

VOCABULARY

clock minute hand
analog clock hour hand

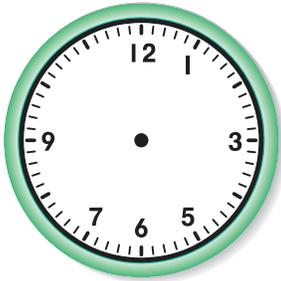
► Features of Clocks

Clocks are tools that we use to measure time.

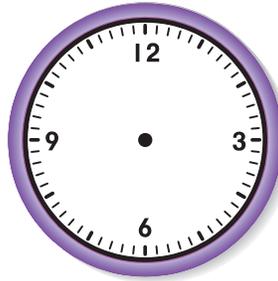
1. Describe some clocks that you have seen.

Place the missing numbers on the **analog clocks**.

2.



3.



4.



An analog clock has a long hand that is the **minute hand** and a short hand that is the **hour hand**.

Ring the hour hand on the clocks.

5.



6.



7.



Ring the minute hand on the clocks.

8.



9.



10.



VOCABULARY

A.M.

P.M.

► **Times of Daily Activities**

We use **A.M.** for the hours after 12:00 midnight and before 12:00 noon.

9:00 A.M. is 9 o'clock in the morning.

We use **P.M.** for the hours after 12:00 noon and before 12:00 midnight.

9:00 P.M. is 9 o'clock in the evening.

11. Complete the chart. For each time listed, write whether it is dark or light outside; whether it is morning, afternoon, or evening; and an activity you might be doing at that time.

Time	Sunlight	Part of the Day	Activity
4:00 A.M.	dark	morning	sleeping
12:30 P.M.			
9:00 P.M.			

For each activity, ring the most appropriate time.

12. brush your teeth in the morning

1:30 P.M.

3:00 P.M.

7:30 A.M.

13. eat dinner at night

5:00 A.M.

12:00 noon

6:00 P.M.

14. watch an afternoon movie

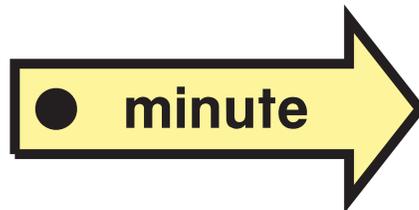
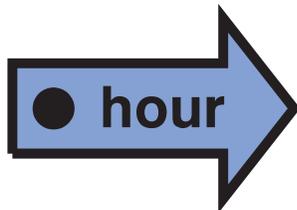
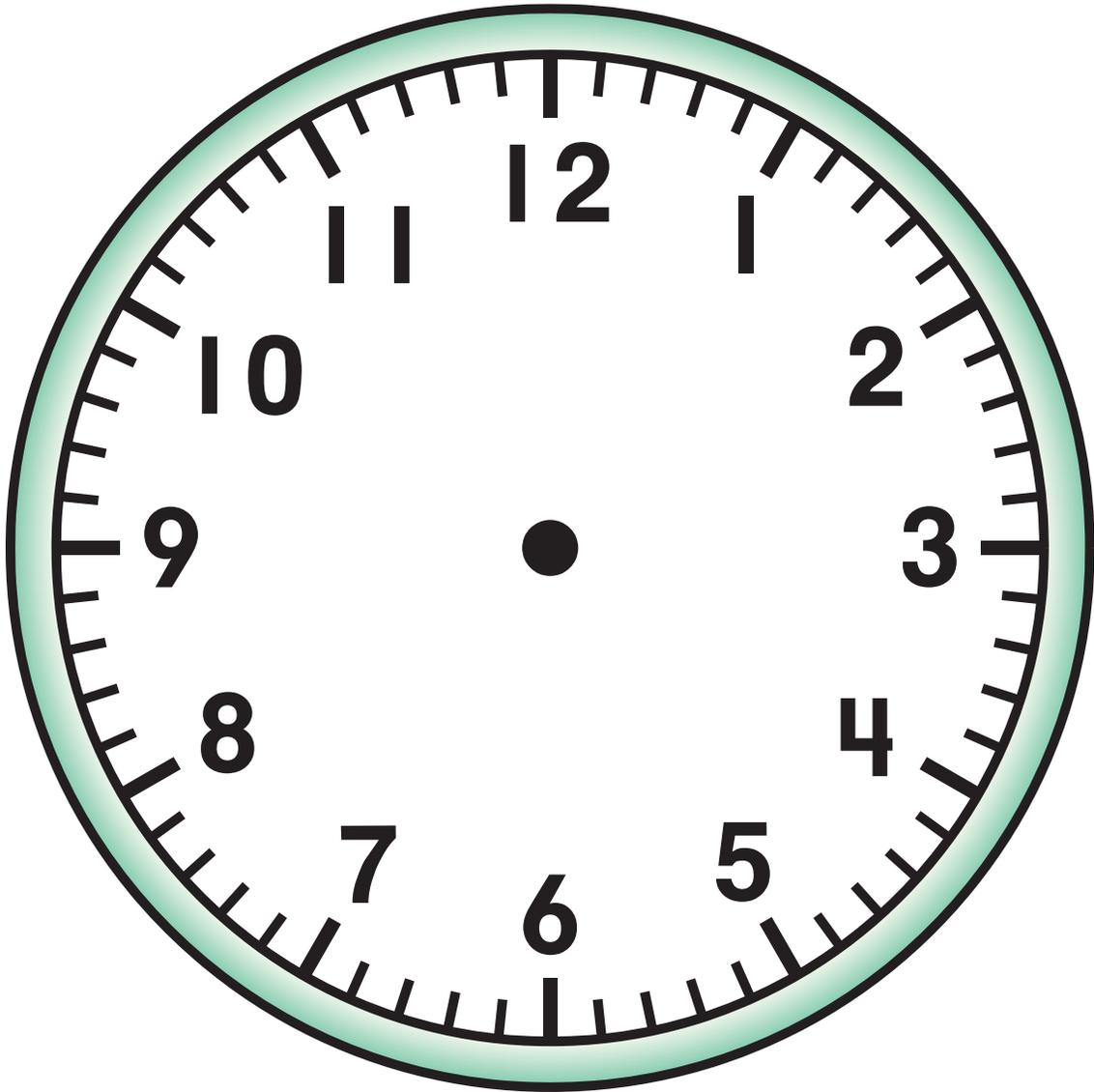
3:00 A.M.

2:00 P.M.

6:00 P.M.

► **Model a Clock**

Attach the clock hands using a prong fastener.





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► Write Time

On a **digital clock**, the number on the left shows the hour, and the number on the right shows the minutes after the hour.



Write the time in two different ways.

15.



o'clock



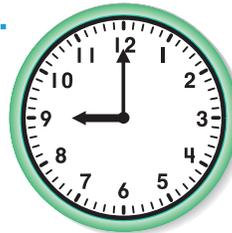
16.



o'clock



17.





18.





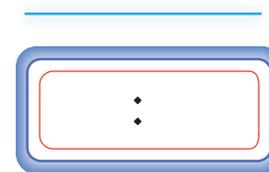
19.



20.



21.

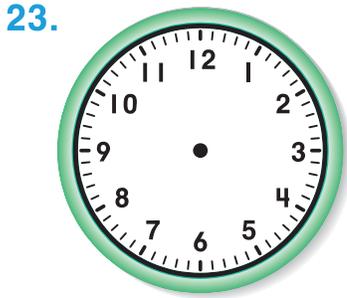


22.

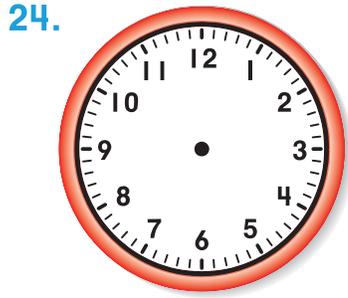
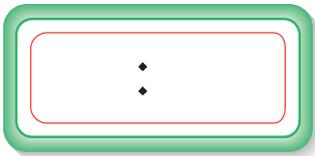


► Draw Clock Hands

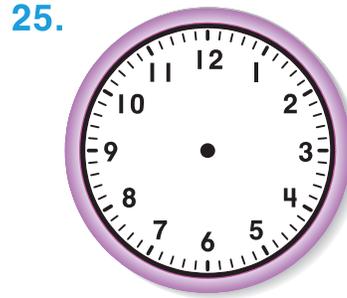
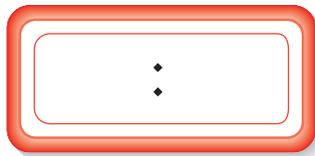
Draw the hands on each analog clock, and write the time on each digital clock below.



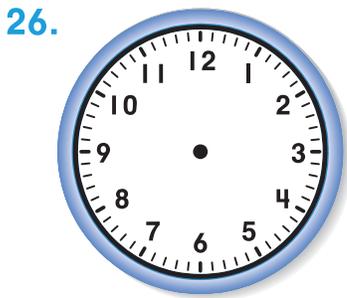
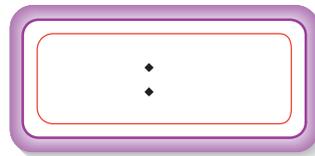
7 o'clock



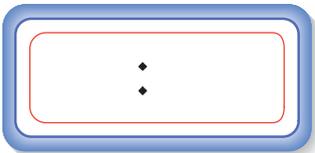
11 o'clock



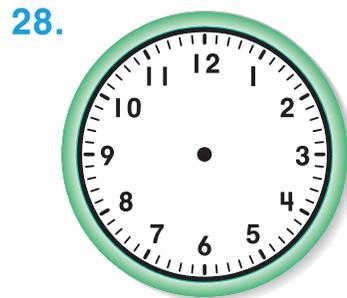
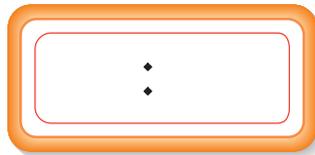
2 o'clock



