Study Island

Generation Date: **10/29/2015**
Generated By: **Kathy Daniels**
Title: **Blizzard Bag Science 1 2015-2016**

1. Coach Hamilton watches Kate and Sandy play a game of basketball.

Coach Hamilton notices that Kate makes all of her shots, but Sandy only makes half of her shots. Which of these should Coach Hamilton conclude?

○ **A.** Kate is better at shooting a basketball than Sandy.

○ **B.** Sandy is better at shooting a basketball than Kate.

○ **C.** Sandy and Kate always make all of their shots.

○ **D.** Kate and Sandy never make any of their shots.

2. Technology Enhanced Questions are not available in Word format.

3. During recess every day for a week, Lester counted the number of birds that he saw on the playground. At the end of the week, his teacher told him to make a poster that will make his results clear when he shares them with the rest of the class. Lester decides to make a pictograph.

Because he counted a large number of birds every day, Lester decided that each bird on his pictograph should stand for five birds. Here is his pictograph:

Number of Birds on the Playground

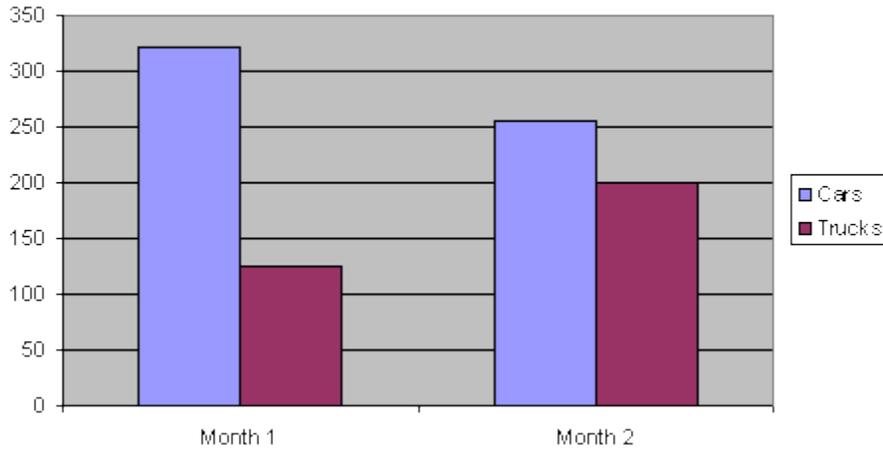| Day:	Number of Birds
Mon	🕊🕊
Tues	🕊🕊🕊
Wed	🕊
Thurs	🕊🕊🕊🕊🕊
Fri	🕊🕊

Each 🕊 stands for **5** birds

What was the greatest number of birds that Lester saw in one day?
○ **A.** 25
○ **B.** 10
○ **C.** 5
○ **D.** 13

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4. Billy kept track of the traffic that passed in front of his house for two months. The graph below shows the results of his observations.

Car and Truck Traffic

Which of the following can be concluded from the information in the graph?

○ **A.** More cars passed by the house in month 2 than in month 1.

○ **B.** More trucks passed by the house in month 2 than in month 1.

○ **C.** Some of the people who drove trucks in month 1 drove cars in month 2.

○ **D.** Trucks were less popular in Billy's town in month 2 than in month 1.

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Number of Birds on the Playground

Day:	Number of Birds
Mon	🐦 🐦
Tues	🐦 🐦 🐦
Wed	🐦

| Thurs | 🕊 🕊 🕊 🕊 🕊 |
| Fri | 🕊 🕊 |

Each 🕊 stands for **5** birds

How many birds did Lester see on Thursday?

- ○ **A.** 10
- ○ **B.** 25
- ○ **C.** 5
- ○ **D.** 2

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6. Pete records the temperature every two hours between noon and 8:00 pm every day for five days. Here is his data:
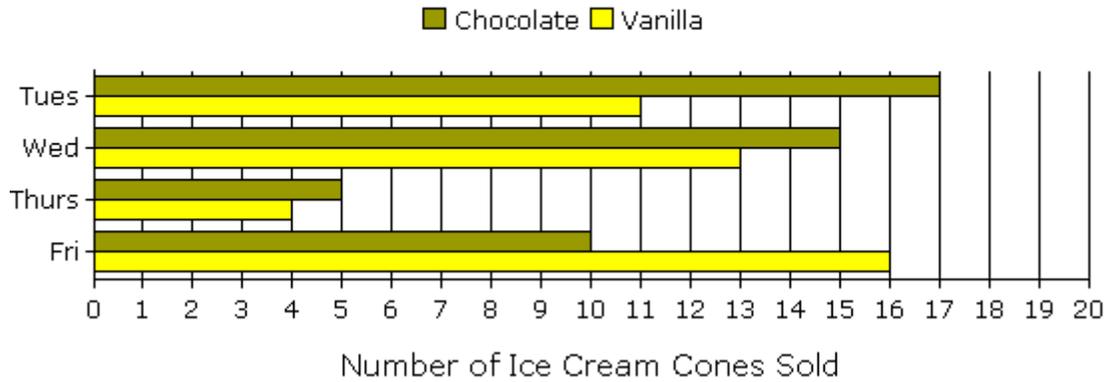
Results of Temperature Measurements

Time:	Mon	Tues	Wed	Thurs	Fri	Average:
noon	57°F	62°F	54°F	37°F	39°F	50°F
2:00 pm	63°F	65°F	53°F	40°F	43°F	53°F
4:00 pm	62°F	64°F	52°F	45°F	48°F	54°F
6:00 pm	60°F	61°F	48°F	43°F	55°F	53°F
8:00 pm	58°F	58°F	43°F	40°F	53°F	50°F

Which of the following statements best fits all of Pete's data?

- ○ **A.** The highest temperature is never later than 4:00 pm.

- ○ **B.** The temperature usually goes up throughout the day.

- ○ **C.** The highest temperature is usually at 4:00 pm.

- ○ **D.** The highest average temperature is at 4:00 pm.

7.

Ice Cream Cone Sales

Chocolate ☐ Vanilla

Number of Ice Cream Cones Sold

According to the chart, the ice cream store sold _____ more chocolate ice cream cones than vanilla ice cream cones on Tuesday.

○ **A.** 17

○ **B.** 28

○ **C.** 11

○ **D.** 6

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8. Paula set up the following experiment:

Question	In what type of soil do plants grow best?
Prediction	Plants will grow best in clay soil.
Variables	Not Changing: 1. amount of water 2. amount of sunlight 3. type of plant Changing: 1. type of soil

Results

Type of Soil	Height of Plant
Clay	tall
Sand	short
Mixed	tallest

Which of the following is the best conclusion for Paula's experiment?

○ **A.** The prediction was right because the plant in the clay soil grew the tallest.

○ **B.** The prediction was wrong because the plant in the sandy soil grew the tallest.

○ **C.** The prediction was right because the plant in the mixed soil grew the shortest.

○ **D.** The prediction was wrong because the plant in the mixed soil grew the tallest.

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9. Daniel counted the number of dandelion plants in the school yard each month for four months. The data he collected is shown in the table.

Number of Dandelion Plants Over Time

Month	Number of Plants
March	9
April	14
May	21
June	35

Daniel is sharing his results with the class. He tells the class that the number of dandelion plants got bigger each month. But he also needs to tell the class why the number of dandelions was bigger.

How should Daniel explain why the number of dandelion plants kept getting bigger each month?

○ **A.** Rabbits ate more dandelion plants in May than in March.

○ **B.** In May, many students picked dandelion flowers for their mothers.

○ **C.** The oak trees produced acorns, which grew into new dandelion plants.

○ **D.** Each dandelion plant produced seeds, which grew into new plants.

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10. Madelyn wanted to learn what sorts of things around the house are magnetic. She took a magnet around and touched it to many things to see if it tried to stick. Here are the items she tried and what she found.

| not attracted to the magnet | attracted to the magnet | not attracted to the magnet | attracted to the magnet |

What can Madelyn conclude from the above results?

○ **A.** All metals are magnetic.

