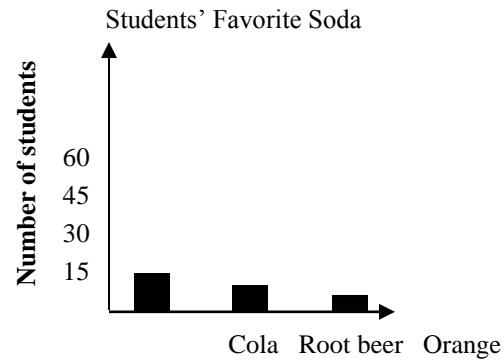
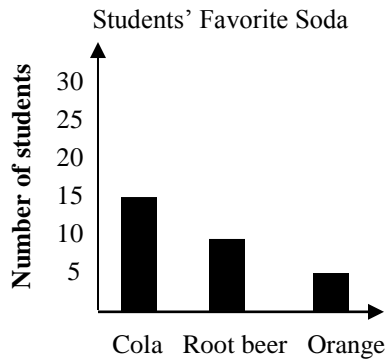


# Data 1: Events, Graphs, Probability

Long-Term Memory Review – Grade 6  
Review 1

1. A \_\_\_\_\_ is a list of all possible outcomes from a series of random events.
2. Which graph is a better representation of the data? Justify your answer.



3. When Joe gets dressed he can choose from three shirts (white, red, green), four pants (blue jeans, khaki, tan, gray), and two pairs of shoes (black, brown). Create a sample space of all the different outfits that include 1 shirt, 1 pair of pants, and 1 pair of shoes that Joe can make.
4. Place the letter of the problem on the line next to the matching sample space.

### Problem

- A) Coin toss
- B) Roll 1 6-sided die
- C) Spin a 4 colored spinner
- D) A family has 2 children

### Sample Space

- \_\_\_\_\_ BB, BG, GB, GG
- \_\_\_\_\_ H, T
- \_\_\_\_\_ 1, 2, 3, 4, 5, 6
- \_\_\_\_\_ red, blue, green, yellow

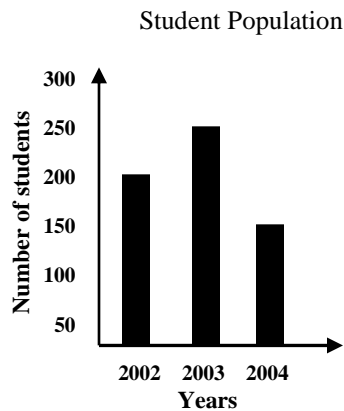
# Data 1: Events, Graphs, Probability

Long-Term Memory Review – Grade 6

## Review 2

1. A sample space is a list of all possible \_\_\_\_\_ from a series of random events.

2. What is one conclusion that can be made from the data shown in the graph below?



3. At a sandwich shop, Mary can choose from three breads (white, rye, Italian), three meats (ham, turkey, roast beef), and four vegetables (onions, lettuce, tomato, pickles). Create a tree diagram that shows all the possible sandwiches that Mary can choose from.

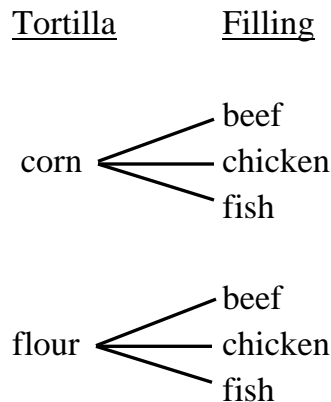
4. What is the probability that an even number is rolled on a 6-sided number cube?

## Data 1: Events, Graphs, Probability

Long-Term Memory Review – Grade 6

### Review 3

- The tree diagram below shows how tacos can be ordered at a restaurant. How many different types of tacos can be ordered? What is the probability that a random customer would order a beef taco in a flour tortilla?



- Laura collects postcards from different cities and states. Her collection includes a card from each of the following:

<b>Cities</b>	<b>States</b>
Los Angeles, Las Vegas, Reno San Jose, Boulder City	California, Nevada, Utah, Arizona, New Mexico, Texas, Washington, New York, Illinois, Colorado

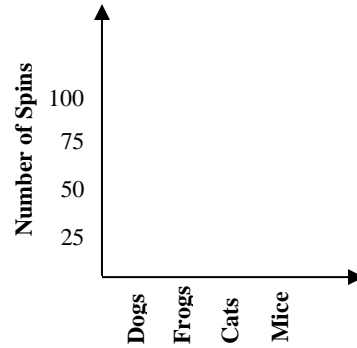
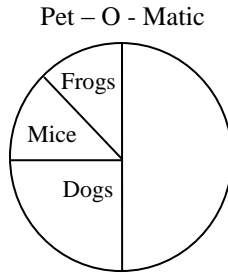
What conclusion can be made based on this data?