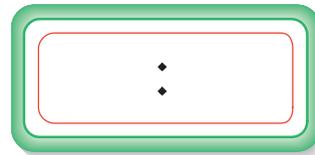
3 o'clock



5 o'clock

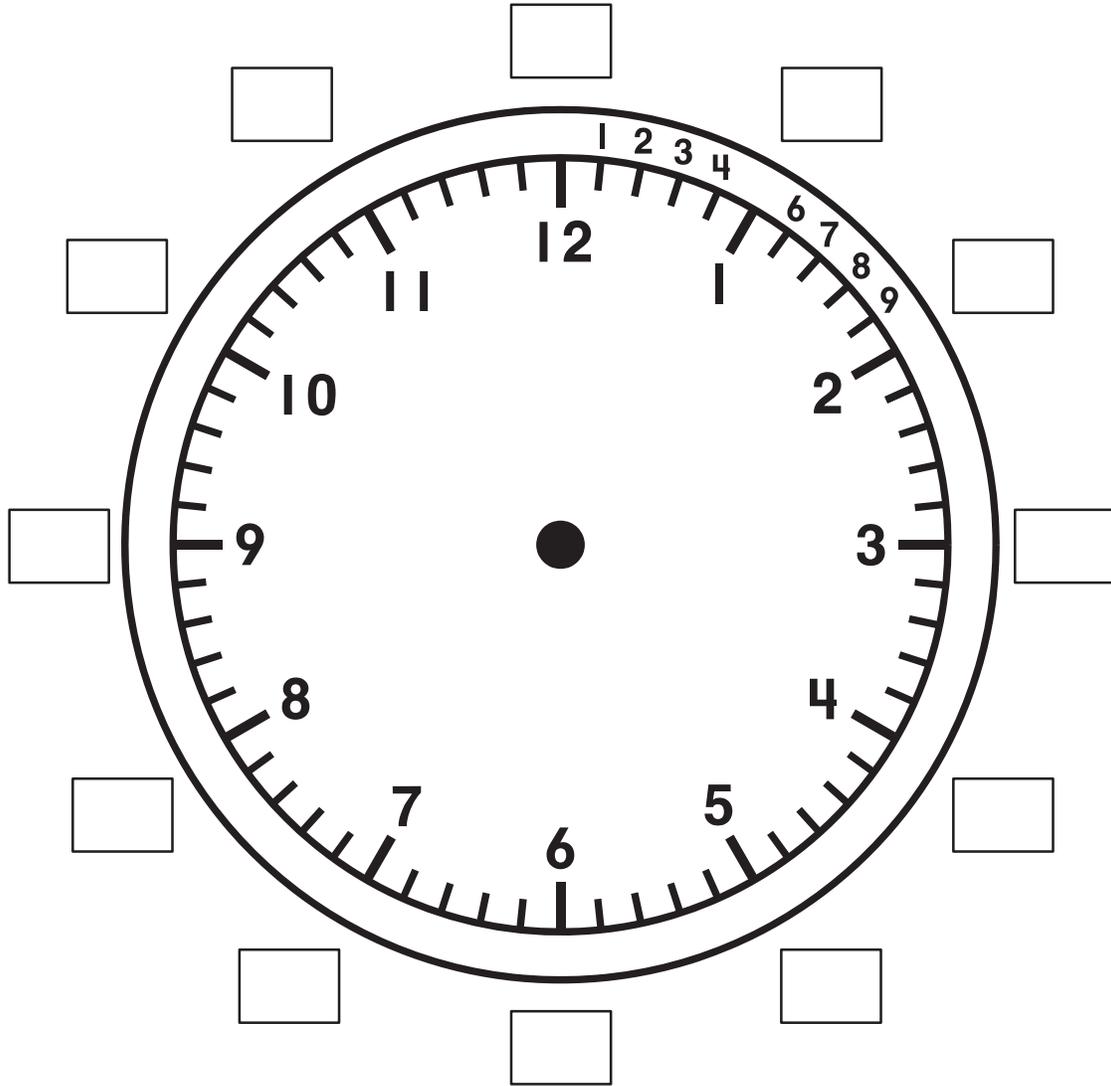


10 o'clock



► **5-Minute Intervals**

1. Count by 5s around the clock.

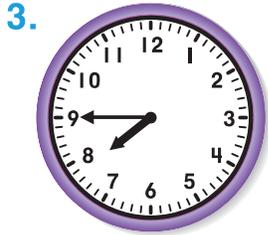


► Read Time to 5 Minutes

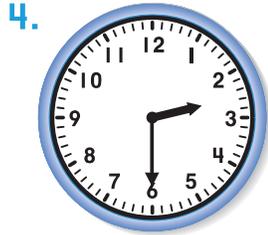
Write the time on the digital clocks.



⋮



⋮



⋮



⋮



⋮



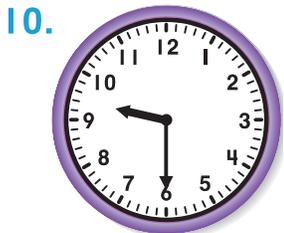
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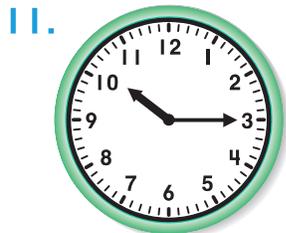
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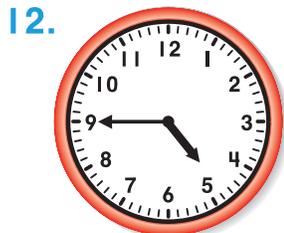
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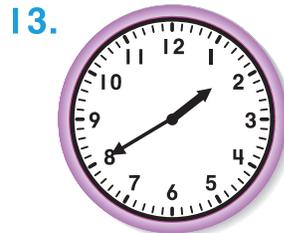
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⋮



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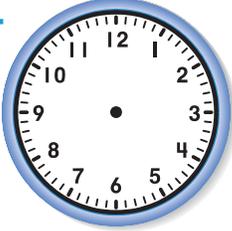


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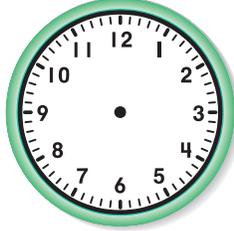
► Show Times to 5 Minutes

Draw hands on each clock to show the time.

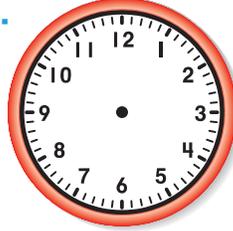
14.



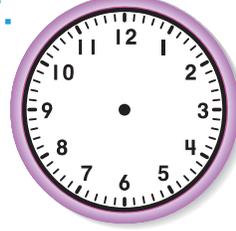
15.



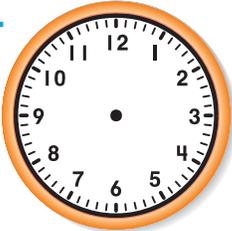
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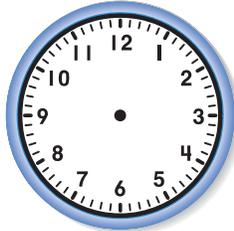
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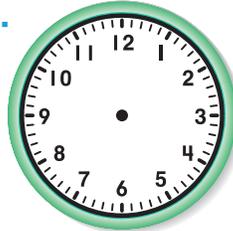
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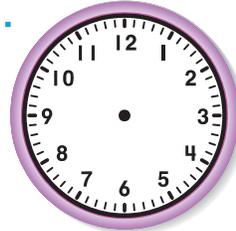
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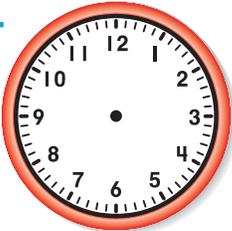
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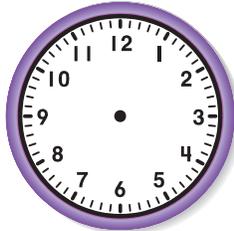
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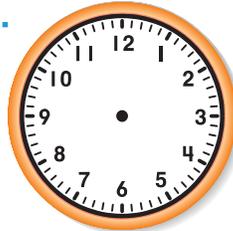
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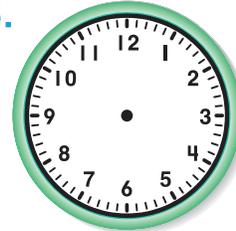
23.



24.



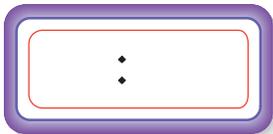
25.



► What's the Error?



26. What is the correct time?



► A.M. OR P.M.?

For each activity, ring the appropriate time.

27. picnic

28. school recess

29. afternoon snack

30. going to the playground

5:30 A.M.

10:00 A.M.

3:15 A.M.

9:25 A.M.

5:30 P.M.

10:00 P.M.

3:15 P.M.

9:25 P.M.

31. lunch

32. sunset

33. wake up

34. math class

12:10 A.M.

7:05 A.M.

6:45 A.M.

8:30 A.M.

12:10 P.M.

7:05 P.M.

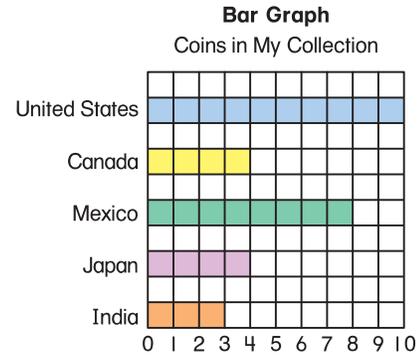
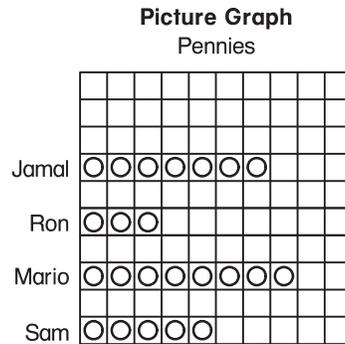
6:45 P.M.

8:30 P.M.



Dear Family:

Your child is learning how to show information in various ways. In this unit, children will learn how to create and read picture graphs and bar graphs.



An important feature of *Math Expressions* is its emphasis on real world connections. Children will collect and represent data on graphs. They will also interpret the graph to answer questions about the data shown.