○ **B.** All magnetic metals are silver.

○ **C.** All silver objects are magnetic.

○ **D.** Not all metals are magnetic.

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11. Dale had equal amounts of orange juice, milk, and water that he left in the refrigerator overnight. He took them all out and let them sit on the counter for one hour. At the end of the hour, he measured the temperature of each liquid. The table below shows the data that he collected.
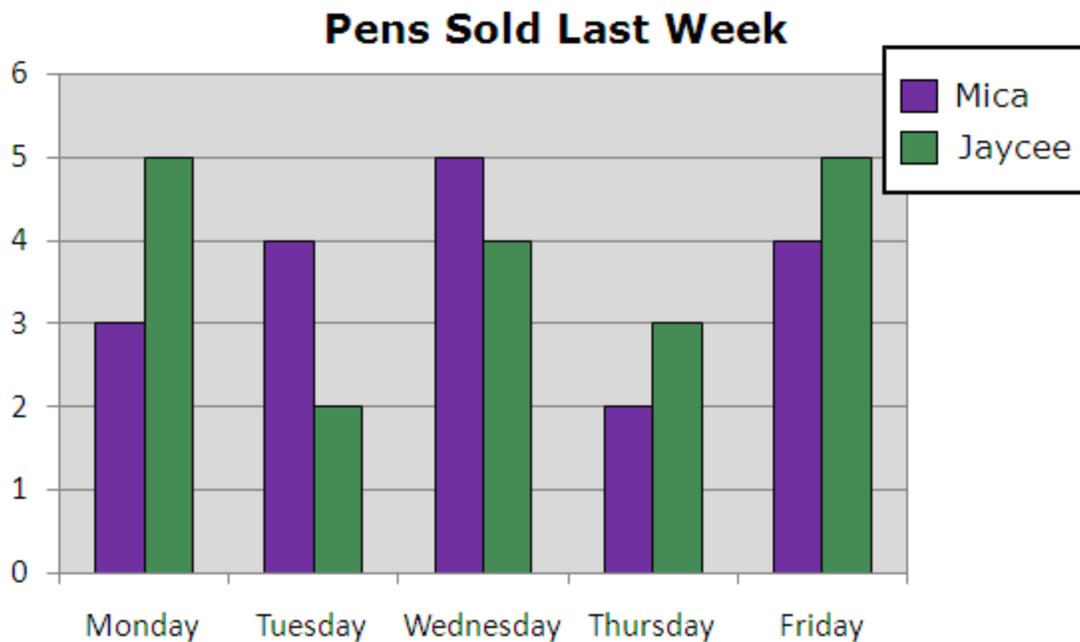
Temperature of Liquids After One Hour

Liquid	Temperature (°C)
orange juice	11.4
milk	11.0
water	10.5

What can Dale conclude from these measurements?

○ **A.** Different liquids change temperatures at different rates.

○ **B.** Different refrigerators are different temperatures.

○ **C.** Different liquids are different temperatures.

○ **D.** Different liquids have different flavors.

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12. Mica and Jaycee decided to sell pens to their classmates who needed them. Mica and Jaycee sold pens for a week and then displayed their results in a bar graph. How many total pens did Mica sell?

Pens Sold Last Week

○ **A.** 18
○ **B.** 17
○ **C.** 15
○ **D.** 16

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13. Why is it important to clearly describe procedures and communicate data?

○ **A.** so others can get credit for your work

○ **B.** so no one will copy the experiment

○ **C.** so no one will be able to understand the experiment

○ **D.** so others can understand and repeat the experiment

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14. Mrs. Taylor's class is doing an experiment to find out whether children perform better on tasks before recess or after recess. To study this, the class participated in learning games both before and after recess every day for a week. Overall, the class performed better during the games when they played them after recess.

Which of these could Mrs. Taylor conclude from the study?

○ **A.** It may be better to not have recess at all.

○ **B.** It may be better to give students tests after recess.

○ **C.** It may be better to have only recess at school and learn nothing.

○ **D.** It may be better to do all of the day's work before recess.

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15. Technology Enhanced Questions are not available in Word format.