

Name _____

A Fraction of Time

E 10-1
ESTIMATION

Chore	Amount of Time to Complete
Sweep floor	$\frac{2}{6}$ hr
Fold clothes	$\frac{1}{5}$ hr
Dust	$\frac{4}{6}$ hr
Wash windows	$\frac{5}{8}$ hr
Cut grass	$\frac{2}{3}$ hr
Weed garden	$\frac{3}{4}$ hr
Feed pets	$\frac{1}{8}$ hr

Ken has 1 hr to complete some chores around the house. Estimate to decide whether the 2 chores listed could be completed within 1 hr. Use < or > for each .

- sweep floor and fold clothes hour
- weed garden and wash windows hour
- fold clothes and cut grass hour
- feed pets and fold clothes hour
- cut grass and weed garden hour
- Which combination of 2 chores can be completed in exactly 1 hr?

- If Ken had to feed the pets, what other chore could he do to complete both chores in 1 hr or less?

Name _____

Number Search

E 10-2
NUMBER SENSE

Circle the fraction pairs that have a sum greater than 1. Pairs can be made across or up and down.

1.

$\frac{4}{6}$	$\frac{2}{6}$	$\frac{1}{6}$	$\frac{5}{6}$
$\frac{4}{6}$	$\frac{2}{6}$	$\frac{4}{6}$	$\frac{3}{6}$
$\frac{3}{6}$	$\frac{5}{6}$	$\frac{2}{6}$	$\frac{1}{6}$
$\frac{3}{6}$	$\frac{1}{6}$	$\frac{5}{6}$	$\frac{4}{6}$

2. What is the sum of all the fractions not circled in Exercise 1?

3.

$\frac{1}{8}$	$\frac{4}{8}$	$\frac{7}{8}$	$\frac{2}{8}$
$\frac{3}{8}$	$\frac{5}{8}$	$\frac{3}{8}$	$\frac{1}{8}$
$\frac{6}{8}$	$\frac{1}{8}$	$\frac{4}{8}$	$\frac{5}{8}$
$\frac{5}{8}$	$\frac{2}{8}$	$\frac{6}{8}$	$\frac{2}{8}$

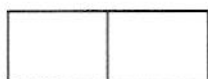
4. What is the sum of all the fractions not circled in Exercise 3?

Name _____

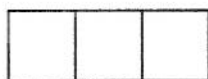
Bar None

E 10-3
REASONING

Mrs. Howard had health bars for her students to eat during their snack time. The bars were each divided into an equal number of parts. Use the pictures of the bars to find how much each student ate.



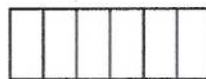
Bar 1



Bar 2



Bar 3



Bar 4



Bar 5

1. Maria ate one piece of Bar 1 and two pieces of Bar 2. Draw a picture that represents what Maria ate.

2. Barb ate one piece of Bar 2 and two pieces of Bar 3. Write an addition sentence to find out how much she ate.

3. Mark ate one piece of Bar 1 and four pieces of Bar 5. Write an addition sentence to find how much he ate.

4. Kerry ate two pieces of Bar 5 and three pieces of Bar 4. Write an addition sentence to find how much she ate.

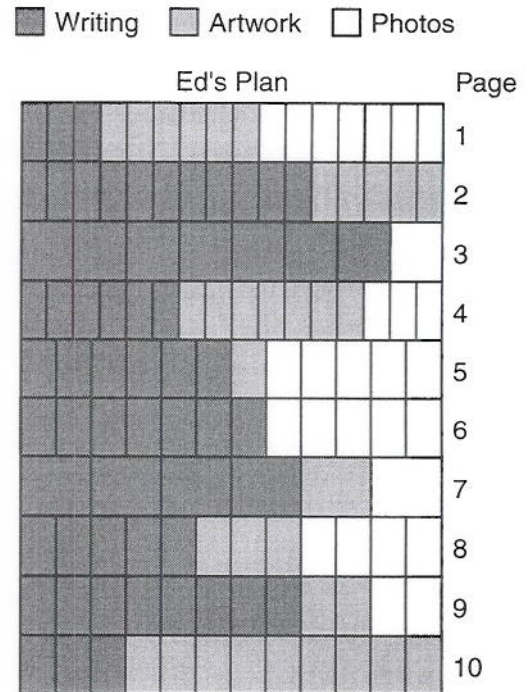
5. How much is left? Explain how you know.

Book Plan

E 10-4
DATA

The students in Mr. Martin's class are writing their autobiographies. The shaded table shows Ed's plan for his story. Complete the fraction chart for Ed's autobiography.

Page	Writing	Artwork	Photos
1.		$\frac{6}{16}$	
2.	$\frac{11}{16}$		
3.			$\frac{1}{8}$
4.	$\frac{6}{16}$		
5.		$\frac{1}{12}$	
6.			$\frac{5}{12}$
7.		$\frac{1}{6}$	
8.			$\frac{4}{12}$
9.		$\frac{2}{12}$	
10.	$\frac{3}{12}$		



11. Ed designed one page by drawing a family tree and including photos of 3 generations of his family. Which page do you think best represents his family tree?

12. Ed designed one page that told the story of his lost pet with a photo of "Dubie." Which page do you think best represents this information?

Name _____

Fraction Subtraction

E 10-5
NUMBER SENSE

Three of the fractions in each of the exercises below make a subtraction sentence. Work from left to right. Write a minus sign and an equal sign between the 3 fractions to make each subtraction sentence. Then circle each completed subtraction sentence. The first one has been done for you.

1. $\frac{1}{2}$ $\frac{3}{4} - \frac{1}{8} = \frac{5}{8}$ $\frac{7}{8}$ $\frac{1}{4}$

2. $\frac{1}{3}$ $\frac{4}{5}$ $\frac{5}{6}$ $\frac{2}{3}$ $\frac{1}{6}$ $\frac{5}{12}$

3. $\frac{7}{10}$ $\frac{3}{5}$ $\frac{5}{6}$ $\frac{4}{5}$ $\frac{1}{2}$ $\frac{3}{10}$

4. $\frac{2}{5}$ $\frac{3}{5}$ $\frac{1}{3}$ $\frac{4}{15}$ $\frac{4}{5}$ $\frac{7}{15}$

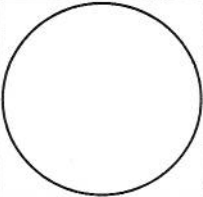
5. $\frac{7}{12}$ $\frac{1}{4}$ $\frac{1}{3}$ $\frac{2}{3}$ $\frac{10}{12}$ $\frac{3}{4}$

6. $\frac{3}{20}$ $\frac{7}{10}$ $\frac{9}{20}$ $\frac{1}{10}$ $\frac{7}{20}$ $\frac{9}{20}$

7. $\frac{1}{6}$ $\frac{6}{7}$ $\frac{1}{2}$ $\frac{5}{14}$ $\frac{3}{7}$ $\frac{5}{14}$

8. $\frac{8}{9}$ $\frac{8}{27}$ $\frac{16}{27}$ $\frac{1}{9}$ $\frac{7}{18}$ $\frac{2}{9}$

9. Subtract across and down to complete the fraction square.

$\frac{7}{8}$	$\frac{1}{4}$	
$\frac{1}{3}$	$\frac{1}{8}$	
		

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Pet Problem

E 10-6
REASONING

Brian, Anna, and Karen each own a pet. Use the facts below to fill in the charts. Write yes or no in the columns as you gather information.

	Color				Pet		
	White	Tan	Brown		Hamster	Cat	Dog
Angie							
Brian							
Karen							

- Angie has a pet that is tan.
- Brian does not have a dog.
- Angie's best friend is Karen.
- Brian lives next door to Angie.
- Angie's best friend's pet is a white hamster.
- Brian's next door neighbor has a dog.
- Someone has a brown cat.