Children also explore the language of comparison by using such words as *same*, *more*, *less*, and *fewer*. The connection between pairs of terms is emphasized. For example: Carlos has 8 stickers. Maria has 3. Carlos has 5 *more* stickers than Maria. Maria has 5 *fewer* stickers than Carlos has.

Please call if you have any questions or concerns. Thank you for helping your child learn how to create, read, and interpret graphs.

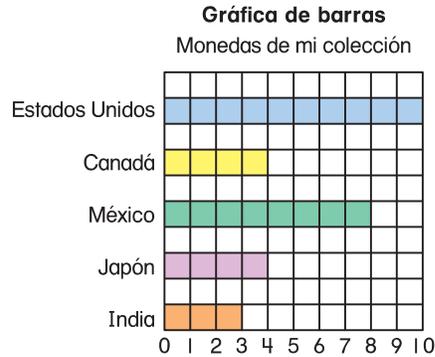
Sincerely,
Your child's teacher





Estimada familia:

Su niño está aprendiendo a mostrar información de varias maneras. En esta unidad los niños aprenderán a crear y a leer gráficas de dibujos y gráficas de barras.



Un aspecto importante de *Math Expressions* es su énfasis en las conexiones con situaciones de la vida cotidiana. Los niños reunirán datos y los representarán en gráficas. También interpretarán las gráficas para responder preguntas acerca de los datos que se muestran.

Los niños también estudiarán palabras que se usan para comparar, tales como *igual*, *mismo*, *más* y *menos*. Se hará énfasis en la conexión entre los pares de términos. Por ejemplo: Carlos tiene 8 adhesivos. María tiene 3. Carlos tiene 5 adhesivos *más* que María. María tiene 5 adhesivos *menos* que Carlos.

Si tiene alguna pregunta o algún comentario, por favor comuníquese conmigo. Gracias por ayudar a su niño a aprender cómo crear, leer e interpretar gráficas.

**Atentamente,
El maestro de su niño**

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La Unidad 5 incluye los Common Core Standards for Mathematical Content for Operations and Algebraic Thinking, 2.OA.1, 2.OA.2; Number and Operations in Base Ten, 2.NBT.2, 2.NBT.5; Measurement and Data, 2.MD.7, 2.MD.10; Geometry, 2.G.3 and all Mathematical Practices.

► Use Picture Graphs to Compare Amounts

Read the **picture graph**.Write the number. Ring *more* or *fewer*.

Number of Balloons	
Carla	
Peter	
Hanna	

- Carla has *more fewer* balloons than Peter.
- Hanna has *more fewer* balloons than Carla.

Read the picture graph. Write the number.

Leaves Collected	
Amari	
Sam	
Marco	

- Amari needs more leaves to have as many as Sam has.
- If Sam gives away leaves, he will have as many leaves as Marco has.

► **Solve Put Together/Take Apart Problems**

This picture graph shows the number of apples Mrs. Reid bought at the store.

5. How many apples did Mrs. Reid buy altogether?

label

Apples Bought	
Red	
Green	
Yellow	

6. There are 2 green apples, 1 yellow apple, and 1 red apple in the bowl. The rest are in Mrs. Reid's bag. How many apples are in the bag?

label

This picture graph shows the number of books that four children read.

7. Two children read 6 books altogether. Who are the two children?

_____ and _____

Books Read	
Pablo	
Janis	
Helen	
Ray	

8. Two of the books the children read are about cars and 2 books are about trains. The rest of the books are about animals. How many books are about animals?

label

► **Make a Picture Graph**

Title: _____

► **Make a Bar Graph**

Title: _____



▶ PATH to FLUENCY Add and Subtract Within 100

Add.

1. $46 + 4 = \underline{\quad}$ 2. $3 + 39 = \underline{\quad}$ 3. $26 + 71 = \underline{\quad}$

4.
$$\begin{array}{r} 56 \\ + 36 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 11 \\ + 47 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 36 \\ + 53 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 78 \\ + 6 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 25 \\ + 61 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 18 \\ + 60 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 44 \\ + 17 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 13 \\ + 5 \\ \hline \end{array}$$

Subtract.

12. $74 - 8 = \underline{\quad}$ 13. $51 - 12 = \underline{\quad}$ 14. $60 - 15 = \underline{\quad}$

15.
$$\begin{array}{r} 42 \\ - 34 \\ \hline \end{array}$$

16.
$$\begin{array}{r} 78 \\ - 29 \\ \hline \end{array}$$

17.
$$\begin{array}{r} 43 \\ - 28 \\ \hline \end{array}$$

18.
$$\begin{array}{r} 50 \\ - 18 \\ \hline \end{array}$$

19.
$$\begin{array}{r} 80 \\ - 37 \\ \hline \end{array}$$

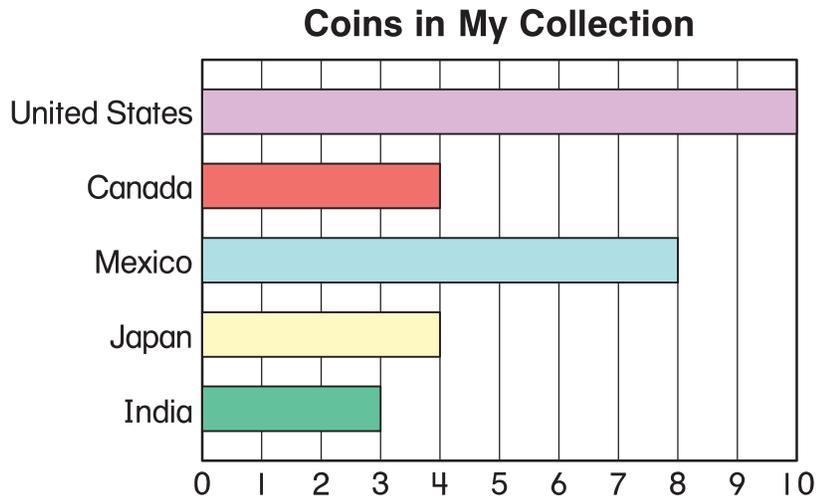
20.
$$\begin{array}{r} 64 \\ - 45 \\ \hline \end{array}$$

