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.
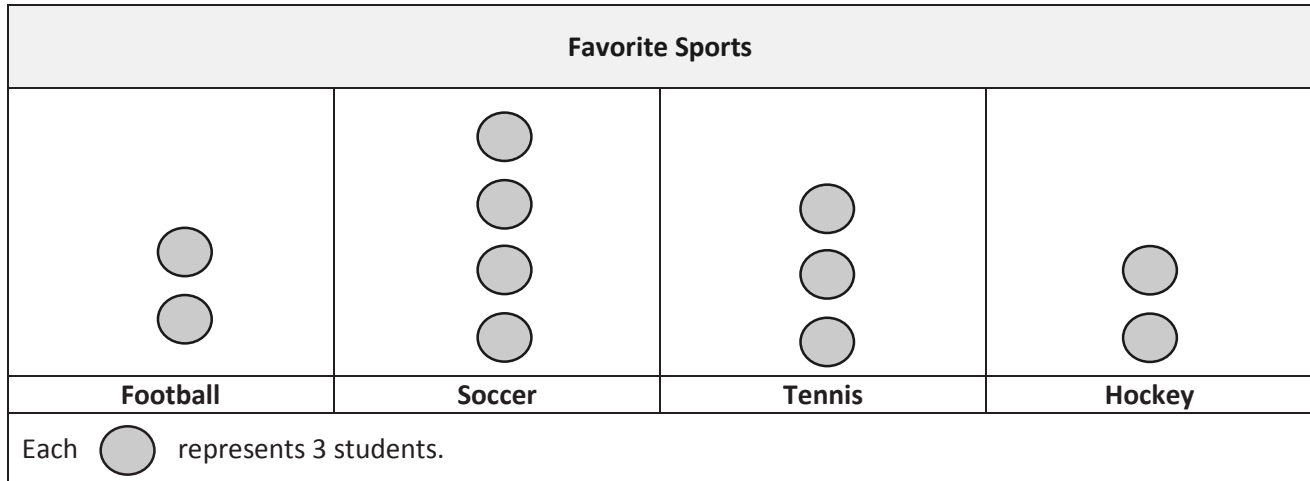
a. The same number of students picked **football** and **hockey** as their favorite sport.

b. How many students picked tennis as their favorite sport?

$3 \times 3 = 9$ Nine students picked tennis.

c. How many more students picked soccer than tennis? Use a number sentence to show your thinking.

$4 \times 3 = 12$ (soccer)
$3 \times 3 = 9$ (tennis) $4 \times 3 - 3 \times 3 = 3$

3 more students picked soccer than tennis.

d. How many total students were surveyed?

11 circles
$11 \times 3 = 33$

33 students were surveyed.

