$ of an hour 45 | $\frac{1}{3}$ of an hour 20 |
| :---: | :---: | :---: |
| $\frac{1}{6}$ of an hour 10 | $\frac{3}{6}$ of an hour 30 | $\frac{1}{12}$ of an hour $\quad 5$ |
| $\frac{2}{3}$ of an hour 40 | $\frac{5}{12}$ of an hour $\quad 25$ |  |

## Annie's School Day page 1 of 2

1 Annie is a third grader at Bridger School. There are two clocks in her classroom. One is a digital clock, and the other is an analog clock with a regular clock face. Read the clocks below, and write the time to show when the class does different activities through the day.

| a School starts at 8:20 $\qquad$ | b Reading starts at $8: 35$ |
| :---: | :---: |
| C Recess is over at 10:20, but by the time the kids got back to class today, it was $\qquad$ 10:22 . | d On Tuesdays and Thursdays, Annie's class has gym at 11:25, but today they got there a little early, at |
| e Recess starts at 10:00, but Annie's class is sometimes a few minutes late getting out to the playground. Today, they got out at 10:03 | f Lunch starts at 11:50, and then the kids have recess again. Annie and her friends didn't get out to the playground until $\qquad$ 12:17 today. |
| g Annie's teacher always reads a chapter book to the class after lunch recess. It took the kids a few minutes to get settled, so Mr. Willis didn't start reading until 12:36 | h Math always starts at 1:00, but Mr. Willis got finished with the book a couple of minutes early, so the class started math at $\qquad$ 12:58 |

## Annie's School Day page 2 of 2

Show your thinking in numbers, words, or sketches when you solve these problems.
2 Annie measured the cover of her library book using jumbo paperclips. She found that it is 5 paperclips high and $4 \frac{1}{2}$ paperclips wide. A jumbo paperclip is 5 centimeters long.
a How many centimeters high is the cover of Annie's library book?
25 cm
Work will vary.
b How many centimeters wide is the cover of Annie's book?

$$
\begin{gathered}
221 / 2 \mathrm{~cm} \\
\text { Student work will vary. }
\end{gathered}
$$

3 Challenge Annie's reading class begins at $8: 35$ and lasts 1 hour and 45 minutes. What time is her reading class over? Show two different ways to find the answer.
a One way:

> Student responses will vary.
b Another way:

> Student responses will vary.

Annie's reading class is over at $\qquad$ 10:20 .

## Measuring Mass \& Weight page 1 of 2

1 Read the scale. How much does the kitten weigh?


650 g

2 Look at the pan balance scale. What is the mass of the turtle?


126 g

3 The $\qquad$ of the box of crayons is 127 g .


4 Read the scale. How much do the oranges weigh?


5 Look at the pan balance scale. What is the mass of the bag of potatoes in grams? Show your work.

(continued on next page)

NAME

## Measuring Mass \& Weight page 2 of 2

6 What is the total mass of Sarina's lunch, including her lunchbox, if her sandwich is 180 grams, her apple is 125 grams, and her cookies are 35 grams each? The lunch box itself has a mass of 350 grams. Sarina has 4 cookies in her lunch. Show your work.

795 g
Work will vary.

7 Draw the hands on the analog clocks to show the times on the digital clocks for a and $\mathbf{b}$ below. Write the times shown on the analog clocks on the digital clocks for $\mathbf{c}$ and $\mathbf{d}$ below.


8 CHALLENGE: Sarina's piano teacher gave her a large candy bar. One serving has a mass of 39 grams. The candy bar has 2 and $\frac{1}{2}$ servings. What is the mass of the whole candy bar? Show all of your thinking.
97.5 grams

## Metric Measures of Mass \& Liquid Volume page 1 of 2

1 What unit would you use to measure the mass of the following items? Circle the correct answer.
a The mass of an envelope
grams kilograms
b The amount of soda a straw can hold
milliliters liters
C The mass of a ard grader.
grams
kilograms
d The amount of milk in a container at school
milliliters
liters
e The mass of a loaf of bread grams kilograms
f The amount of water used to take a bath milliliters liters
$g$ The amount of milk in a cake recipe

liters
h The amount of gasoline in a car milliliters

i The mass of an apple
grams kilograms
j The amount of cough medicine you take

k The mass of a television
grams
kilograms
(continued on next page)

## Metric Measures of Mass \& Liquid Volume page 2 of 2

## Responses will vary.

2 Go on a scavenger hunt at home. Try to find objects that have a mass of about 1 gram and about 1 kilogram. Record them below.

| 1 gram (g) |  |
| :--- | :--- |
|  |  |
|  |  |
|  |  |

3 Now try to find containers that hold about 1 milliliter and 1 liter. Record them below.

| 1 milliliter (ml) |  |
| :--- | :--- |
|  |  |
|  |  |

4 What object in your home do you think has the most mass?
a About how much mass does it have in kilograms?
b What object in your home probably has the least mass?

