## A Story of Units®

# Eureka Math<sup>™</sup> Grade 3, Module 6

Student File\_B

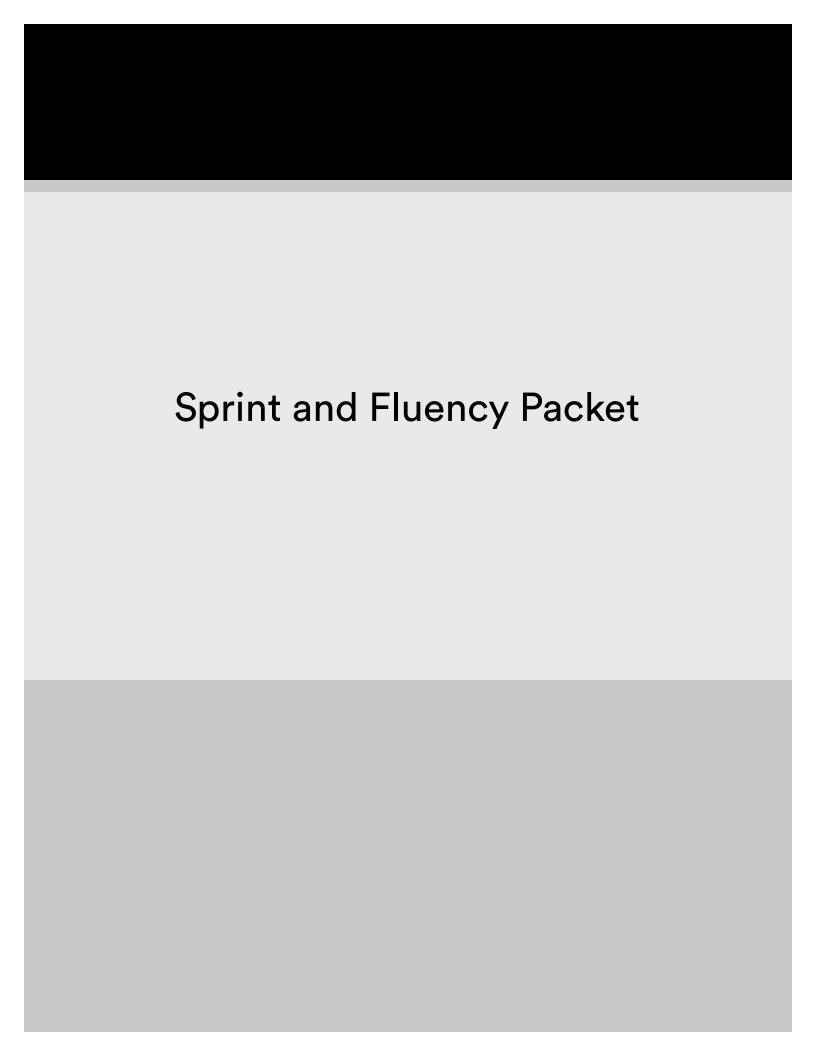
Contains Sprint and Fluency, Exit Ticket, and Assessment Materials

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10 9 8 7 6 5 4 3 2 1



Number Correct: \_\_\_\_\_

#### Multiply or Divide by 6

1.	2 × 6 =	
2.	3 × 6 =	
3.	4 × 6 =	
4.	5 × 6 =	
5.	1 × 6 =	
6.	12 ÷ 6 =	
7.	18 ÷ 6 =	
8.	30 ÷ 6 =	
9.	6 ÷ 6 =	
10.	24 ÷ 6 =	
11.	6 × 6 =	
12.	7 × 6 =	
13.	8 × 6 =	
14.	9 × 6 =	
15.	10 × 6 =	
16.	48 ÷ 6 =	
17.	42 ÷ 6 =	
18.	54 ÷ 6 =	
19.	36 ÷ 6 =	
20.	60 ÷ 6 =	
21.	×6=30	
22.	×6=6	

