

Grade 5 Mathematics
Week of March 8 – March 12

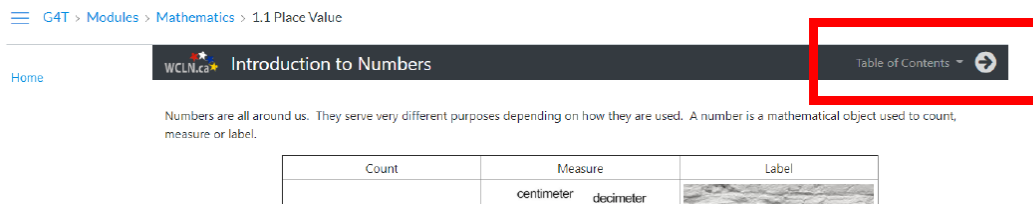
Lesson 6.1: Probability

Lesson 6.2 Calculating Probability

Lesson Materials

- Lessons for [Section 6.1 Probability](#)
- Lessons for [Section 6.2 Calculating Probability](#)
- Learning Guide (This PDF)

Use the link above to open the lessons for this section. Remember: on the lesson page, use the arrow next to the “Table of Contents” at the **top of the page** to move through the lessons. You can also click on the Table of Contents to open the menu so you can jump to a specific lesson page.



Work through the online lessons for this section. You can work at your own pace or follow the suggested schedule below. Complete the activities in your Learning Guide as you work through the lessons. You can print the Learning Guide, or, copy out the questions on a separate piece of paper. Be sure to try the games and practice quizzes as you make your way through the online lesson book.

Suggested Lesson Schedule

<p>Monday</p> <ul style="list-style-type: none">• What is Probability?• Matching Probability• Coin Flipping Example• LG 6.1 p. 1-2, #1-2 <p>Tuesday</p> <ul style="list-style-type: none">• Spinner Example #1• Spinner Example #2• LG 6.1 p. 2, #3 <p>Wednesday</p> <ul style="list-style-type: none">• Die Example• Die Example• Matching Terms	<p>Thursday</p> <ul style="list-style-type: none">• Theoretical Probability• Coin Flip Example• LG 6.2 p. 2-3, #1-2 <p>Friday</p> <ul style="list-style-type: none">• Spinner Example• LG p. 3-4, #3-4
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Name: _____

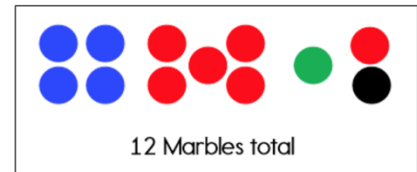
UNIT 6 LEARNING GUIDE – DATA ANALYSIS

INSTRUCTIONS:

Using a pencil, complete the following questions as you work through the related lessons. Show ALL of your work as is explained in the lessons. Do your best and always ask questions if there is anything that you don't understand.

6.1 PROBABILITY

1. A bag contains these marbles. Without looking, you pick one marble out of the bag. Use the terms below to answer the following questions.



Impossible Unlikely Even Likelihood Likely Certain

- | | |
|--|---|
| <p>a) What is the likelihood of pulling a green marble out of the bag?</p> <p>b) What is the likelihood of pulling a yellow marble out of the bag?</p> | <p>c) What is the likelihood of pulling a red marble out of the bag?</p> <p>d) What is the likelihood of pulling a marble out of the bag?</p> |
|--|---|

2. Using the terms below, describe the following examples:

Impossible Unlikely Even Likelihood Likely Certain

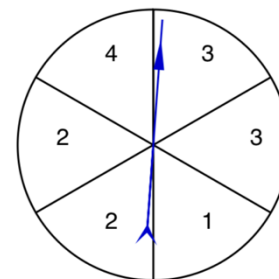
Explain your answer.

- a) Ben has two marbles of the same size in his pocket, a green one and a red one. He puts his hand into his pocket and, without looking, takes out a red marble.
- b) Cindy has three marbles of the same size in her pocket, a green, a blue and a red marble. She puts her hand into her pocket and, without looking, takes out a red marble.

- c) Leroy has six red marbles of the same size in his pocket. He puts his hand into his pocket and, without looking, takes out a blue marble.

3. Use the spinner shown to answer the following questions.

- a) What is the probability of the spinner not landing on 1 or 4 ? _____
- b) What is the probability of the spinner not landing on 4 ? _____
- c) Do you have an equal chance of landing on either 1 or 4 ? _____
- d) What is the probability of the spinner not landing on 3 or 4 ? _____
- e) What is the probability of the spinner not landing on 1? _____



6.2 CALCULATING PROBABILITY

1. This is multiplication table has 25 outcomes

X	1	2	3	4	5
1	1	2	3	4	5
2	2	4	6	8	10
3	3	5	9	12	15
4	4	8	12	16	20
5	5	10	15	20	25

- a) How many outcomes are even numbers?
- b) How many outcomes are odd numbers?
- c) What is the probability of getting an even outcome?
- d) What is the probability of getting an odd outcome?

2. How many possible outcomes are there in each scenario? *Reminder: The number of possible outcomes is the number of ways that the scenario could play out.*

Ex. A number from 1 to 10 is chosen at random.

10 (Because there are 10 different numbers that could be drawn out of the hat.)

- a. A number from 1 to 25 is chosen at random.
- b. A number from 1 to 100 is chosen at random.

- c. A normal six-sided die is rolled.
 - d. There are 7 candies in your pocket, and you grab one out.
 - e. A card from a regular 52-card deck is chosen at random.
3. What is the probability for each scenario? *Reminder: The number of successful (favourable) outcomes is the number of different ways that the scenario works out or is successful.*

$$\text{probability of an event} = \frac{\# \text{ of favourable outcomes}}{\text{total \# of possible outcomes}}$$

Ex. A number from 1 to 10 is chosen at random. What is the possibility of selecting an even number?

Favourable Outcomes: 5 (Because there are 5 even numbers between 1 and 10.)

Possible Outcomes: 10 (Because there are 10 numbers in total.)

Probability: $\frac{5}{10}$ or simplified to $\frac{1}{2}$

- a. A number from 1 to 15 is chosen at random. What is the possibility of selecting an even number?
Favourable Outcomes:
Possible Outcomes:
Probability:
- b. A number from 1 to 100 is chosen at random. What is the probability of selecting a number less than 7?
Favourable Outcomes:
Possible Outcomes:
Probability:
- c. A letter from the alphabet is chosen at random. What is the chance of selecting a vowel (not counting y)?
Favourable Outcomes:
Possible Outcomes:
Probability:
- d. A normal six-sided die is rolled. What is the possibility of landing a 3?
Favourable Outcomes:
Possible Outcomes:
Probability:

- e. There are 7 coins in your pocket: 1 quarter, 2 loonies, and 4 toonies. If you reach in your pocket and grab a coin at random, what are the chances of pulling a toonie out of your pocket?

Favourable Outcomes:

Possible Outcomes:

Probability: