

LETTER HOME

Sampling and Classifying

Dear Family Member:

Your child will be using a curriculum called *Math Trailblazers*®. It is based on two foundational ideas: the scientific investigation of everyday situations is an ideal setting for learning mathematics, and all students deserve a rich and challenging curriculum.

Throughout the year, we will create a mathematics classroom where students work together on challenging tasks and discuss ideas with their peers, teacher, and family. At times, I will ask you to participate by sending small items to school, playing a math game, or helping with homework assignments.

We begin the year by taking samples of populations. These samples will help us make predictions about the population. Throughout this investigation, your child will collect and organize data and make and interpret bar graphs. Other activities involve writing and understanding number sentences, estimating, practicing addition and subtraction facts, and learning to work cooperatively and productively with classmates.

Use the following activities to help your child at home:

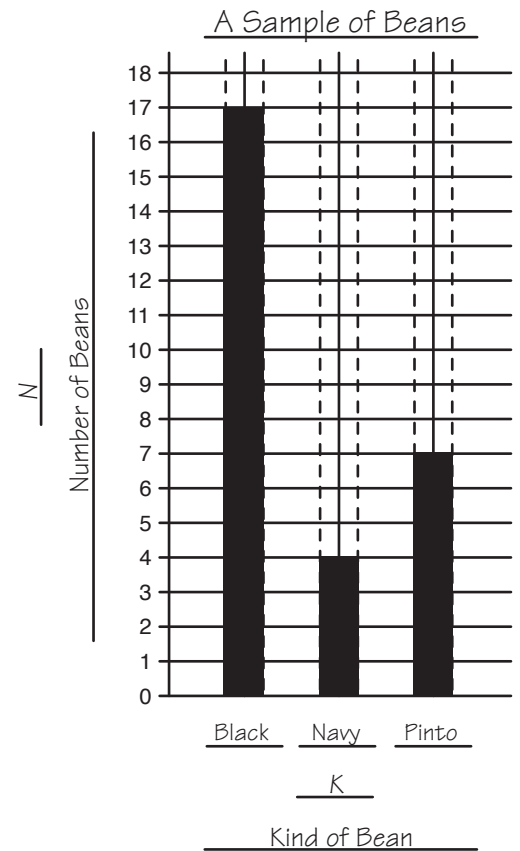
Show Sums on Number Lines. Ask your child how to play Number Line Target. The goal is to be the player to choose a number that lands on or passes the target number when added to the sum of all numbers chosen. Directions are in the *Student Activity Book*.

Graphs and Tables. Invite your child to look for graphs and tables in printed material such as newspapers, magazines, and books. Discuss the graphs with your child. You might ask questions like:

- What information does the graph show?
- Does anything surprise you about the graph?
- What else would you like to know based on what you see?
- How many more [pinto beans] are there than [navy beans]?
- How many [beans] were counted altogether?
- If the population was two times larger, which [beans] would be most common?

Sample Populations. Encourage your child to talk about the *Kind of Bean Lab*. Ask what your child was investigating, how he or she went about it, and what your child found out.

Predictions from Data. Point out instances where people have made predictions based upon sample data such as public opinion polls or scientific studies.



Math Facts and Mental Math

In this unit, students review the addition facts and are assessed for proficiency. This review helps prepare students to develop strategies for the subtraction facts that start in Unit 2. Help your child by using the activities below.

Addition Facts. Students have been developing strategies for solving the addition facts since their early years and are fairly close to gaining or have gained fluency. In Unit 2, students will use their addition facts to develop strategies and fluency with the related subtraction facts. The addition facts are sorted into groups by strategy. See Figure 1.