23.	×6=60	
24.	×6=12	
25.	×6=18	
26.	60 ÷ 6 =	
27.	30 ÷ 6 =	
28.	6 ÷ 6 =	
29.	12 ÷ 6 =	
30.	18 ÷ 6 =	
31.	×6=36	
32.	×6=42	
33.	×6 = 54	
34.	×6=48	
35.	42 ÷ 6 =	
36.	54 ÷ 6 =	
37.	36 ÷ 6 =	
38.	48 ÷ 6 =	
39.	11 × 6 =	
40.	66 ÷ 6 =	
41.	12 × 6 =	
42.	72 ÷ 6 =	
43.	14 × 6 =	
44.	84 ÷ 6 =	

### Multiply or Divide by 6

1.	1 × 6 =	
2.	2 × 6 =	
3.	3 × 6 =	
4.	4 × 6 =	
5.	5 × 6 =	
6.	18 ÷ 6 =	
7.	12 ÷ 6 =	
8.	24 ÷ 6 =	
9.	6 ÷ 6 =	
10.	30 ÷ 6 =	
11.	10 × 6 =	
12.	6 × 6 =	
13.	7 × 6 =	
14.	8 × 6 =	
15.	9 × 6 =	
16.	42 ÷ 6 =	
17.	36 ÷ 6 =	
18.	48 ÷ 6 =	
19.	60 ÷ 6 =	
20.	54 ÷ 6 =	
21.	×6=6	
22.	×6=30	

Number Correct:	
Improvement:	

23.	×6=12	
24.	×6=60	
25.	×6=18	
26.	12 ÷ 6 =	
27.	6 ÷ 6 =	
28.	60 ÷ 6 =	
29.	30 ÷ 6 =	
30.	18 ÷ 6 =	
31.	×6=18	
32.	×6 = 24	
33.	×6 = 54	
34.	×6 = 42	
35.	48 ÷ 6 =	
36.	54 ÷ 6 =	
37.	36 ÷ 6 =	
38.	42 ÷ 6 =	
39.	11 × 6 =	
40.	66 ÷ 6 =	
41.	12 × 6 =	
42.	72 ÷ 6 =	
43.	13 × 6 =	
44.	78 ÷ 6 =	

#### **Number of Children in Third-Grade Families**

	X		
X	X		
X	X		
X	X	X	
X	X	X	
X	X	X	
X	X	X	
X	X	X	X
X	X	Х	X
1	2	3	4

**Number of Children** 

**X** = 1 Child

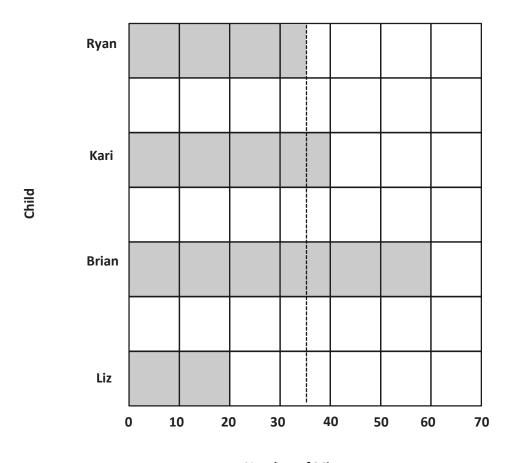
line plot



Lesson 4:

Solve one- and two-step problems involving graphs.

#### **Number of Minutes Spent Practicing Piano**



**Number of Minutes** 

bar graph



4

6 x 3 = \_\_\_\_

 $6 \times 4 =$ 

6 x 2 =

Multiply.

6 x 1 =

multiply by 6 (1-5)

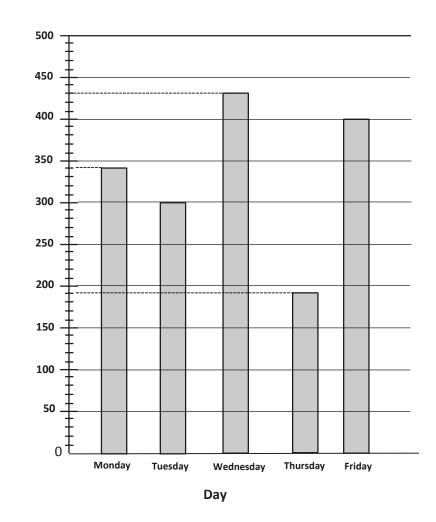
6 x 5 =



Number of

Miles

#### **Number of Miles a Truck Driver Drives**



number of miles bar graph



6

Multiply.

multiply by 6 (6-10)



Multiply.