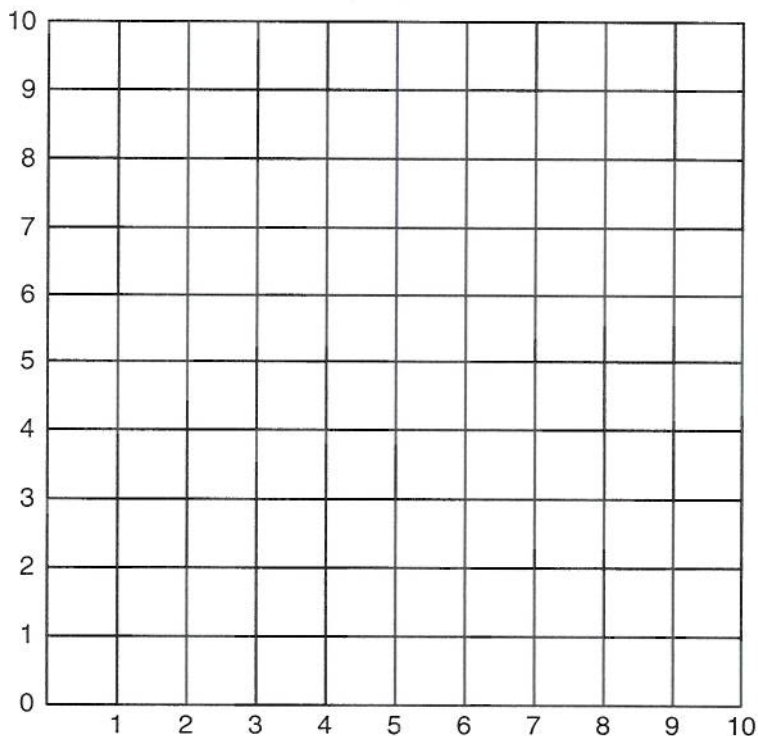
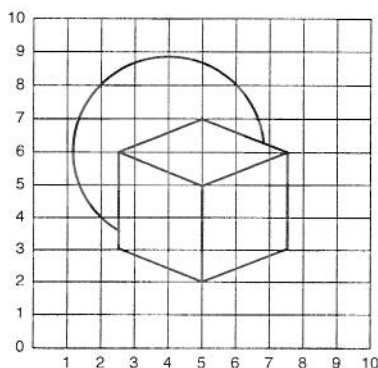
1. What color pet does each child have?

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Proportional Drawing

E 10-7
VISUAL THINKING

Enlarge the picture by using coordinating points. To start, find the points of the corners of the cube on the larger graph and connect the points.



1. What does a side of the small cube measure in inches?

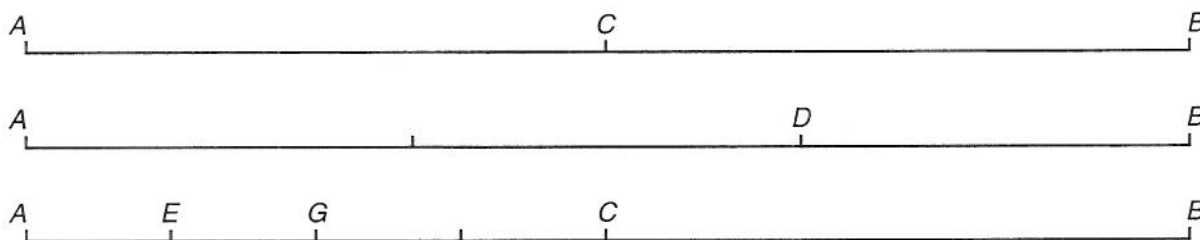
2. What does the side of the larger cube measure in inches?

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A New Measure

E 10-8
NUMBER SENSE

Distance AB is a new measurement called a pflugel.



Write the fractional part of a pflugel.

1. Distance DB _____

2. Distance AE _____

3. Distance EC _____

4. Distance GB _____

5. Distance AG _____

6. What is the total of $AC + DB$? _____

7. $1\frac{1}{4}$ pflugel = $CB + AE +$ _____

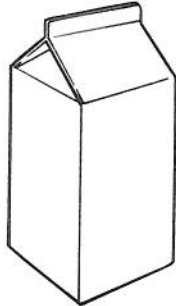
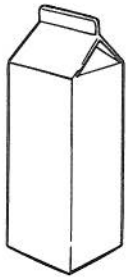
8. $1\frac{1}{2}$ pflugel = $AC + CB + AG +$ _____

Name _____

Label the Containers

E 10-9
REASONABLENESS

Match the six customary measures for capacity with the most reasonable description. Write the letters under the drawing.