5 What container in your home do you think has the largest capacity (holds the most liquid)?
a About how many liters do you think it holds?
b What container in your home probably has the smallest capacity?

## Grasshopper Math page 1 of 2

Grasshoppers are insects that can jump 10 times their height. Help Greg Grasshopper solve the problems below. Use the correct unit in your answer. Use numbers, sketches, or words to show your work.

1 Greg Grasshopper has a mass of 3 grams. He climbs onto a leaf with 9 other grasshoppers that each have a mass of 3 grams. Then 4 grasshoppers jump off of the leaf. What is the total mass of the grasshoppers that are still on the leaf?

18 grams; work will vary.

2 Greg Grasshopper lives in a rectangular garden. One side of the garden is 134 cm long. The other side is 277 cm long. If Greg Grasshopper walks all the way around his garden 2 times, how far has he walked?

$1,644 \mathrm{~cm} ;$
student work will vary.

3 Walking always makes Greg Grasshopper hungry. After he walked around his garden twice, he ate 387 milligrams of grass and 246 milligrams of leaves. How many milligrams did he eat?

633 milligrams; work will vary.

4 Then Greg was tired. He fell asleep for 2 hours. When he woke up, it was $3: 45$. What time did he fall asleep?

He fell asleep at 1:45; work will vary.

## Grasshopper Math page 2 of 2

5 Greg Grasshopper has three cousins: Gary, Grant, and Garth. They all can jump 10 times farther than their length. Figure out how many jumps each cousin needs to make to travel a distance of 9 meters. (Hint: There are 100 centimeters in a meter.) Use numbers, sketches, or words to show your work.
a Gary is 3 centimeters long.

> Work will vary. Example:
> $3 \times 10=30 \mathrm{~cm}$ jump length $9 \mathrm{~m}=900 \mathrm{~cm}$
> $900 \mathrm{~cm} \div 30 \mathrm{~cm} / \mathrm{jump}=30$ jumps

Gary has to make _ 30 jumps to travel a distance of 9 meters.
b Garth is 5 centimeters long.

$$
\begin{gathered}
\text { Work will vary. Example: } \\
5 \times 10=50 \mathrm{~cm} \text { jump length } \\
9 \mathrm{~m}=900 \mathrm{~cm} \\
900 \mathrm{~cm} \div 50 \mathrm{~cm} / \mathrm{jump}=18 \text { jumps }
\end{gathered}
$$

Garth has to make _ 18 jumps to travel a distance of 9 meters.
C Challenge grant is 4 centimeters long.
Work will vary. Example:
$4 \times 10=40 \mathrm{~cm}$ jump length
$9 \mathrm{~m}=900 \mathrm{~cm}$
$900 \mathrm{~cm} \div 40 \mathrm{~cm} / \mathrm{jump}=221 / 2$ jumps

Grant has to make $\qquad$ 23 jumps to travel a distance of 9 meters.

## Sharing Candy Bars \& Measuring page 1 of 2

1 You are sharing a candy bar with friends.
a If you share with one person, there are two of you sharing. How do you write your share? $1 / 2$
b If you share with two people, there are three of you sharing. How do you write your share? 1/3

C Would you have more candy if you share with one person or two people? Explain your answer.

You have more candy when you share with one person.
Student explanations will vary.
2 Circle the appropriate words to fill in the blanks.
a A bowling ball is heavy! I would measure its $\qquad$ with $\qquad$ .
mass length volume liters kilograms grams
b A sun jellyfish is pretty long. I would measure its $\qquad$ with $\qquad$ .
mass length volume
liters kilograms centimeters

C A water bottle doesn't hold much. I would measure its $\qquad$ with $\qquad$ .

d A giraffe is tall. I would measure its $\qquad$ with $\qquad$
mass height volume

e An elephant eats lots! I would measure the $\qquad$ of its food with $\qquad$ .

f An Etruscan shrew is short. I would measure its $\qquad$ with $\qquad$ .