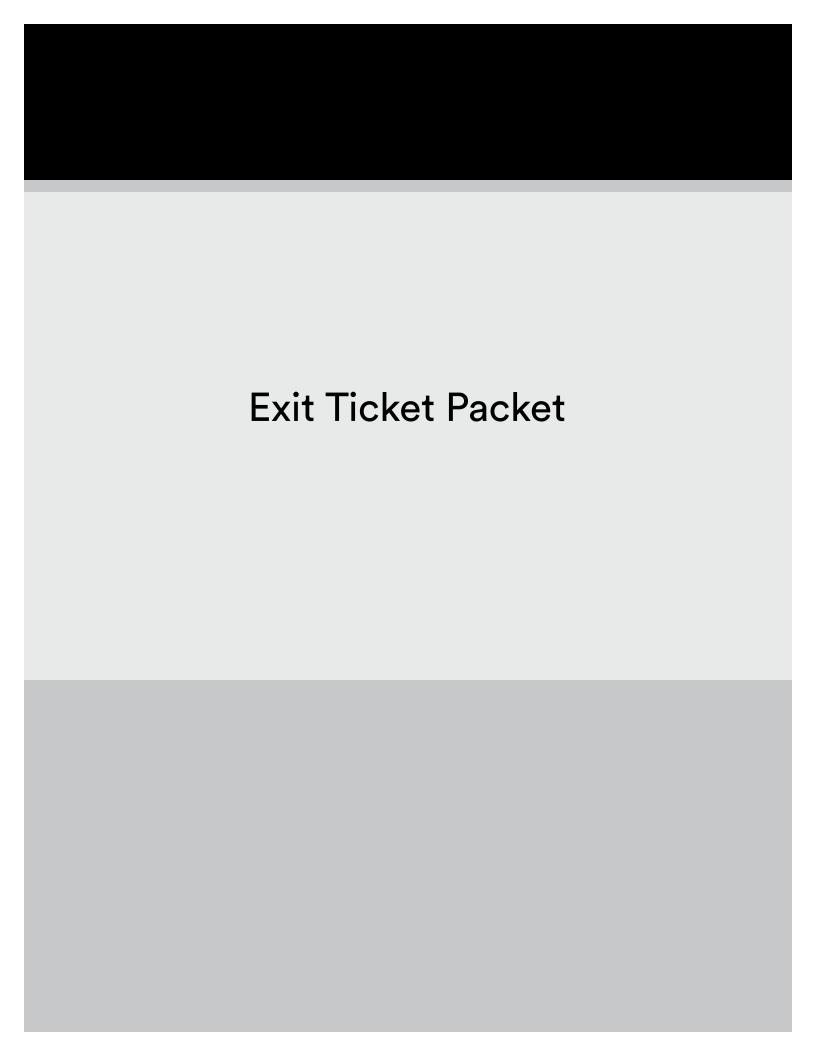
multiply by 7 (1-5)



Multiply.

multiply by 7 (6-10)





Name	Date

The picture graph below shows data from a survey of students' favorite sports.

Favorite Sports							
Football Soccer Tennis Hockey							
Each represents 3 students.							

- a. The same number of students picked \_\_\_\_\_ and \_\_\_\_ as their favorite sport.
- b. How many students picked tennis as their favorite sport?
- c. How many more students picked soccer than tennis? Use a number sentence to show your thinking.
- d. How many total students were surveyed?

The chart below shows a survey of the book club's favorite type of book.

