

Name _____

Date _____

Probability of Chance Events - Independent Practice Worksheet

Complete all the problems.

1. A box contains 100 green and blue pencils. Addison chooses a pencil out of the box, without looking, records the pencil, and then places that pencil back in the box. Addison has recorded 32 green pencils and 26 blue pencils. Using these results, predict the number of green pencils in the bag.

2. Lucas has a bag that contains 11 cabbages, 12 beets, and 7 stalks of celery. Lucas performs 50 pulls, recording the vegetables drawn and placing the pulled vegetable back into the bag before the next draw.

How many cabbage draws would is expected if 1000 pulls are conducted?
10,000 pulls?

3. Gabriel tosses a coin 60 times and has 32 heads and 28 tails. We define a tails as a success. What is the relative frequency of tails?

4. Harry and Evan want to play snakes and ladders. They want to decide who throws the dice. They decide to have Harry roll one die first, if he rolls a 3 or less Evan goes first. If he rolls a 4 or higher, he will go first. What is the relative frequency of a 4 or higher on a single die roll?

5. Aiden has a carton with 10 clocks in it. 4 are alarm clocks. What is the relative frequency probability that a randomly selected clock will be an alarm clock?



6. Hailey organizes a New Year's party. There are 16 pastries at the party, 7 of the pastries are chocolate. What is the relative frequency probability that a randomly selected pastry will be a chocolate pastry?



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7. Samuel has a bell box that contains 4 door bells, 3 office bells, and 7 big bells. Without looking, Samuel chooses a bell from the box, what is the relative frequency probability that he selects a door bell?

8. Oliver has lots of bags. There are three types of bags that he collects. travel bags, hand bags and school bags. If the probability of getting a travel bag is $\frac{5}{10}$ and the probability of getting hand bag is $\frac{4}{10}$; what is the relative frequency probability of getting a school bag?

9. Nathan has a box which contains fish. There are 45 fish in the box. 25 of the fish are goldfish. What is the relative frequency probability that a randomly selected fish will be a gold fish?

10. Caleb has a bike rental agency. He has 26 vehicles available, 19 are black bikes. What is the relative frequency probability that a randomly selected vehicle will be a black bike?