Group	Addition Facts	Strategy Used
A	$0 + 1, 1 + 1, 2 + 1, 3 + 1, 0 + 2, 2 + 2, 3 + 2, 4 + 2$	Counting and Zero
B	$3 + 0, 4 + 0, 4 + 1, 5 + 1, 6 + 1, 5 + 2, 6 + 2, 5 + 3, 7 + 1, 1 + 8$	Counting and Zero
C	$1 + 9, 2 + 7, 2 + 8, 2 + 9, 3 + 6, 3 + 7, 3 + 8, 4 + 6, 4 + 7, 5 + 5, 5 + 6$	Making Tens
D	$3 + 3, 3 + 4, 4 + 4, 4 + 5, 6 + 6, 6 + 7, 7 + 7, 7 + 8, 8 + 8, 10 + 9, 10 + 10$	Using Doubles
E	$5 + 7, 8 + 4, 8 + 5, 9 + 3, 9 + 4, 9 + 5, 10 + 1, 10 + 2, 10 + 3$	Using Tens
F	$8 + 6, 9 + 6, 9 + 7, 10 + 4, 10 + 5, 10 + 6, 10 + 7, 10 + 8, 9 + 8, 9 + 9$	Using Tens

Figure 1: Addition Facts Groups as reviewed in Grade 2

You can help your child review these facts using the flash cards that are sent home or by making a set of flash cards from index cards or scrap paper. Study the facts in small groups each night. As your child goes through the flash cards, put the cards in three stacks: Facts I Know Quickly, Facts I Can Figure Out, and Facts I Need to Learn.

For Facts I Need to Learn, work on strategies for figuring them out.

For Facts I Can Figure Out, use the flash cards to practice the facts for fluency.

For Facts I Know Quickly, help your child use strategies to solve problems like these using mental math:

Adding 10s and 100s: $700 + 500, 110 + 20, 130 + 80$

Two-digit plus one-digit problems: $27 + 5$ (practices $7 + 5$), $31 + 2$ (practices $1 + 2$),
 $43 + 8$ (practices $3 + 8$)

Thank you for taking time to talk with your child about what he or she is doing in math. I look forward to working with you and your child during this school year. Please feel free to contact me with any questions, concerns, or comments.

Sincerely,

Unit 1: Home Practice

Part 1 Addition and Subtraction Facts Practice

- A. $4 + 7 = \underline{\quad}$ 2. A. $10 - 4 = \underline{\quad}$

B. $5 + 9 = \underline{\quad}$ B. $15 - 10 = \underline{\quad}$

C. $8 + 2 + 4 = \underline{\quad}$ C. $15 - 9 = \underline{\quad}$
3. Carl dropped thirty-three pennies. Some pennies rolled under the refrigerator. He picked up seventeen pennies. How many pennies rolled under the refrigerator? Explain how you decided.

Part 2 Addition and Subtraction

- A. $12 - 6 = \underline{\quad}$ 2. A. $4 + 6 + 8 = \underline{\quad}$

B. $14 - 10 = \underline{\quad}$ B. $9 + 1 + 8 = \underline{\quad}$

C. $14 - 5 = \underline{\quad}$ C. $17 + 3 + 5 = \underline{\quad}$
3. Tina bought a folder for 67¢. She gave the clerk one dollar.
 - A. How much change should she get back? Explain how you decided.
 - B. What coins might the cashier give her?

Part 3 Writing Number Sentences

Jerome’s aunt just turned 25 years old. Jerome wrote the following number sentences to show how 25 can be broken into parts.

$20 + 5 = 25$

$10 + 3 + 2 + 10 = 25$

Write five more number sentences that show 25 broken into parts.

A. _____

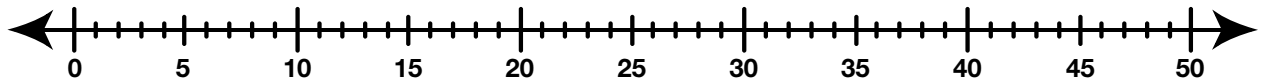
B. _____

C. _____

D. _____

E. _____

Part 4 Using a Number Line

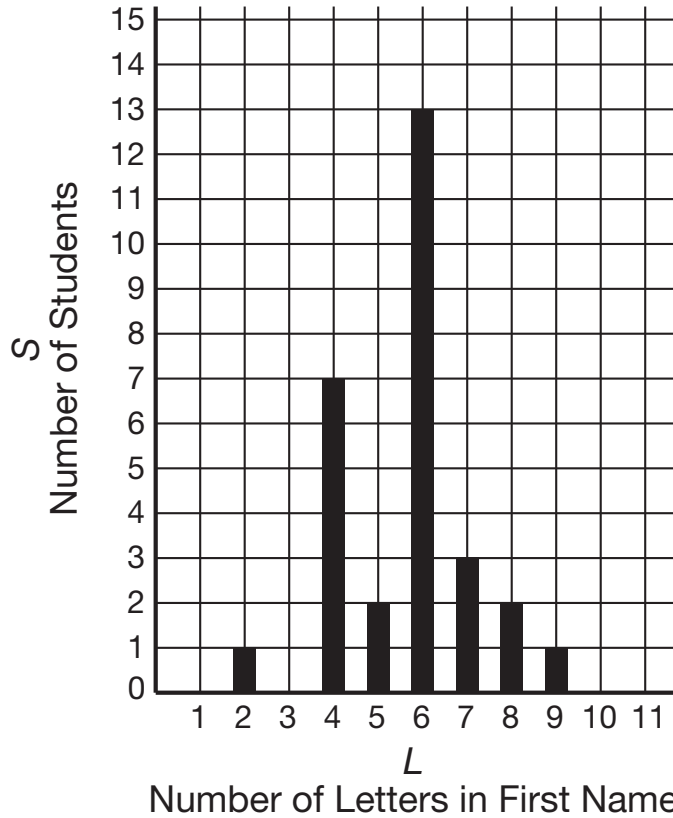


Use the number line to help you solve the problems.

- A. 25 is 10 more than _____
- B. $10 + \underline{\hspace{1cm}} = 25$
- C. 25 is 10 less than _____
- D. 25 is 6 less than _____
- E. 25 is half of _____
- F. 25 is about twice _____
- G. 25 is 9 less than _____
- H. 25 is 9 more than _____

Lisa's Class Graph

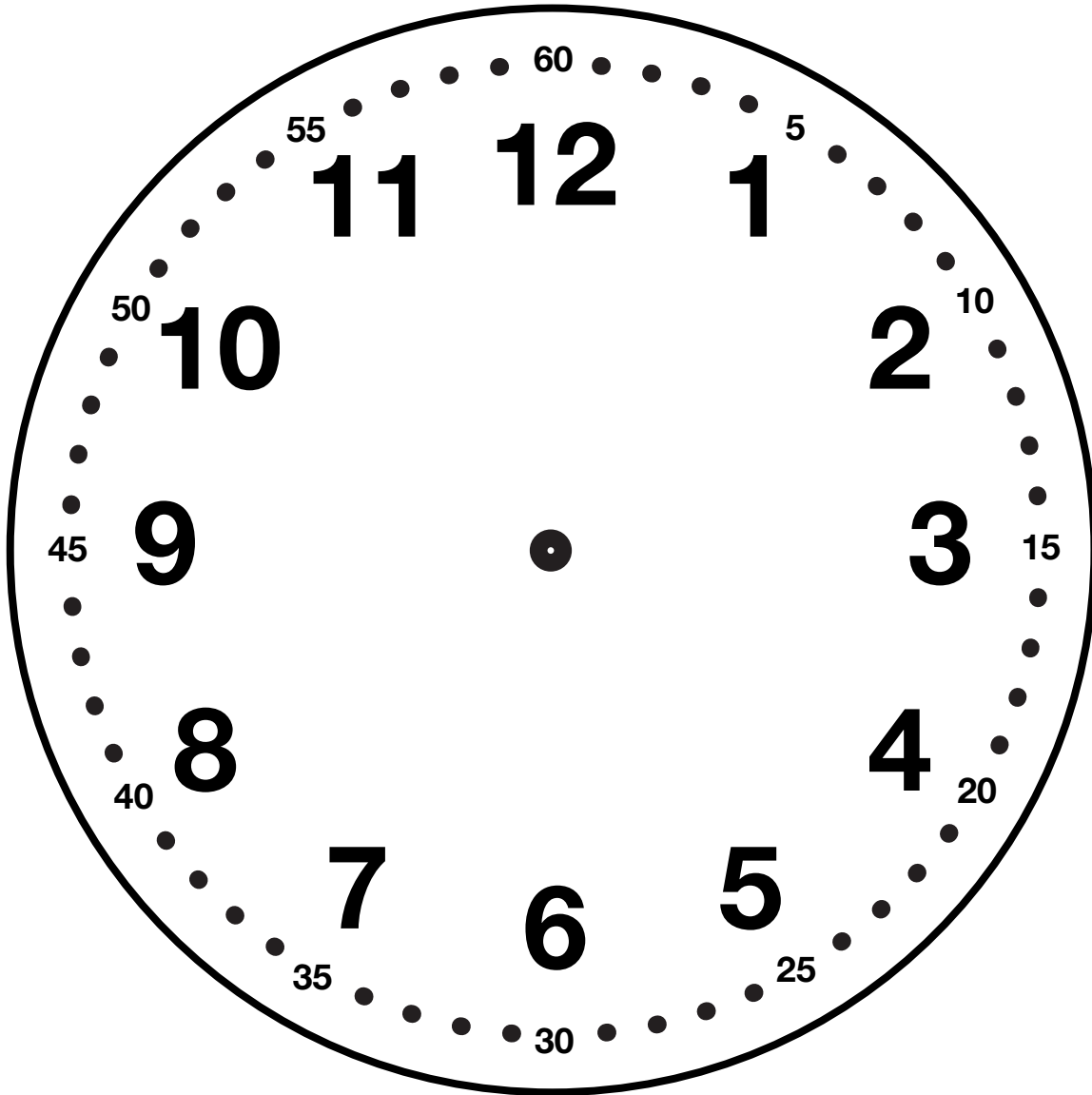
Use the data in the table to answer the questions below.