- Laura has  $\frac{1}{3}$  more state postcards than city postcards.
  - Laura has twice as many state postcards as city postcards.
  - Laura has  $\frac{1}{3}$  more city postcards than state postcards.
  - Laura has twice as many city postcards as state postcards.
- Henry flipped a coin and then rolled a 6-sided number cube.
    - Create a list that shows the sample space for all the possible outcomes.
    - What is the probability that Henry will flip a tail and roll a 5?
  - Data has been collected about the students' favorite color in a class. Would a bar graph or circle graph best represent this data? Justify your choice.

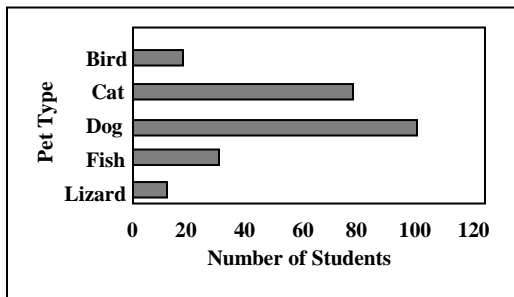
# Data 1: Events, Graphs, Probability

Long-Term Memory Review – Grade 6  
Review 4

- Carlos will spin the Pet-O-Matic game shown below 100 times. Draw a graph that shows the number of times Carlos can expect to win each animal.



- Melissa can choose from two pants (tan and black) and three shirts (white, blue, and purple) when dressing for school. What is the probability that Melissa will wear black pants and a blue shirt to school?
- Julie spun a spinner with equally sized spaced of green, yellow, and red. She then flipped a coin. Create a sample space to illustrate her possible outcomes. What is the probability that Julie landed on green and flipped a heads?
- Sean took a survey of his grade level class to find out what pets they owned. What are three conclusions that can be made from the data shown in the graph below?

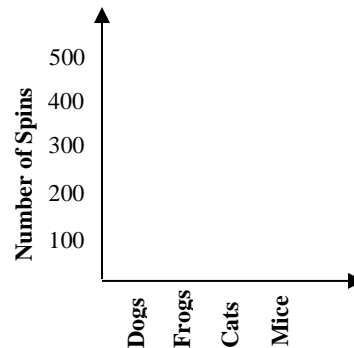
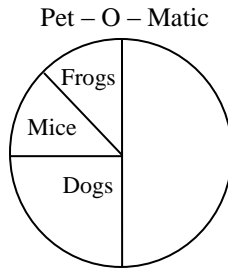


# Data 1: Events, Graphs, Probability

Long-Term Memory Review – Grade 6

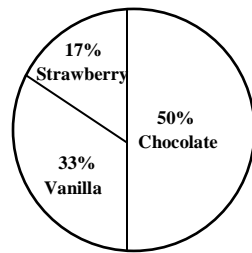
## Quiz

1. Sue will spin the Pet-O-Matic game shown below 800 times. Draw a graph, on the given axis, showing the number of times Sue can expect to win each animal.

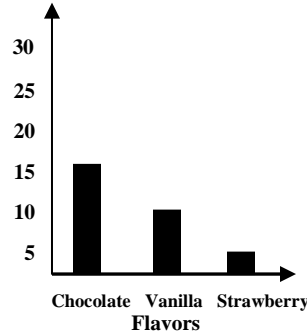


2. A class of 30 students is surveyed to determine each student's favorite ice cream flavor. Which graph better represents the data found? Justify your answer.

Class of 30 Students' Favorite Ice Cream Flavors



Class of 30 Students' Favorite Ice Cream Flavors



3. Maria collects stickers. She has a sticker from each of the following states and countries.

### States

California, Nevada, Utah,  
New Mexico, Oregon, Arizona

### Countries

Canada, United States, Mexico

Based on the data, which conclusion can be drawn?

- A) Maria has twice as many stickers from countries as from states.
- B) Maria has  $\frac{1}{3}$  as many country stickers as state stickers.
- C) Maria has twice as many stickers from states as from countries.
- D) Maria has  $\frac{1}{3}$  as many state stickers as country stickers.
- 4) A pizza shop offers a selection of crust (thin or thick), meat (sausage, pepperoni), and vegetables (black olive, onion, green peppers) to make a pizza.
- a) Create a tree diagram that demonstrates the choices of pizza.
- b) What is the probability that a random guest would choose a sausage and olive pizza on thin crust?
- 5) If one coin is flipped, and then one six sided number cube is rolled, what is the probability that the coin will land on heads and the number cube will show a 1?