Name _____   Date _____

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

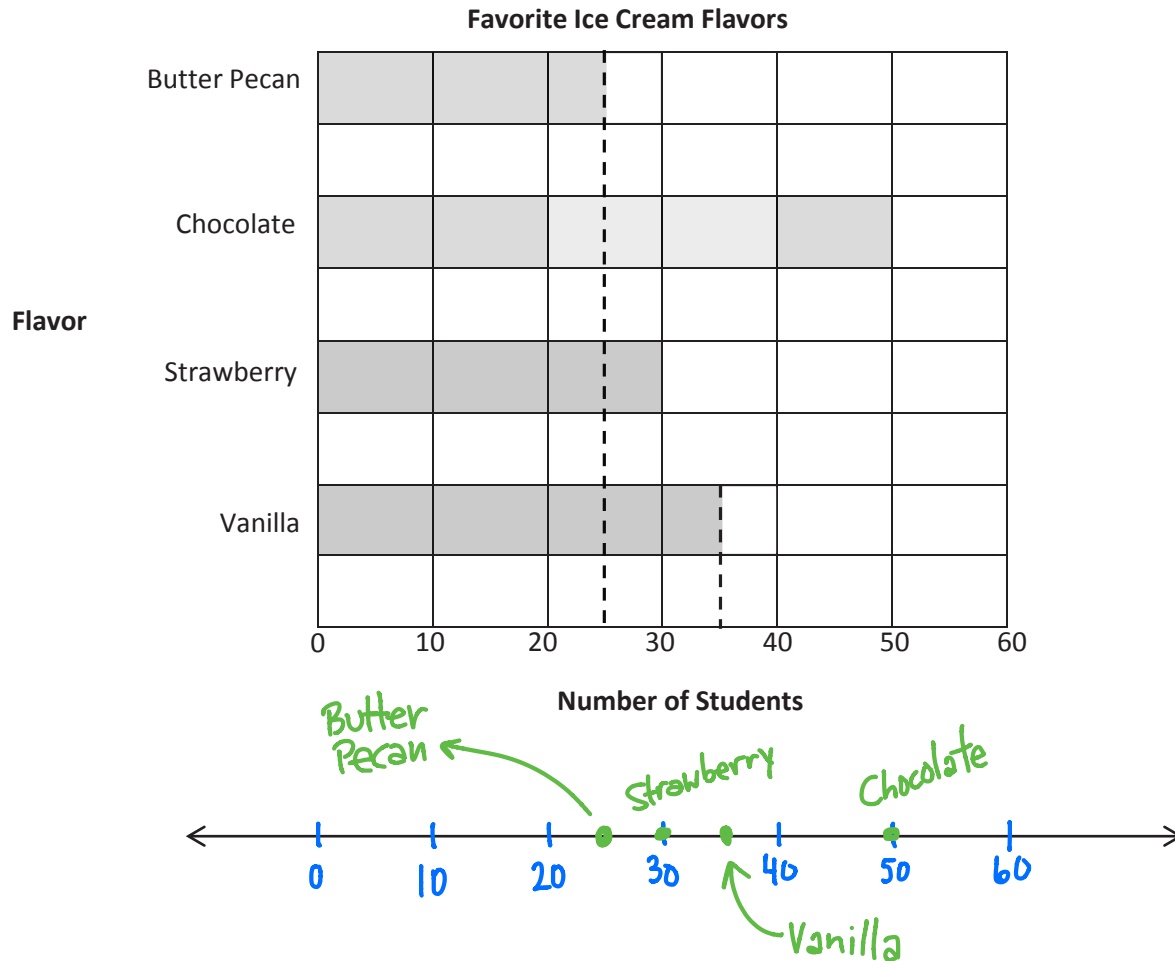a. Draw tape diagrams with a unit size of 4 to represent the book club's favorite type of book.

Mystery [4 | 4 | 4]
Biography [4 | 4 | 4 | 4]
Fantasy [4 | 4 | 4 | 4 | 4]
Science Fiction [4 | 4]
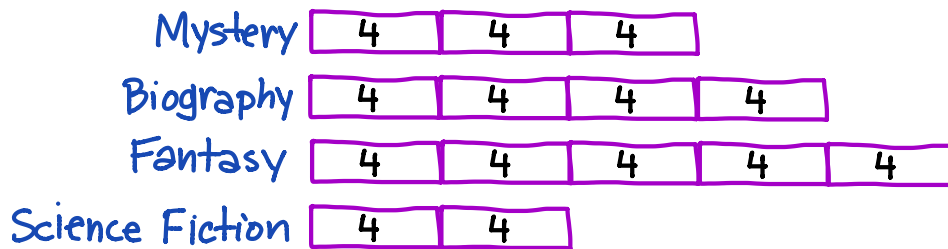
b. Use your tape diagrams to draw vertical tape diagrams that represent the data.