21.
$$\begin{array}{r} 28 \\ - 14 \\ \hline \end{array}$$

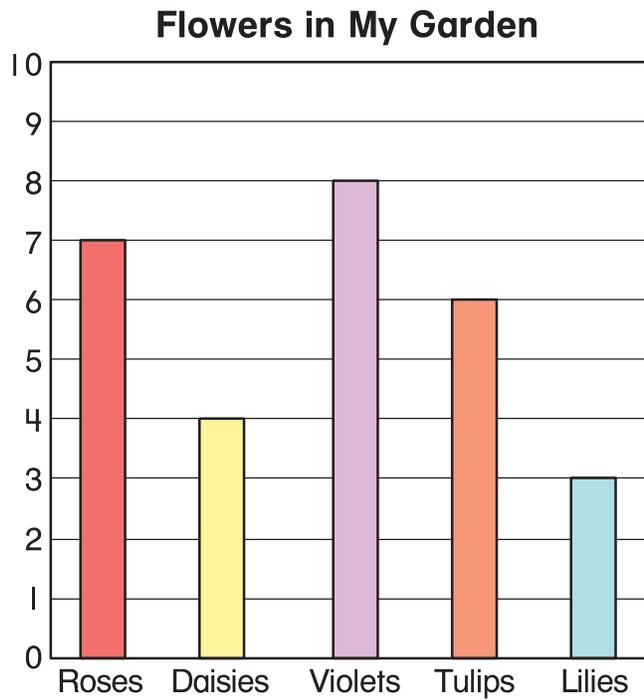
22.
$$\begin{array}{r} 56 \\ - 27 \\ \hline \end{array}$$

VOCABULARY
horizontal bar graph
vertical bar graph

► Read a **Horizontal Bar Graph**

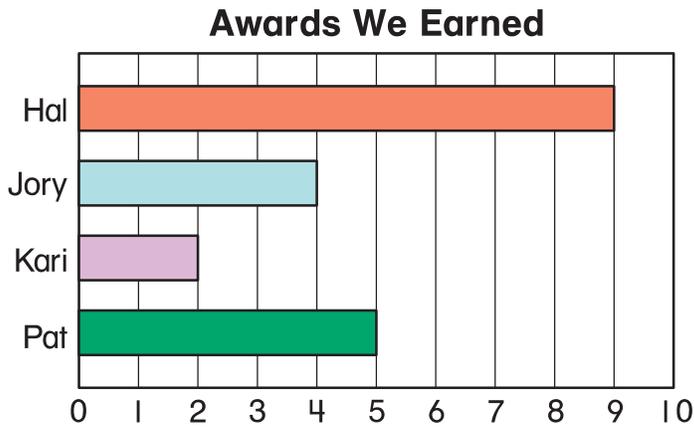


► Read a **Vertical Bar Graph**



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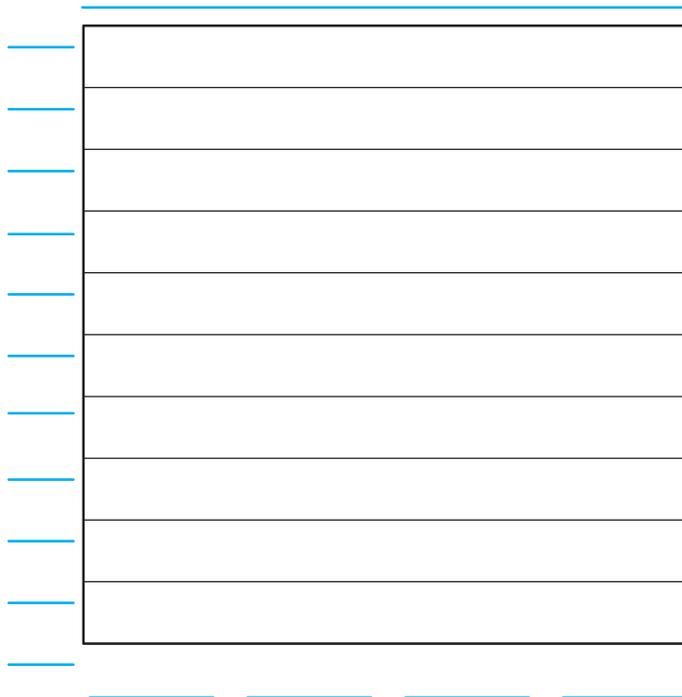
► Write Comparison Statements



1. Use the horizontal bar graph.
Write an *is greater than* statement.

► Make a Vertical Bar Graph

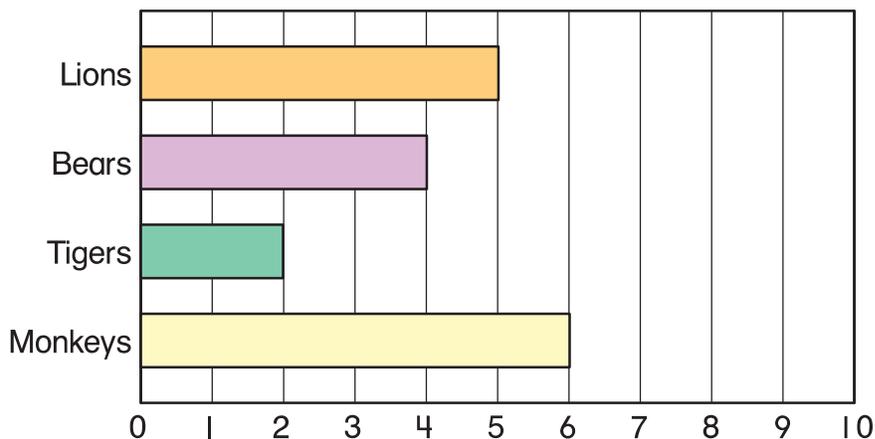
2. Make a vertical bar graph from the horizontal bar graph above.



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► **Solve Put Together/Take Apart and Compare Problems**

Animals at the Wildlife Park



Use the bar graph to solve the problems.

Show your work.

1. Four of the monkeys are adults and the rest are babies. How many of the monkeys are babies?

label

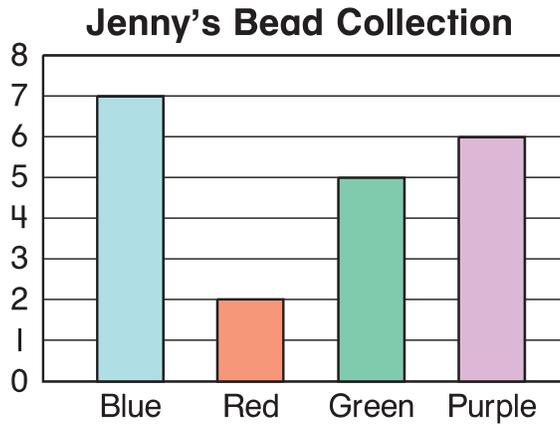
2. How many fewer bears are there than monkeys?

label

3. There are 2 fewer lions than elephants. How many elephants are there?

label

► Solve Word Problems with More Than One Step



Use the bar graph to solve the problems.

Show your work.

