Master 11.7   **Additional Activity 1:**
Match My Meaning!

Work with a partner. Carefully cut apart these cards.

certain	will definitely happen
impossible	cannot happen
possible	could happen
probable	is likely to happen
improbable	is unlikely to happen

- ➤ Place all the cards face down.
- ➤ Take turns flipping over 2 cards.
- ➤ If the cards match (word and meaning), keep them and take another turn.
- ➤ The winner is the player who collects the most cards.
- ➤ Play 5 rounds. The grand winner is the player who wins the most rounds.

Take It Further:
Write about a situation that can be described using the words on the cards.

37

(**Master 11.8**) **Additional Activity 2:**
Animal Draw

Work with a partner.

➢ Look at the animal names listed here. What fraction of the list are
  Cats? Insects? Birds? Fish?

Cougar	**Lion**	**Tiger**	**Panther**
Beetle	**Fly**	**Mosquito**	**Ladybug**
Crow	**Eagle**	**Salmon**	**Tuna**

➢ Cut apart the animal names and place them in a bag.

➢ You will pull out an animal name without looking, then replace it in the bag.

➢ Make a prediction. In 30 tries, about how many times do you expect to draw a
  cat? An insect? A fish? A bird?

➢ Shake up the bag. Reach in and pull out a name without looking.
  Record your result and replace the name. Make 30 draws in all.

➢ Did your actual draws match your prediction? Explain.

Take It Further:
Find as many different equivalent fractions as possible to express the probability of
drawing an insect.

Master 11.9 **Additional Activity 3:**
Fold Your Tents!

Work with a partner.

You will need 20 matching squares of paper about 2 cm by 2 cm and a tray.

- ➢ Fold each piece of paper in half to make a small "tent."

- ➢ Stand all your tents on a tray. Each tent should have the fold facing up.

- ➢ Shake the tray so that all the tents fall off and land on the floor.

- ➢ What fraction of the tents have landed fold up?
  What fraction landed lying on one side?
  What fraction landed standing on one end?

- ➢ Repeat the experiment 4 more times.

- ➢ Record your results each time.

- ➢ Based on your results, predict what fraction of the tents will land fold up after
  your next toss.

- ➢ Toss the tents once more. Count the tents that landed fold up.
  Did your actual results match your prediction? Explain.

Take It Further:
Predict the fraction of the tents that will land fold up after the 10th and 20th tosses.

Name _____ Date _____

Additional Activity 4:
Robot Roundup

Imagine you are in charge of a robot factory.

Each robot needs 2 arms, 2 wheels, and a box-shaped body.

Both arms must be the same colour. Both wheels must be the same colour.

For each component, you have the colour choices shown here:

Arms: yellow or blue
Wheels: green or purple
Body: red or black or grey

- ➢ Use a tree diagram to find out how many different robots you can make.

- ➢ Draw and colour one of the robots.

- ➢ If you picked the components without looking, what are the chances you would create a grey robot with blue arms and purple wheels?

Take It Further:
Add another component (for example, a control panel in gold or silver) and work out how many different robots can now be produced.