## Exploring Probability

A bag contains purple and yellow cubes. Jon pulled a cube from the bag 20 times. He tallied the color of the cube and put it back each time. These are his results.

| Purple | Yellow |
| :---: | :---: |
| HH HH HH II | III |


I. Which color do you think Jon is less likely to pull out next? $\qquad$
2. Which color do you think Jon is more likely to pull out next? $\qquad$
3. Which color probably has more cubes in the bag? $\qquad$
4. Which color probably has fewer cubes in the bag? $\qquad$
5. How could Jon change the cubes in the bag so yellow and purple are equally likely to be pulled out?
$\qquad$
$\qquad$

## Using Real-Object Graphs and Picture Graphs

The children in Room 4 made a picture graph showing the years they were born.

I. $\qquad$ is the oldest child.
2. The youngest child was born in the year $\qquad$ .
3. There were $\qquad$ children born in the year 2001.
4. LeAnn was born in the year $\qquad$ .
5. There are $\qquad$ children in Room 4.
6. Sara is about $\qquad$ years younger than Meta.
7. There were $\qquad$ more children born in 2001 than in 2002.

## Using Bar Graphs to Investigate Probability



I. Which sum was tossed the most times?
2. Which sums were tossed the fewest times? $\qquad$
3. If the game continues, is it likely or unlikely that 18 will win the race?
4. If the number cubes are tossed again, which sum are you most likely to get?

## Making and Using Bar Graphs

I. Count the length of the words in this sentence.

Oh, give me a home where the buffalo roam, where the deer and the antelope play.

| Word | Length |
| :--- | :---: |
| Oh | 2 |
| give | 4 |
| me |  |
| a |  |
| home |  |


| Word | Length |
| :--- | :--- |
| where |  |
| the |  |
| buffalo |  |
| roam |  |
| where |  |


| Word | Length |
| :--- | :--- |
| the |  |
| deer |  |
| and |  |
| the |  |
| antelope |  |
| play |  |

2. Make a bar graph for the length of words. Label the graph.

| Length of Words in the Sentence |  |  |  |  |  |  |  |  |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |

## Making and Using Pictographs

I. Use the tally table to make a pictograph. Choose a symbol and make a key.

| Tacos Served Last Week |  |
| :--- | :--- |
| Day | Tally |
| Tuesday | HH HH II |
| Wednesday | HH HH HH III |
| Thursday | HH HH HH I |
| Friday | HH HH HH |
| Saturday | HH HH HH HH II |



Key: Each $\qquad$ stands for $\qquad$ tacos.
2. Write your own sentence about the pictograph.
$\qquad$
$\qquad$

## Graphing Change Over Time

I. This table shows how the temperature in Boston changed on one cold winter day. Make a line graph of the data.

| Temperature in Boston <br> on Monday |  |
| :---: | :---: |
| Time | Temperature <br> in Fahrenheit |
| 8:00 А.м. | $4^{\circ}$ |
| 10:00 д.м. | $5^{\circ}$ |
| 12:00 р.м. | $9^{\circ}$ |
| 2:00 р.м. | $10^{\circ}$ |
| 4:00 р.м. | $8^{\circ}$ |


2. What do you think the temperature will be at 6:00 P.M.? Explain.