1. Ed looked at Lisa's graph. He said, "I am the only one with two letters in my first name." Show or tell how Ed knows this from the graph.

2. How many students in Lisa's class have four letters in their first names?

Clock



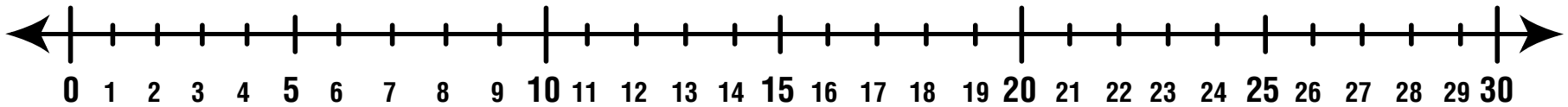
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Name _____ Date _____

Number Line Target Game Boards

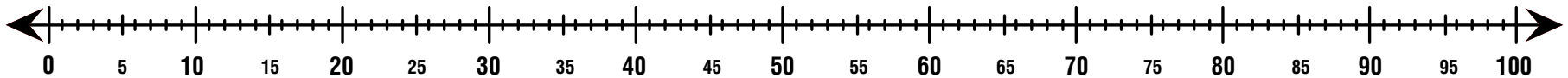
Game Board 1

0	1	2	3	4	5	6	7	8	9
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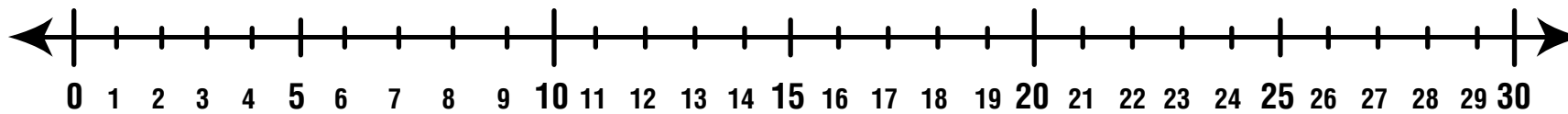
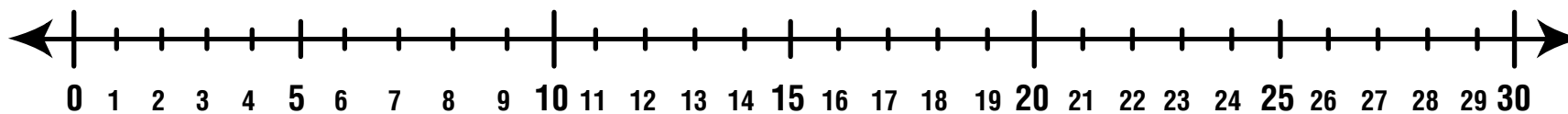
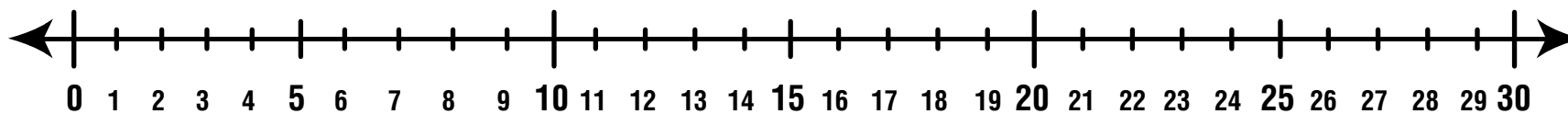
Game Board 2

