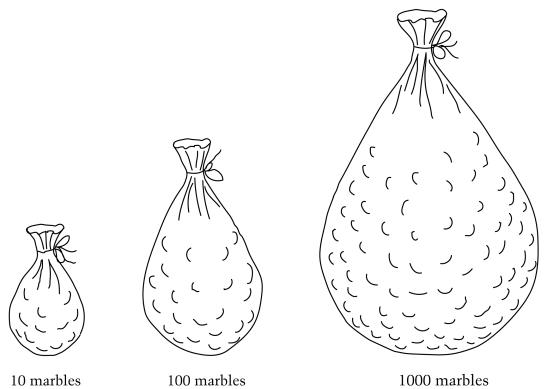
Lower Group

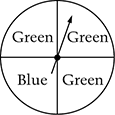
1) There is only one red marble in each of the bags shown below. Without looking, you are to pick a marble out of one of the bags. Which bag would give you the greatest chance of picking the red marble?



1. Bag with 10 marbles
2. Bag with 100 marbles
3. Bag with 1000 marbles

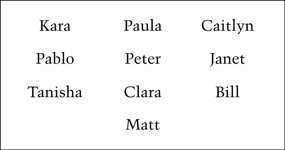
D. It makes no difference

2) Ms. Livingston’s class spins the arrow on the spinner 92 times. Of the following, which is the most likely result?



1. 66 green, 26 blue
2. 46 green, 46 blue
3. 23 green, 69 blue
4. 2 green, 90 blue

3)



One student will be chosen at random from the list above. What is the probability that the student's name begins with the letter *P*?

1. 1 out of 3
2. 1 out of 10
3. 3 out of 7

D. 3 out of 10

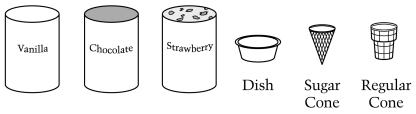
Middle Group

4) There are 6 cubes of the same size in a jar. 2 cubes are yellow. 3 cubes are red. 1 cube is blue. Chuck is going to pick one cube without looking. Which color is he most likely to pick?

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What is the probability of this color being picked?

5)

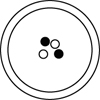
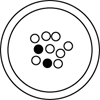
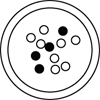
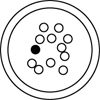


*Jan's Snack Shop has 3 flavors of ice cream—vanilla, chocolate, and strawberry. The ice cream can be served in a dish, a sugar cone, or a regular cone. There are 9 people who choose 1 dip of ice cream in a dish, or in a sugar cone, or in a regular cone, and all of their choices are different. List or show the 9 different choices.*

Could another person have a choice that is different from one of these 9 choices? Why or why not?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

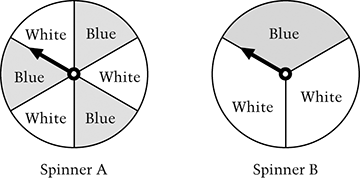
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6) A person is going to pick one marble without looking. For which dish is there the greatest probability of picking a black marble?

A.  B.  C.  D. 

High Group

7)



Lori has a choice of two spinners. She wants the one that gives her a greater probability of landing on blue.

Which spinner should she choose? Circle your answer.

       Spinner A           Spinner B

Explain why the spinner you chose gives Lori the greater probability of landing on blue.

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8) Marty has 6 red pencils, 4 green pencils, and 5 blue pencils. If he picks out one pencil without looking, what is the probability that the pencil he picks will be green?

1. 1 out of 3
2. 1 out of 4
3. 1 out of 15
4. 4 out of 15

9) There are 3 fifth graders and 2 sixth graders on the swim team. Everyone's name is put in a hat and the captain is chosen by picking one name. What are the chances that the captain will be a fifth grader?

1. l out of 5
2. l out of 3
3. 3 out of 5
4. 2 out of 3

# Works Cited

Institute of Education Sciences. (n.d.). *NAEP Questions Tool*. Retrieved November 28, 2011, from NAEP: http://nces.ed.gov/nationsreportcard/itmrlsx/s508/Result.aspx