- a. testing soup to see if it is too hot
- b. milk for school lunch
- c. measure of nuts for health bar mix
- d. enough milk for family of four for a week
- e. 6 to 8 of these filled with water a day for good health
- f. enough milk for breakfast cereal for one day for your family
- g. container of dog food for a week
- h. enough fruit preserves to put on toast

Name _____

A Day in the Park

E 10-10
DATA

James, Mary, Chris, and Brooke want to see who lives the closest to the park. Use the information below to make a bar graph. Then use the graph to answer the questions.

- a. Mary lives 6 blocks from the park.
- b. Chris lives 3 blocks closer to the park than Mary does.
- c. Brooke lives 5 blocks farther from the park than Chris.
- d. James lives half as far from the park as Brooke does.

1. Who lives the closest to the park?

2. Who lives farthest from the park?

3. Who lives twice as far from the park as Chris?

Name _____

Can you Substitute?

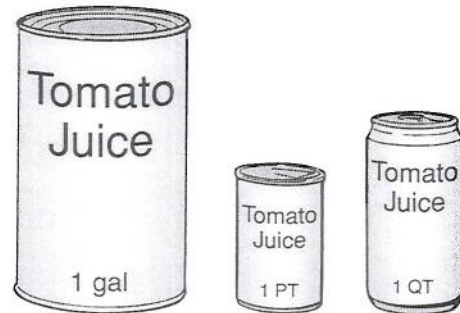
E 10-11
NUMBER SENSE

Janice is at the grocery store buying items to do her cooking for the week.

1. Janice needs 1 pt of sour cream. Which container should she buy, and how many of them does she need to purchase?



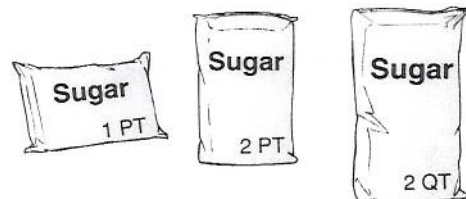
2. Janice needs 16 oz of tomato juice. Which container should she buy, and how many of them does she need to purchase?



3. Janice needs 4 c of skim milk. Which container should she buy, and how many of them does she need to purchase?



4. Janice needs 32 oz of sugar. Which container should she buy, and how many of them does she need to purchase?



Name _____

Find a Pair

E 10-12
NUMBER SENSE

The following list has six pairs of partial products that can be combined to form one multiplication problem. For example, **a** and **j** can be combined to make one problem as follows:

$$\begin{array}{r} \mathbf{j.} \quad + \quad \mathbf{a.} \\ (12 \times 40) + (12 \times 3) = \\ 12 \times (40 + 3) = \\ 12 \times 43 \end{array}$$

Match the five remaining pairs. List each pair and combine the pairs into a single problem as shown above.

- | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|
| a. 12×3 | b. 72×10 | c. 47×2 | d. 39×20 |
| e. 97×50 | f. 61×10 | g. 47×30 | h. 39×4 |
| i. 72×6 | j. 12×40 | k. 97×2 | l. 61×5 |

1. _____

2. _____

3. _____

4. _____

5. _____

Name _____

Who Has What?

E 10-13
REASONING

1. Ken, Paul, and Karen each have \$0.50. Ken has 6 coins, Paul also has 6 coins but not the same coins as Ken, and Karen has 7 coins. What coins does each one have?

2. Ken, Paul, and Karen each have \$0.75. Ken has 7 coins, Paul also has 7 coins but not the same coins as Ken, and Karen has 8 coins. What coins does each one have?

3. Ken, Paul, and Karen each have \$1.35. Ken has 11 coins, Paul has 10 coins, and Karen has 8 coins. What coins does each one have?

4. John buys a toy that costs \$4.49. He gives the clerk \$5.00. He gets 3 coins in change. What coins does he receive?

5. Hank buys a new CD for \$9.99 and a pack of batteries for \$5.39. He gives the clerk \$20.00. He receives 4 bills and 9 coins in change. What bills and coins does he receive?