4. Jenny has 4 fewer purple beads than Morgan. How many purple beads do Jenny and Morgan have in all?

label

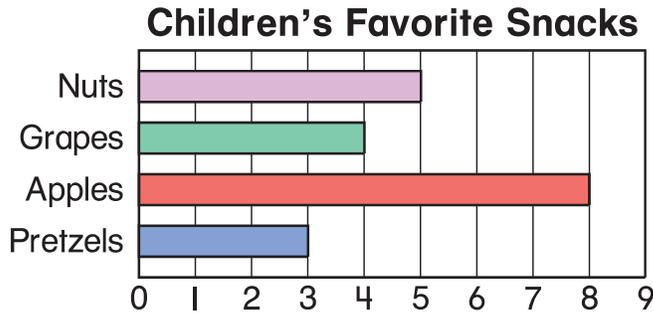
5. Morgan has 11 red beads. Then she gives 2 red beads to Arun. How many more red beads does Morgan have now than Jenny?

label

6. Five of Jenny's beads are large and the rest are small. She buys some small yellow beads. Now she has 18 small beads. How many small yellow beads does she buy?

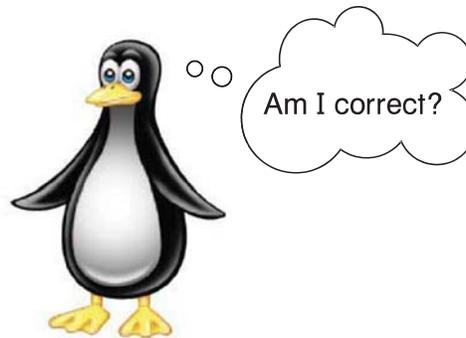
label

► **What's the Error?**



How many more children choose fruit than nuts?

Fruit	8
Nuts	5
	?
$8 - 5 = 3$	
3	more children

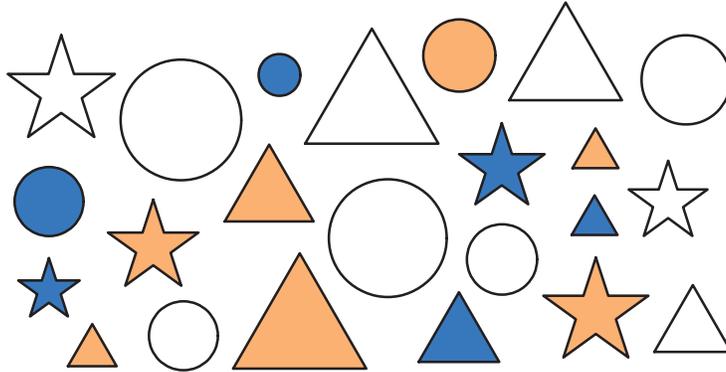


7. Show Puzzled Penguin how you would solve the problem.

more children

► **Organize and Graph Information**

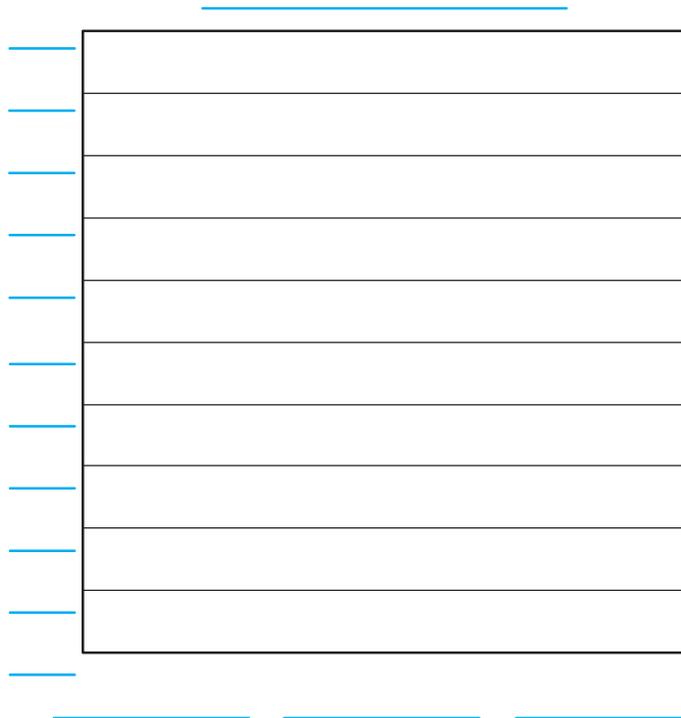
Here are some shapes for you to graph.



8. First make a **table**.

9. Then make a bar graph.

	Number



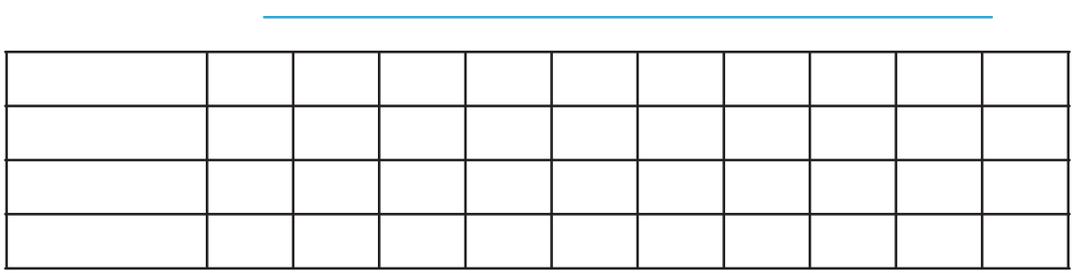
VOCABULARY
survey
data

► Record the Collected Data

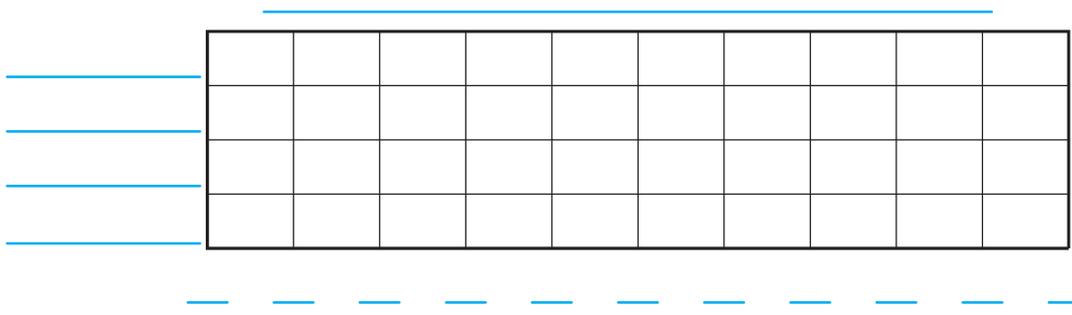
1. Show the results of your **survey** in the table.
Your teacher will help you.