9 An Etruscan shrew is light. I would measure its $\qquad$ with $\qquad$ .
mass length volume grams kilograms meters
h That bucket holds a lot! I would measure its $\qquad$ with $\qquad$ .


## Sharing Candy Bars \& Measuring page 2 of 2

Show all your thinking with numbers, words, or sketches for each of the problems below. Label your answers with the correct units.

3 A bottle of Charlie's favorite brand of orange juice has 7 servings. Each serving is 240 milliliters (ml).
a How many milliliters of orange juice are in the whole bottle?
1,680 milliters; work will vary.
b Is that more or less than 2 liters? (Hint: 1 liter $=1,000$ milliliters)
Less; work will vary.

4 CHALLENGE A box of soup contains 4 servings. Each serving has $4 \frac{1}{2}$ grams of fat and 720 milligrams of sodium.
a If someone was really hungry and ate all 4 servings in the box, how many grams of fat would that person eat?

18 grams; work will vary.
b How many milligrams $(\mathrm{mg})$ of sodium would that person eat? ( 1 gram $=1,000$ milligrams)

2,880 milligrams; work will vary.

C It is recommended that people eat no more than $2,400 \mathrm{mg}$ of sodium in a day. If a person ate a whole box of the soup, would that person take in more or less than $2,400 \mathrm{mg}$ ?

More; work will vary.
d How many milligrams more or less?
480 milligrams more; work will vary.

## Measurement \& Fractions page 1 of 2

1 Circle the appropriate words to fill in the blank.
a A piece of paper is light! I would measure its $\qquad$ with $\qquad$ .
mass length volume
milliliters grams centimeters
b That pencil is short! I would measure its $\qquad$ with $\qquad$
mass length volume
milliliters grams centimeters

C A soda can doesn't hold very much. I would measure its $\qquad$ with $\qquad$ .
mass length volume milliliters grams centimeters

2 Circle your answer.
a Which is longer-half of a day or half of an hour?
b Which is heavier-half of a gram or half of a kilogram?
C Which holds more-half of a milliliter orhalf of a liter?
3 Write the correct symbol: < or $>$ or $=$
$\frac{1}{4}>\frac{1}{10}$

$\frac{1}{4}<1$
4 Choose one pair of fractions from problem 3. Discuss your answer. How do you know that one of the numbers is more than the other?

Student responses will vary.

5 Divide the shape into the number of parts you need, and shade in the fraction $\frac{1}{3}$.


Work will vary. Example above:

## Measurement \& Fractions page 2 of 2

6 My friends and I are sharing a candy bar. I got $\frac{1}{4}$ of the candy bar, and my friend Abby got $\frac{1}{4}$ of it. How much is left? Explain your answer.

There is $1 / 2$ left.
Student explanations will vary.

7 Tam filled his wading pool with 150 liters of water. Then 138 liters splashed out. How many liters are still in the pool? Write and solve an equation to represent the problem.

12 liters

$$
150-138=12
$$

8 A bottle of Lilly's favorite soda contains 590 milliliters of soda, has 260 calories, and 70 grams of carbohydrates. Lilly is going to share the bottle with Maddy, so each will get half the bottle. Show your work. Include the unit of measurement in your answer.

Work will vary.
a How many milliliters of soda will Lilly drink?

$$
295 \mathrm{ml}
$$

b How many calories will Maddy get?

## 130 calories

C How many grams of carbohydrates will each girl get?

$$
35 \mathrm{~g}
$$

Use a separate sheet of paper to show your thinking using words, sketches, or numbers to solve the problems below.

Work will vary.
9 CHALLENGE Chris is looking at a map to see how many miles it is from Golden Valley, where he lives, to Willow Lake, where his grandmother lives. The map uses a scale where $1 \frac{1}{2}$ inches represents 12 miles.
a Chris measured the map distance between the two towns and found that it is 6 inches. How many miles is it from Golden Valley to Willow Lake?

48 miles
b Chris will take the train to Willow Lake. The train goes 60 miles an hour. If Chris takes the 2:20 train, about what time will he get to Willow Lake?

