Name: _____

Date: _____

Communicate the Ideas

1 | 4
2 | 3 | 5

1. Jasmine has 5 tiles numbered from 1 to 5 and a coin.
She chooses 1 tile and flips the coin. What are all the possible outcomes?

a) Use 3 different methods to show how to find the number of possible outcomes.

Tree Diagram:

Table:

		Tiles				
Coins						

Multiplication:

b) Which method do you like best? Give 1 reason for your answer.

_____

_____

2. Explain why you cannot use 1 table to find the possible outcomes when you have
3 or more events. Use an example to help you explain your answer.
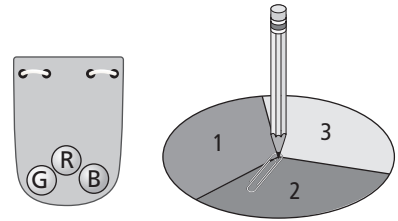
_____

_____

_____

Name: _____ Date: _____

Check Your Understanding

Practise

3. A bag holds 3 marbles—1 red, 1 green, and 1 blue.
A spinner has 3 equal sections labelled 1, 2, and 3.
You choose a marble and spin the spinner.

a) Complete the table to show the sample space.

		Spinner		
		1	**2**	**3**
	Red (R)			
Marbles	**Green (G)**			
	Blue (B)			

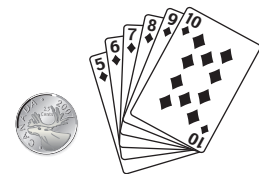**b)** How many possible outcomes does the table show? _____

c) Write a multiplication statement to show the outcomes.

_____ × _____ = _____

There are _____ possible outcomes.

4. Flip a coin and choose a card.

a) Complete the table to show all the possible outcomes.

		Cards					
		5	_____	_____	_____	_____	_____
Coin	**Heads (H)**						
	Tails (____)						

There are _____ possible outcomes.

b) Use multiplication to check the number of possible outcomes.
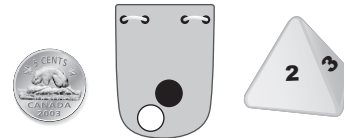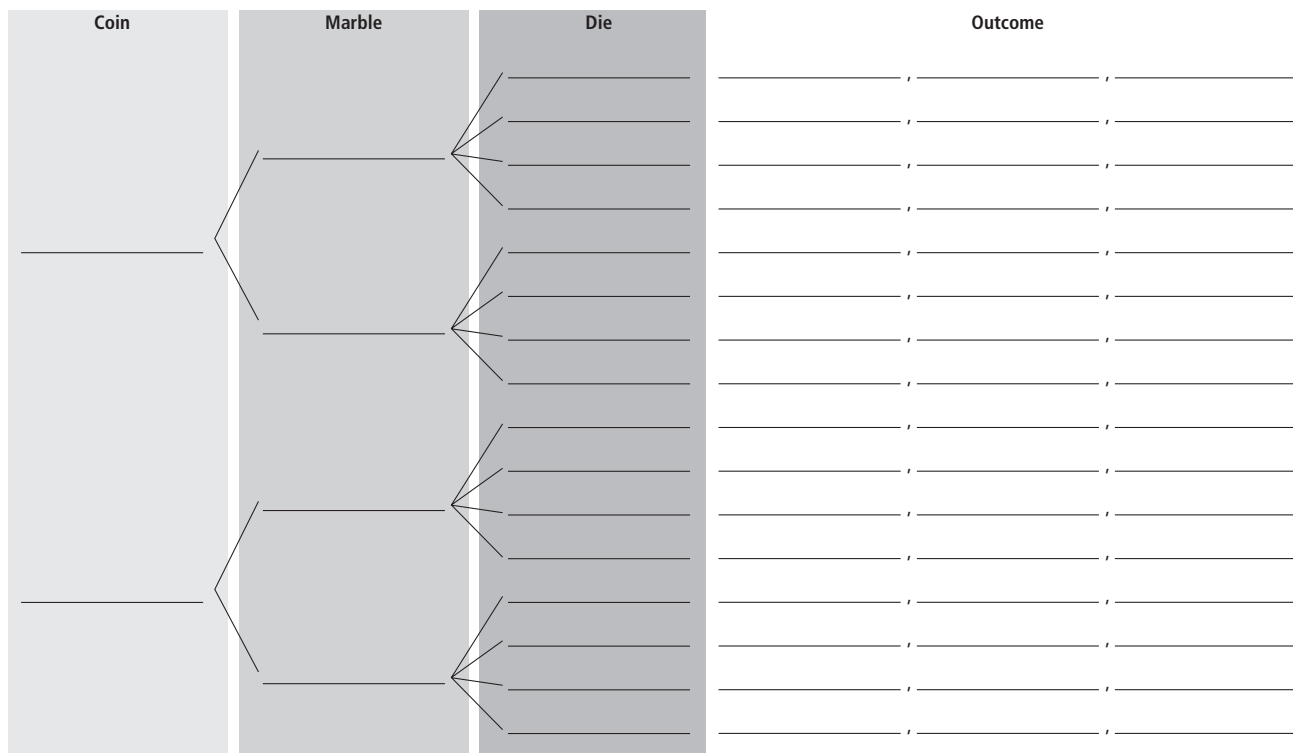
_____ × _____ = _____

There are _____ possible outcomes.

Name: _____ Date: _____

5. You flip a coin, roll a 4-sided die, and choose a marble from a bag. Show the number of possible outcomes 2 different ways.

Tree Diagram:

Coin	Marble	Die	Outcome

_____ × _____ × _____ = _____

Multiplication: _____ × _____ × _____ = _____

There are _____ possible outcomes.

Apply

6. You have a nickel, a dime, and a loonie in your left pocket, and a penny and a quarter in your right pocket.

a) If you choose 1 coin from each pocket, how many different combinations could you get?

		Left Pocket		
		Nickel (N)	**Dime (D)**	**Loonie (L)**
Right Pocket	**Penny (P)**			
	Quarter (Q)			

Sentence: _____

b) You choose 1 coin from each pocket. What is the largest sum of money you could get?

Sentence: _____

Name: _____ Date: _____

7. Tony has 3 pairs of jeans and 4 shirts.
How many different combinations can he wear?
Show your work.

Draw a chart or tree
diagram, or use the
multiplication method.

_____

8. The birthday menu at the Blue Bird Restaurant gives you 1 choice from each category:
Drinks: 3 choices
Meal: 4 choices
Dessert: 2 choices
How many possible combinations are there?
Show your work.

_____

MATH LINK

In the stick game, each stick can land decorated or bare side up.

a) Find the total number of possible outcomes when you toss 4 sticks.
Use multiplication.
Each stick has 2 sides or _____ possible outcomes.

Stick 1 × Stick 2 × Stick 3 × Stick 4 = total possible outcomes

_____ × _____ × _____ × _____ = _____
(possible   *(possible*   *(possible*   *(possible*
outcomes)   *outcomes)*   *outcomes)*   *outcomes)*

b) If you used 5 sticks, how many possible outcomes would there be?

_____