_____	Number of Children

2. Show the **data** on a picture graph.



3. Show the data on a bar graph.

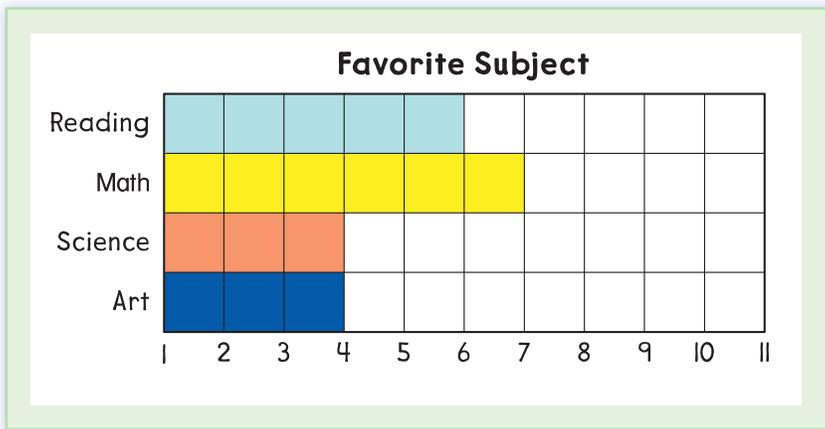


4. Use the data to write a 2-step word problem.

► **What's the Error?**

Favorite Subject	Number of Children
Reading	6
Math	7
Science	4
Art	4

Puzzled Penguin made a graph from the table.



5. Fix Puzzled Penguin's errors.

► **PATH to FLUENCY Add and Subtract Within 100**

Add.

$$\begin{array}{r} 6. \quad 76 \\ + 17 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 49 \\ + 21 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 12 \\ + 51 \\ \hline \end{array}$$

Subtract.

$$\begin{array}{r} 9. \quad 86 \\ - 28 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 60 \\ - 37 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 46 \\ - 19 \\ \hline \end{array}$$

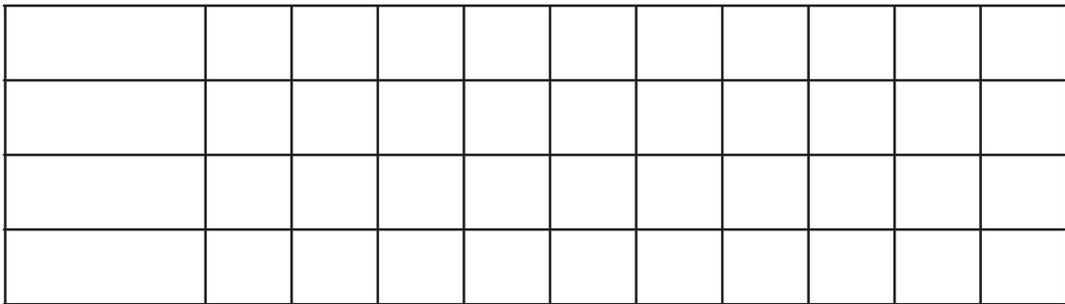
► **Make Graphs Using Data from a Table**

The table shows the number of bicycles sold at a store on four days last week.

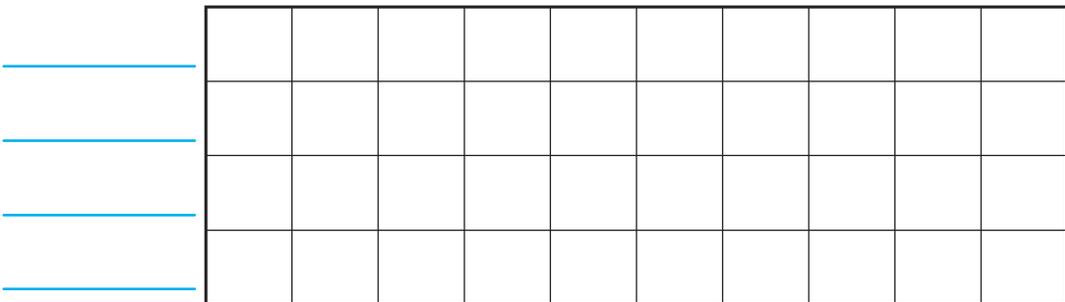
Bicycle Sales

Day	Number Sold
Saturday	8
Sunday	9
Monday	3
Tuesday	4

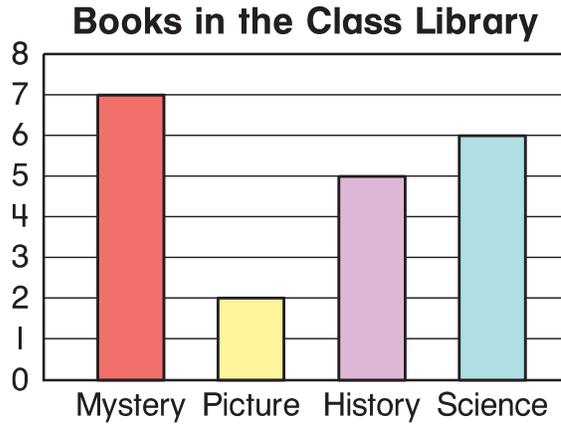
1. Make a picture graph using data from the table.



2. Make a bar graph using data from the table.



► Solve Problems Using a Bar Graph



Use the bar graph to solve the problems.

Show your work.

3. Children are reading 3 history books. The rest are on the shelf in the library. How many history books are on the shelf?

label

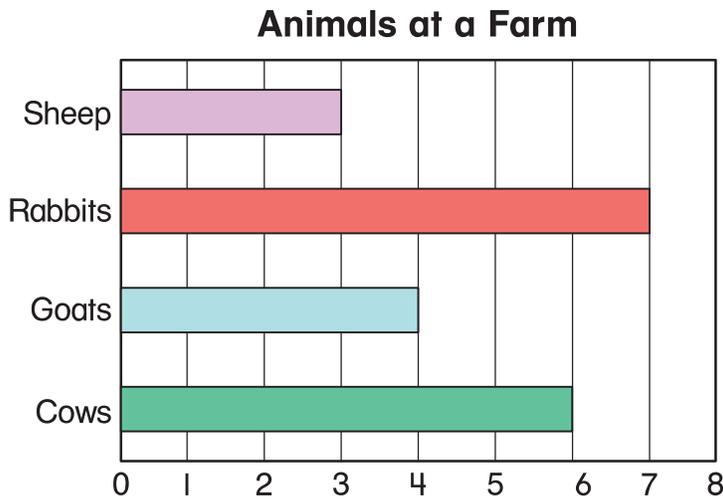
4. The class library has 2 more science books than math books. How many more math books must the library get so there is the same number of math books as mystery books?

label

5. Children are reading some of the mystery books. The rest are on the shelf. The library gets 6 new mystery books. Now there are 10 mystery books on the shelf. How many mystery books are children reading?

label

► Solve Problems Using a Bar Graph (continued)



Use the bar graph to solve the problems.

Show your work.