A little bit after 3:00

## Fractions, Fractions \& Fractions page 1 of 2

1 Complete the missing information below by writing in the fraction number or sketching the given fraction on a number line.

| Fraction | Number Line |
| :---: | :---: |
| ex $\frac{1}{3}$ |  |
| a $\frac{1}{4}$ |  |
| b $1 / 2$ |  |
| c $\frac{1}{6}$ |  |
| d $1 / 8$ |  |
| $\text { e } \quad \frac{2}{4}$ |  |
| f $3 / 4$ |  |
| g $\frac{3}{3}$ |  |

(continued on next page)

Fractions, Fractions \& Fractions page 2 of 2
2 Use a < (less than), > (greater than) or = (equal) symbol to compare the following fraction pairs. Show your thinking by placing the fractions on the number line.
Fraction

## Snack Time: Mass, Volume \& Length page 1 of 2

1 Use numbers, words, or sketches to show your thinking for problems $\mathrm{a}, \mathrm{b}$, and c .
Don't forget to include the unit of measurement in your answers.
a Carl ate an apple that had a mass of 184 grams. Then, he ate 196 grams of peanuts. What was the total mass of Carl's snack?

380 grams; work will vary.
b Allegra drank 203 milliliters of water. Then, she drank 157 milliliters of lemonade. How many milliliters of liquid did Allegra drink in all?

$$
360 \text { ml; work will vary. }
$$

C Mr. Alcott's class was eating licorice twists for a special treat. They ate 117 feet of licorice twists. Mrs. Austen's class was also eating licorice twists. They ate 79 feet of licorice twists. How many more feet of licorice twists did Mr. Alcott's class eat?

38 more feet; work will vary.

2 What unit do you use? Circle the unit you would use for each type of measurement.

| Length | liters | kilograms | centimeters |
| :--- | :---: | :---: | :---: |
| Mass | grams | inches | milliliters |
| Volume | milligrams | milliliters | meters |

## Snack Time: Mass, Volume \& Length page 2 of 2

Use numbers, words, or sketches to show your thinking for all these problems. Don't forget to include the unit of measurement in your answers.

3 Mike has a can of potato chips. There are 16 chips in one serving, and one serving has a mass of 28 grams.
a What is the mass of 3 servings?
84 g; work will vary.
b One serving of the potato chips has 150 calories. How many calories are in 3 servings?
450 calories; work will vary.

C One serving of the potato chips has 160 milligrams of sodium. How many milligrams of sodium are in 3 servings?

480 mg; work will vary.

4 One can of potato chips has 5 servings. Each serving has 15 grams of carbohydrates.
a How many grams of carbohydrates are in a whole can of potato chips?
75 g; work will vary.
b challenge how many cans of potato chips are needed for 14 people to each have 3 servings?

9 cans; work will vary.

## Time \& Fraction Review page 1 of 2

1 Fill in the circle next to the time shown on each clock.

b



2 Write the time shown on each clock.
a $\qquad$ :
$\qquad$
b $\qquad$ :

$\qquad$

3 Circle the digital clock that shows the same time as this analog clock.


4 Taylor's mom said he and his brother could go to a movie while she went shopping. She dropped them off at the theater at 1:45 and said she would be back at 4:00 to get them. They had three choices of movies. Which movie could they see and be done by the time their mom came to get them? Show all your work. Hint: Remember that there are 60 minutes in an hour.

| Movie | Start Time | Length <br> (Including Previews) |
| :---: | :---: | :---: |
| Beetle goes to Town | $1: 55$ | 130 minutes |
| Arctic Adventure | $2: 00$ | 125 minutes |
| Rainy Day Dog | $2: 15$ | 100 minutes |

Work will vary.

## Time \& Fraction Review page 2 of 2

5 On each square, fill in a fraction of the square that is less than $\frac{1}{2}$. Then use the symbols $>$, $=$, or $<$ to compare your fraction to $\frac{1}{2}$.


6 On each square, fill in a fraction of the square that is greater than $\frac{1}{2}$. Then use the symbols $>$, $=$, or $<$ to compare your fraction to $\frac{1}{2}$.


7 Write each of the following fractions where they belong on the number line below.

| $\frac{9}{10}$ | $\frac{1}{4}$ | $\frac{2}{5}$ | $\frac{2}{3}$ |
| :--- | :--- | :--- | :--- |