Mystery: 4, 4, 4
Biography: 4, 4, 4, 4
Fantasy: 4, 4, 4, 4, 4
Science Fiction: 4, 4

Name _____   Date _____

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

Favorite Ice Cream Flavors

Flavor							

Butter Pecan

Chocolate

Strawberry

Vanilla

0   10   20   30   40   50   60

Number of Students

Butter
Pecan

Strawberry   Chocolate

0   10   20   30   40   50   60

Vanilla

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.
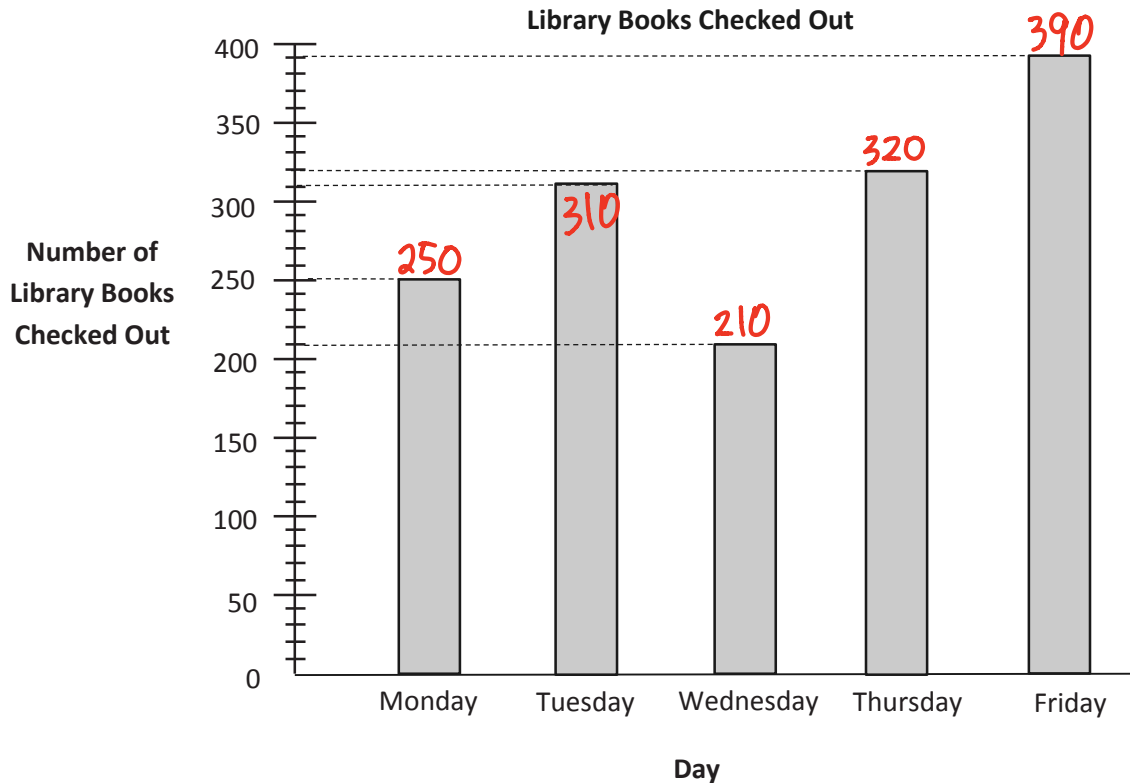
butter pecan + vanilla + chocolate = 25 + 35 + 50
= 110

There were 110 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.

Library Books Checked Out

390
320
310
250
210

400
350
300
250
200
150
100
50
0

Number of Library Books Checked Out

Monday Tuesday Wednesday Thursday Friday

Day

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

210
+ 320
530

530 books were checked out on Wednesday and Thursday.

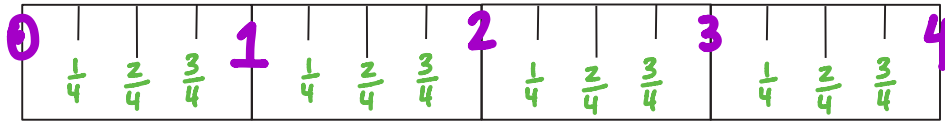d.   How many more books were checked out on Thursday and Friday than on Monday and Tuesday?

Thur + Fri   Mon + Tue   6 11
                                 7̶1̶0
320   250   −560
+390   +310   150
710   560

There were 150 more books checked out on Th/Fri than on Mon/Tue.

EUREKA MATH™

**Lesson 4:**   Solve one- and two-step problems involving graphs.

57

Name _____   Date _____

Davon marks a 4-inch paper strip into equal parts as shown below.

a. 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.
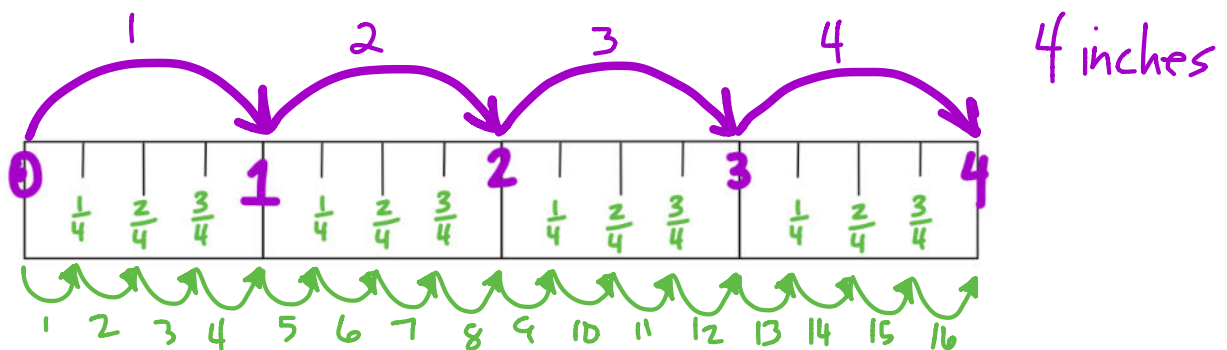

This drawing shows that 4 quarter inches makes 1 inch. This means when Davon counts 4 inches, Sandra would count 16 quarter inches.

Lesson 5:   Create ruler with 1-inch, ½-inch, and ¼-inch intervals, and generate measurement data.

Name _____   Date _____

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

Inches   X = 1 student
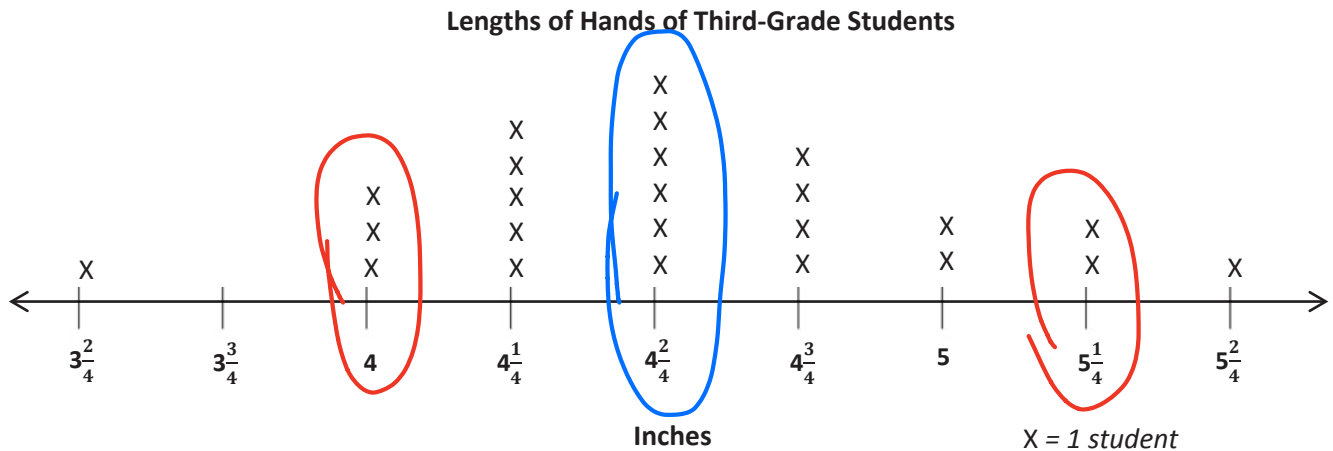
a.   How many students are in Ms. Bravo's class? How do you know?