6. The farm has 4 more rabbits than horses. How many horses does the farm have?

label

7. The farm has 5 fewer goats than chickens. How many chickens does the farm have?

label

8. There are 3 cows in the barn. The rest of the cows are in the field with the goats and the sheep. How many animals are in the field?

label

► **Solve *Compare* Problems with 2-Digit Numbers**

Solve. Draw comparison bars for each.

9. A park has 46 maple trees. It has 18 fewer elm trees. How many elm trees are in the park?

label

10. There are 62 pine trees in the park. There are 13 fewer pine trees than birch trees. How many birch trees are in the park?

label

11. The park has 27 fir trees. There are 16 more spruce trees than fir trees. The park has 28 fewer spruce trees than oak trees. How many oak trees are in the park?

label

► **Math and Pets**

Mrs. Pratt asks the children in her class to tell which kitten they think is the cutest of these four kittens.



Fluffy



Mink



Odin



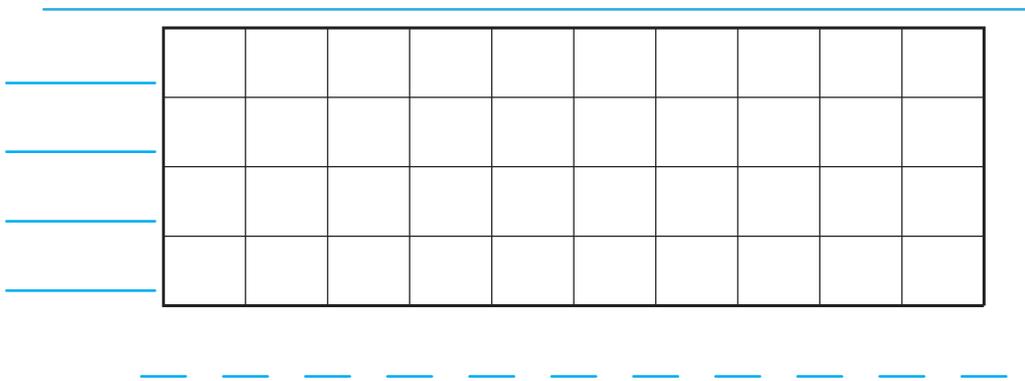
Simba

The results of the survey are shown in this table.

Which Kitten Do You Think Is the Cutest?

Fluffy	○ ○ ○ ○ ○ ○
Mink	○ ○ ○ ○
Odin	○ ○ ○ ○ ○ ○ ○ ○ ○ ○
Simba	○ ○ ○ ○ ○ ○

1. Use the information in the table to make a bar graph.



► **Take a Survey**

Your teacher will ask all of the children in the class to tell which puppy they think is the cutest of these four puppies.



Romy



Parker



Domino



Bernie

Show the results of the survey in this table.

Which Puppy Do You Think Is the Cutest?

Romy	
Parker	
Domino	
Bernie	

- Use the information in the table to make a bar graph on your MathBoard.
- Write a 2-step word problem that can be solved by using the graph. Trade problems with a classmate. Solve each other's problems.

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Name _____

Roses Picked

	Roses
Brad	7
Mark	9
Pam	8
Luis	5

1. Make a picture graph to show the data in the table.

2. Make a bar graph to show the data in the table.



Name _____

Strawberries

Paula										
Reynaldo										

Use the picture graph. Write the number.

Ring **more** or **fewer**.

3. Paula has **more fewer** strawberries than Reynaldo.

Solve these word problems.

Show your work.

4. Ray has 34 peaches in his basket.
 Maria has 19 peaches in her basket.
 How many more peaches does Ray
 have than Maria?

 label

5. Michelle picks 28 apples. She
 picks 12 fewer than Hakim. How
 many apples does Hakim pick?

 label

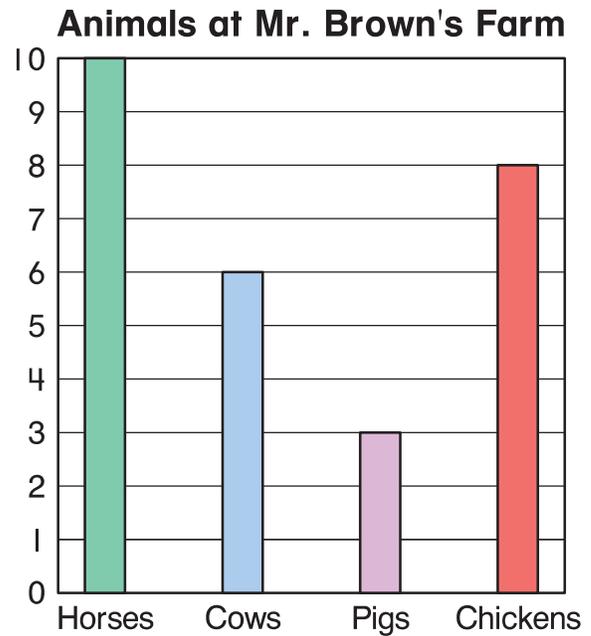
6. Kevin picks 12 more apples than Brendan.
 Kevin picks 50 apples. How many
 apples does Brendan pick?

 label

Use the bar graph. Write the number.
 Ring **more** or **fewer**.

7. There are **more fewer**
 chickens than pigs.

8. There are animals at
 Mr. Brown's farm in all.



Use the bar graph to solve the problems.

9. Two of the cows are calves. The rest are adult cows. How many adult cows are there?

 label

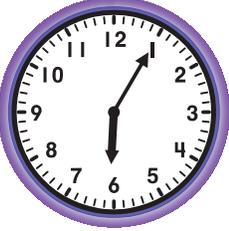
10. There are 2 fewer chickens at Mrs. Smith's farm than at Mr. Brown's farm. How many chickens are there in all at the two farms?

 label

11. If Mr. Brown's farm gets 3 more horses, how many more horses than cows will there be?

 label

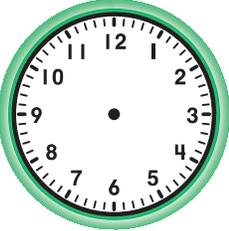
Write the time on each digital clock.

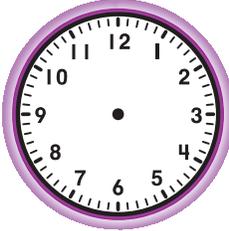
12. 

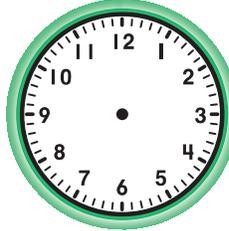

13. 


14. 


Draw hands on each clock to show the time.

15. 


16. 


17. 


For each activity, ring the time that makes sense.

18. wake up in the morning

19. go to the beach in the afternoon

7:00 P.M.

6:30 A.M.

9:00 A.M.

2:00 P.M.

20. Extended Response Explain how you can use skip counting to find the time shown on the clock.