Book Club's Favorite Type of Book					
Type of Book Number of Votes					
Mystery	12				
Biography	16				
Fantasy	20				
Science Fiction	8				

a. Draw tape diagrams with a unit size of 4 to represent the book club's favorite type of book.

b. Use your tape diagrams to draw vertical tape diagrams that represent the data.

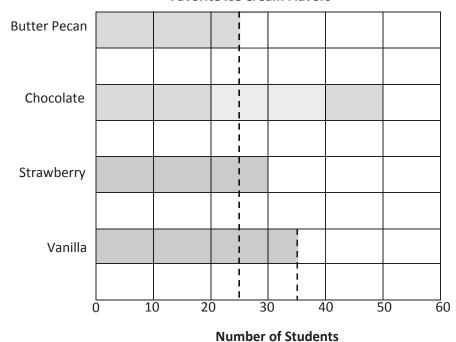


**Flavor** 

Name	Date	

The bar graph below shows the students' favorite ice cream flavors.

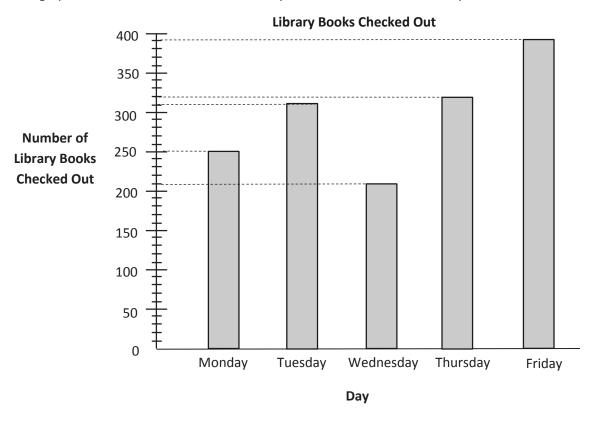




- a. Use the graph's lines as a ruler to draw intervals on the number line shown above. Then plot and label a point for each flavor on the number line.
- b. Write a number sentence to show the total number of students who voted for butter pecan, vanilla, and chocolate.

Name \_\_\_\_\_ Date \_\_\_\_

The graph below shows the number of library books checked out in five days.



c. How many books in total were checked out on Wednesday and Thursday?

d. How many more books were checked out on Thursday and Friday than on Monday and Tuesday?

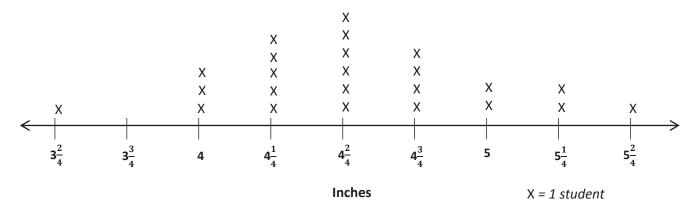
Name							Date	
Davon marks a	a 4-inch լ	oaper stri	p into eq	ual parts as	shown be	low.		

- Label the whole and quarter inches on the paper strip.
- b. Davon tells his teacher that his paper strip measures 4 inches. Sandra says it measures 16 quarter inches. Explain how the two measurements are the same. Use words, pictures, or numbers.



Ms. Bravo measures the lengths of her third-grade students' hands in inches. The lengths are shown on the line plot below.

#### **Lengths of Hands of Third-Grade Students**



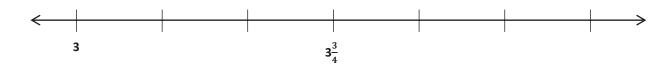
- a. How many students are in Ms. Bravo's class? How do you know?
- b. How many students' hands are longer than  $4\frac{2}{4}$  inches?
- c. Darren says that more students' hands are  $4\frac{2}{4}$  inches long than 4 and  $5\frac{1}{4}$  inches combined. Is he right? Explain your answer.

Name	_ Date	

Scientists measure the growth of mice in inches. The scientists measure the length of the mice to the nearest  $\frac{1}{4}$  inch and record the measurements as shown below.

