TODAY'S AGENDA: March 8

- **Work on Khan Academy Mission:**
  > Probability

- Today's Objective: Large-Group Lesson:

  > Making Predictions with Probability

- Today's Standard:

  > Summarize, represent and interpret data on a single count or measurement variable.

Making predictions with probability

Practice predicting the number of times a certain event will happen.

$$\frac{1}{2} \nearrow \frac{\cancel{x}}{1000}$$

$$\frac{1000}{2} = \frac{\cancel{2}x}{\cancel{x}}$$

$$500 = x$$

Ramkin is going to flip a fair coin 1200 times.

What is the best prediction for the number of times that the coin will land heads up?

600

$$\frac{1}{2} = \frac{x}{1200}$$

Amit is going to guess on all 20 questions of his multiple-choice test. Each question on the test has 4 answer options.

What is the best prediction for the number of questions that Amit will answer correctly?

5

$$\frac{x}{20} \neq \frac{1}{4}$$

$$4x = 20$$

$$x = \frac{20}{4}$$

$$x = 5$$

Jeremy is going to roll a fair 6-sided die 180 times.

What is the best prediction for the number of times that Jeremy will roll a number greater than 4?

60

$$\frac{x}{180} = \frac{2}{6}$$

$$6x = 360$$
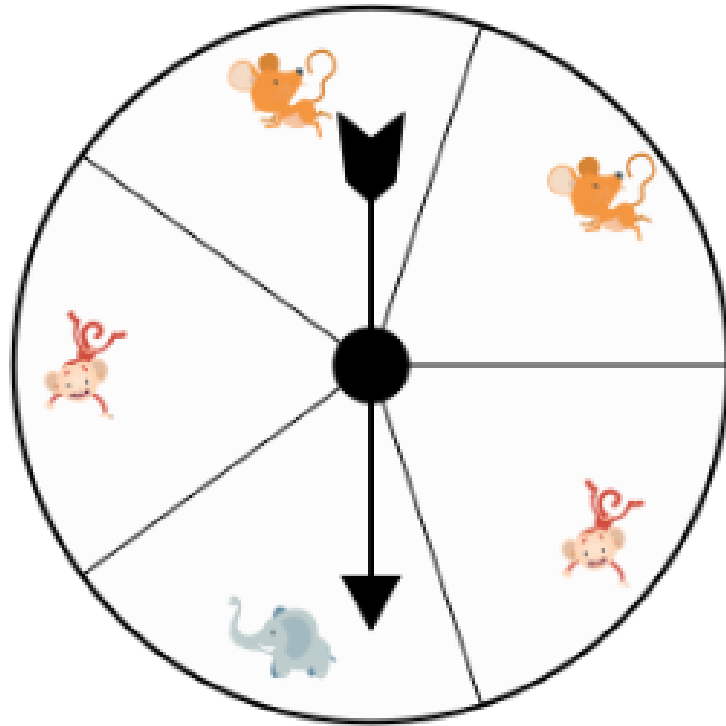
$$\frac{6x}{6} = \frac{360}{6}$$

$$x = 60$$

Chen has an MP3 player called the Jumble. The Jumble randomly selects a song for the user to listen to. Chen's Jumble has 4 classical songs, 3 rock songs, and 2 rap songs on it. Chen is going to listen to 360 songs.

What is the best prediction for the number of classical songs that Chen will listen to?

160

$$\frac{x}{360} = \frac{4}{9}$$

$$9\overline{)1440}$$

$$\frac{1440}{9} = \frac{9x}{9}$$

$$54$$

$$x = 160$$

Kavitha is going to spin the following spinner 200 times. The spinner is divided into equal sections.

What is the best prediction for the number of times the spinner will land on the 🐘?

1/5