

Name: _____

Period: ____

Date: _____

Exercise Set: Mystery Bags

1. Lin is interested in how many of her classmates watch her favorite TV show, so she starts asking around at lunch. She gets the following responses:

yes	yes	yes	no	no	no	no
no	no	no	yes	no	no	no

If she asks one more person randomly in the cafeteria, do you think they will say “yes” or “no”? Explain your reasoning.

2. An engineer tests the strength of a new material by seeing how much weight it can hold before breaking. Previous tests have held these weights in pounds:

1200	1400	1300	1500	950	1600	1100
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Do you think that this material will be able to hold more than 1,000 pounds in the next test? Explain your reasoning.

3. A company tests two new products to make sure they last for more than a year.

- Product 1 had 950 out of 1,000 test items last for more than a year.
- Product 2 had 150 out of 200 last for more than a year.

If you had to choose one of these two products to use for more than a year, which one is more likely to last? Explain your reasoning.

4. Put these numbers in order from least to greatest.

A. $\frac{1}{2}$

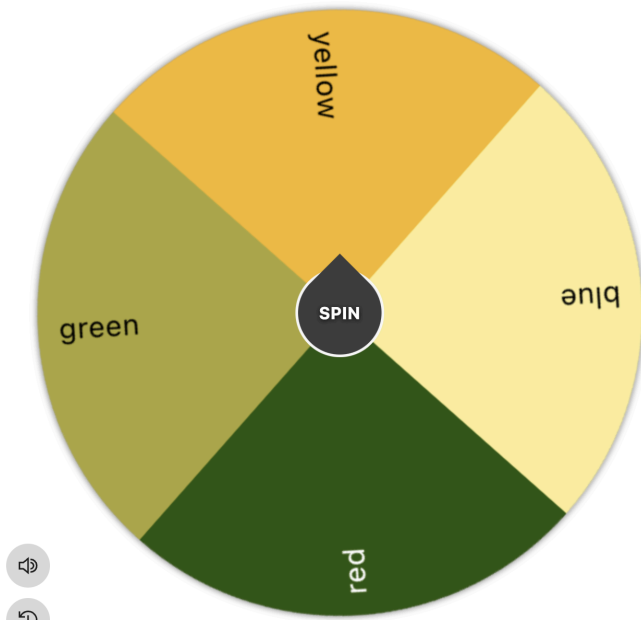
B. $\frac{1}{3}$

C. $\frac{2}{5}$

D. 0.6

E. 0.3

Use the spinner below to answer the following questions.



What is the likelihood that you will spin red? certain likely 50/50 unlikely impossible

What is the likelihood that you will spin a color that starts with a consonant? certain likely 50/50 unlikely impossible

What is the probability you will spin purple? certain likely 50/50 unlikely impossible

Give an example of an event that would be LIKELY. _____