Lengths of Mice (in Inches)						
$3\frac{1}{4}$	3	$3\frac{1}{4}$	$3\frac{3}{4}$	4		
$3\frac{3}{4}$	3	$4\frac{1}{2}$	$4\frac{1}{2}$	$3\frac{3}{4}$		
4	$4\frac{1}{4}$	4	$4\frac{1}{4}$	4		

Label each tick mark. Then, record the data on the line plot below.

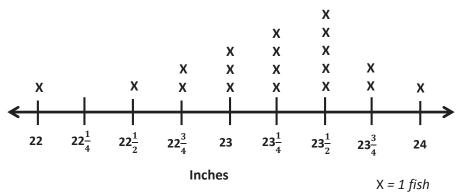


Label: \_\_\_\_\_\_ X = 1 mouse

Date \_\_\_\_\_

The line plot below shows the lengths of fish the fishing boat caught.





Find the three most frequent measurements on the line plot.

b. Find the difference between the lengths of the longest and shortest fish.

c. How many more fish were  $23\frac{1}{4}$  inches long than 24 inches long?

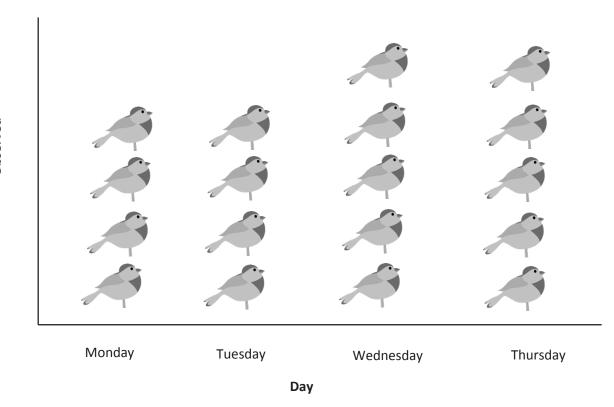
Date \_\_\_\_\_

Mr. Gallagher's science class goes bird watching. The picture graph below shows the number of birds the class observes.