0	0	5	5	10	10	20	20	30	30
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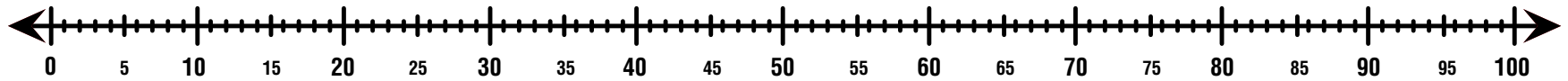
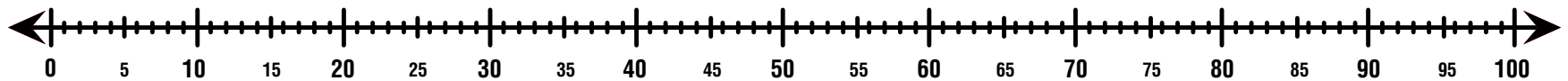
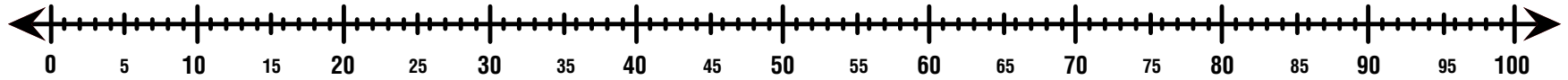
Name _____ Date _____

Number Lines 0–30



Name _____ Date _____

Number Lines 0–100



Which Tub?

Tara and Kim's teacher placed another tub of beans on their desks. Both tubs looked alike. They could not tell which tub was theirs. They decided to take a sample from each of the tubs. Their data is shown below.

First Tub

<i>K</i> Kind of Bean	<i>N</i> Number of Beans Pulled
Pinto	62
Black	112
Navy	22

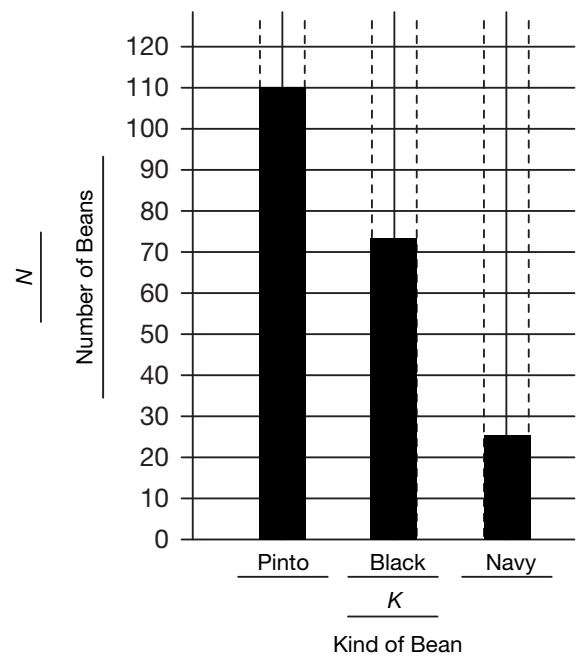
Second Tub

<i>K</i> Kind of Bean	<i>N</i> Number of Beans Pulled
Pinto	115
Black	70
Navy	24

Tara and Kim were still not sure which tub was theirs. They decided to see if their graph from their first sample would help them decide.

- Which tub do you think is the one Tara and Kim used for their first samples?

- Show or tell how you can use the graph to decide which tub of beans Tara and Kim used for their first sample.



Name _____ Date _____

**Which Tub?
Feedback Box**

Yes ...

Yes, but ...

No, but ...

No...

MPE5. Show my work.
I show or tell how I arrived
at my answer so someone
else can understand my
thinking.

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