There are 24 students in the class because there are 24 X's.

b.   How many students' hands are longer than $4\frac{2}{4}$ inches?

Nine 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.

There are 6 students with hands $4\frac{2}{4}$ inches long.

There are 5 students with hands 4 or $5\frac{1}{4}$ inches long.

Darren is correct.

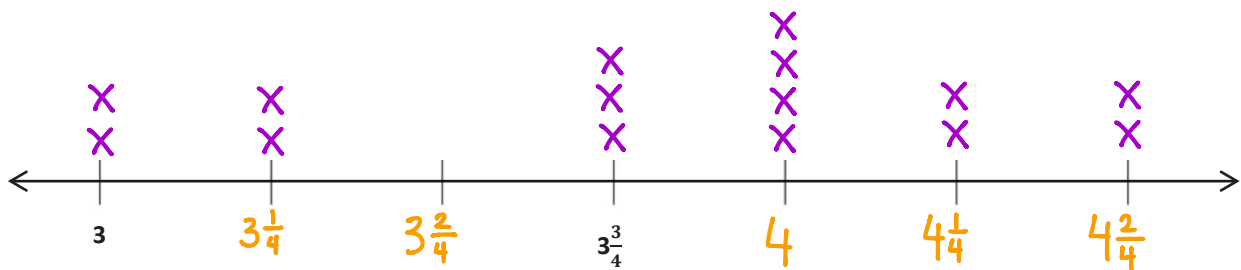Name _____   Date _____

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.
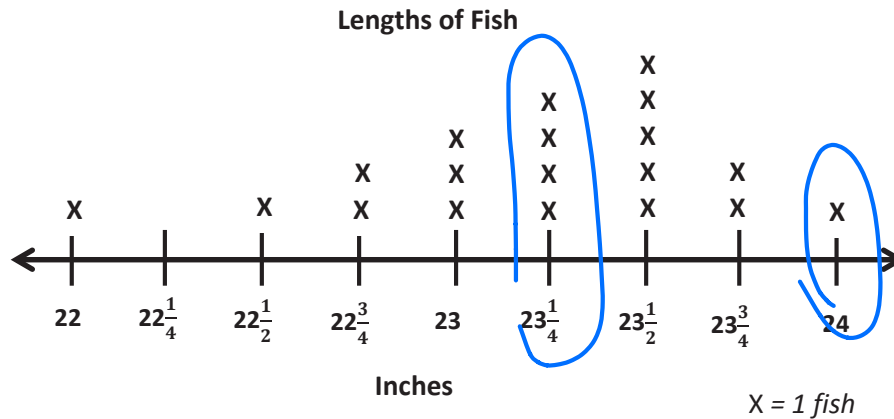
Title: _____Lengths of Mice_____

Label: _____Inches_____   X = 1 mouse

Name _____   Date _____

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

Lengths of Fish

Inches

X = 1 fish

a. Find the three most frequent measurements on the line plot.

The three most frequent measurements are 23, $23\frac{1}{4}$, and $23\frac{1}{2}$.

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

Longest: 24 in

Shortest: 22 in

The difference is 2 inches.