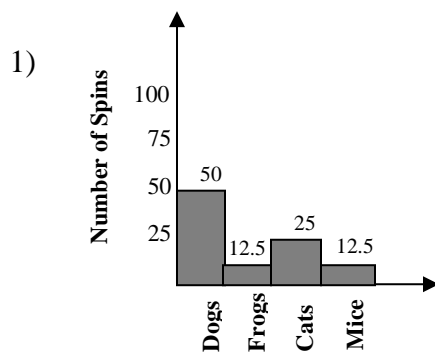
## Data 1: Events, Graphs, Probability

Long-Term Memory Review – Grade 6

### Review 3 Answers

- 1) 6;  $\frac{1}{6}$
- 2) B) Laura has twice as many state postcards than city postcards.
- 3) a) (h, 1), (h, 2), (h, 3), (h, 4), (h, 5), (h, 6), (t, 1), (t, 2), (t, 3), (t, 4), (t, 5), (t, 6); b)  $\frac{1}{12}$
- 4) Answer may vary: A circle graph would be best for a small number of colors and if the comparison was being done with the whole class. A bar graph would be best for a large number of colors or if the comparison was being done between each color. In this case, since the actual data is not known, a bar graph would be best to compare the colors.

### Review 4 Answers



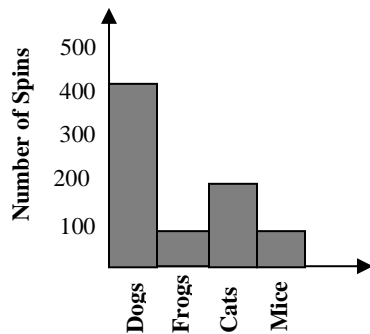
- 2)  $\frac{1}{6}$
- 3)  $\frac{1}{3} \cdot \frac{1}{2} = \frac{1}{6}$  Sample space: GH, GT, YT, YH, RH, RT
- 4) Answers may vary: Dog is most; Lizard is least; At least 230 animals (a student may own more than one animal); At least 100 students (All students may own a dog and another animal).

# Data 1: Events, Graphs, Probability

Long-Term Memory Review – Grade 6

## Quiz Answers

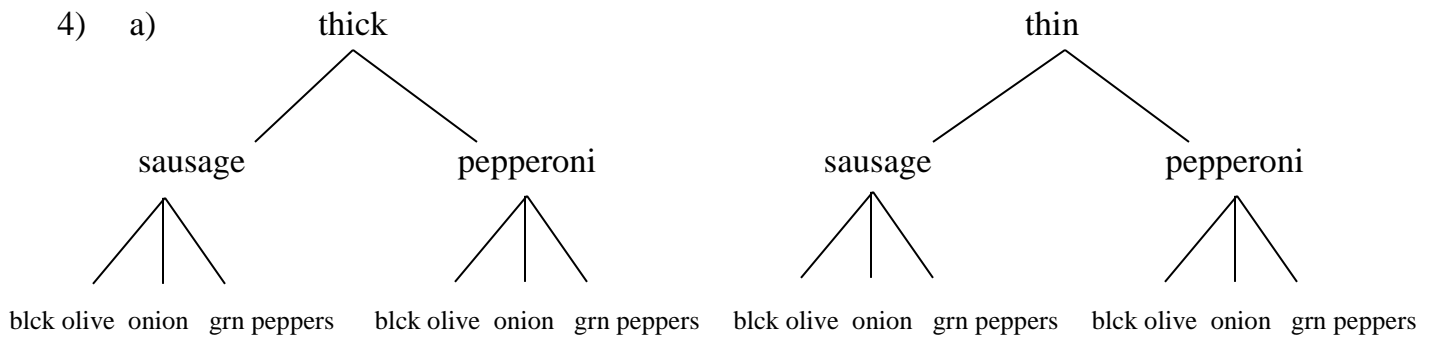
1)



2) The circle graph would be best, because there are only 3 flavors and we are comparing them to the whole. If the comparison is being made between the flavors, the bar graph would be best.

3) C) Maria has twice as many stickers from states as from countries.

4) a)



b)  $\frac{1}{3} \cdot \frac{1}{2} \cdot \frac{1}{2} = \frac{1}{12}$

5)  $\frac{1}{2} \cdot \frac{1}{6} = \frac{1}{12}$