Number of Birds Mr. Gallagher's Class Observed

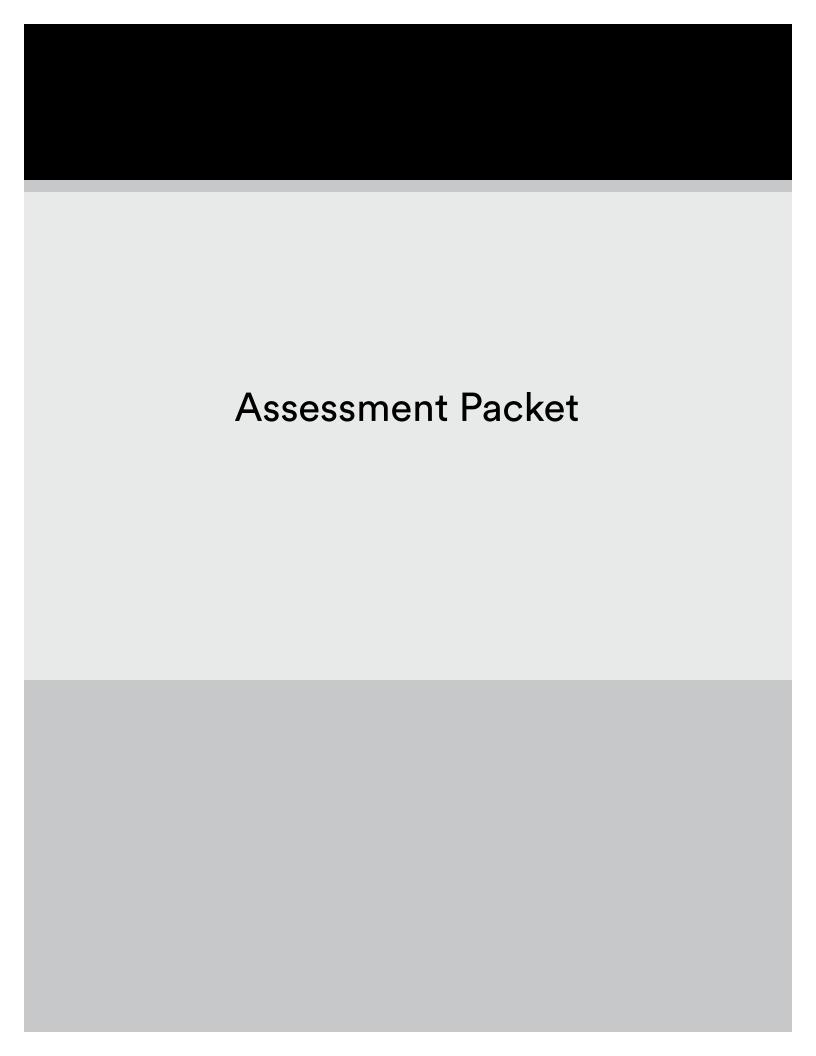


**Number of Birds** Observed

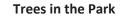


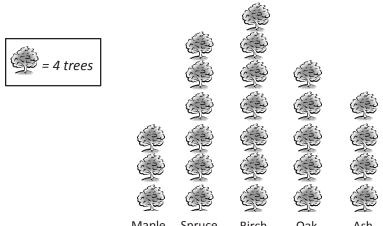
How many more birds did Mr. Gallagher's class observe on Wednesday and Thursday than on Monday and Tuesday?

b. Mr. Manning's class observed 104 birds. How many more birds did Mr. Gallagher's class observe?



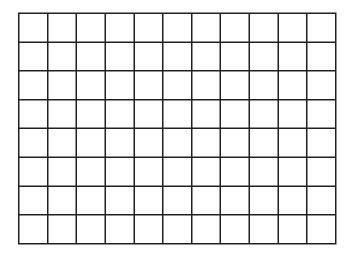
1. The picture graph below represents all the trees in the park.





**Type of Tree** 

a. Use the grid to create and label a scaled bar graph representing the data in the picture graph above.



b. How many more maple and oak trees are there than birch trees?



1

- 2. The table below shows the number of flowers that were planted by the science club.
  - a. Complete the table by filling in the number of marigolds that were planted.

Flowers Planted by Science Club				
Type of Flower	Number Planted			
Roses	24			
Lilies	12			
Marigolds				
TOTAL Flowers Planted:	54			

b. Use the lines below to create and label a picture graph using the data in the table. Determine a picture and scale to represent the number of each type of flower.

\_\_\_ flowers

**Number Planted** 

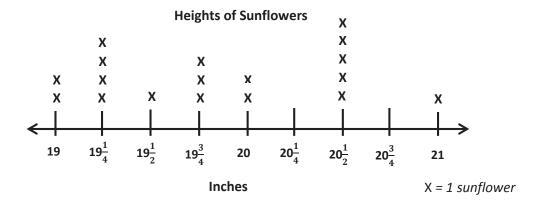
**Type of Flower** 



Module 6:

Collecting and Displaying Data

3. Fred measures the heights of all the sunflowers in his backyard. His measurements in inches are shown on the line plot below.



a. How many sunflowers are in Fred's backyard? Explain how you know.

b. What are the three most frequent measurements on the line plot? Write them in order from shortest to longest.



3

4. Carol measures 16 bamboo shoots. Her measurements are recorded in the table below.

Heights of Bamboo Shoots (in Inches)						
$94\frac{1}{2}$	$94\frac{1}{4}$	$93\frac{3}{4}$	$94\frac{3}{4}$			
$94\frac{3}{4}$	95	$94\frac{3}{4}$	$95\frac{1}{4}$			
$94\frac{1}{2}$	$94\frac{3}{4}$	$94\frac{3}{4}$	$94\frac{1}{2}$			
95	$94\frac{3}{4}$	$94\frac{3}{4}$	95			

a. Make a line plot of the bamboo shoot data. Explain your choice of scale.

b. How many more bamboo shoots measured  $94\frac{3}{4}$  inches than both 95 and  $94\frac{1}{2}$  inches combined?