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

$23\frac{1}{4}$ inches : 4 fish

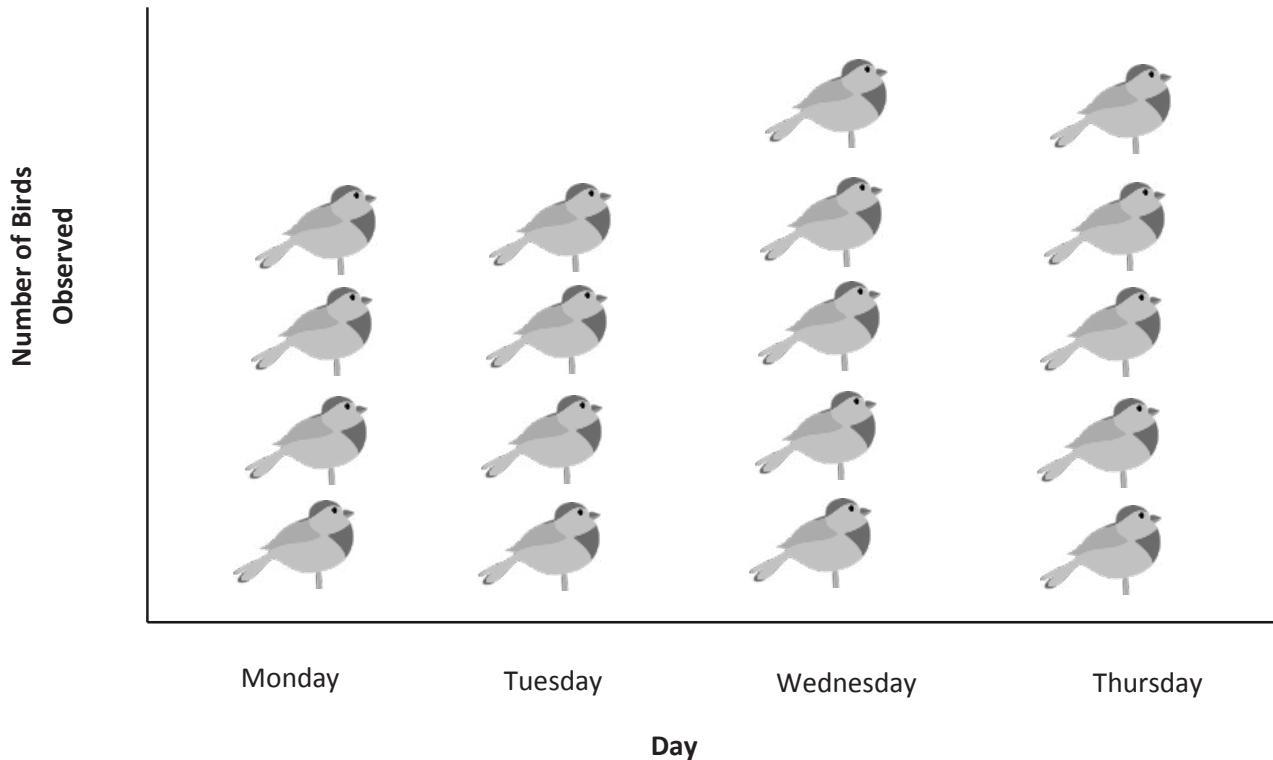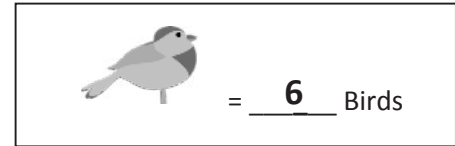24 inches: 1 fish

3 more fish were $23\frac{1}{4}$ inches long.

Name _____   Date _____

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

= __6__ Birds

Number of Birds Mr. Gallagher's Class Observed

| Monday | Tuesday | Wednesday | Thursday |

Day

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

Wed/Thur   Mon/Tue   They observed 12 more birds on

10×6=60 birds   8×6=48 birds   Wednesday and Thursday.

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

60+48=108 birds observed by Mr. Gallagher

This is 4 more birds than Mr. Manning's class.