



Grade 8 - Week 7

Name: _____ Gr. & Sec.: _____

Name of Teacher: _____ Score: _____

MASTER ME

Most Essential Competency (MELC): Counts the number of occurrences of an outcome in an experiment: (table); (tree diagram); (systematic listing); and (fundamental counting principle).

At the end of this activity, you will be able to:

- a. illustrate outcome of an event;
- b. count the number of occurrences of an outcome in an experiment; and
- c. apply the concept of probability in real life situations.

Remember this:

Counting the number of occurrences of an outcome in an experiment can be arranged in four different methods: (1) table; (2) tree diagram; (3) systematic listing; (4) fundamental counting principle.

Example: Ayra went to Robinson Department store in Tejero, General Trias City, Cavite. She decided to buy 3 pants and 2 blouses. In how many ways can she dress up?

Solution:

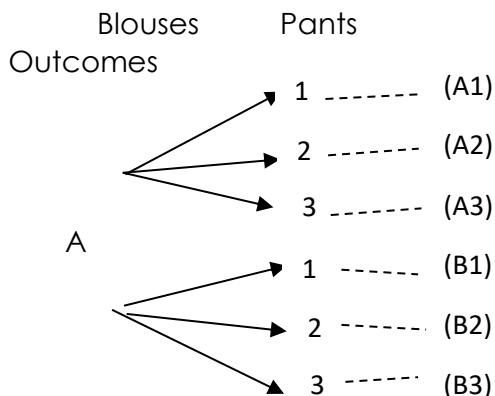
Let: A and B represent blouses
1, 2, and 3 represent pants

1. **Using a Table**

Blouses	PANTS		
	1	2	3
A	A1	A2	A3
B	B1	B2	B3

2. **Using a Tree Diagram**

2.



3. **Using Systematic Listing**

(A1, B1, A2, B2, A3, B3)

By counting the number of outcomes, there are 6 possible ways Ayra can dress up.



4. Using Fundamental Counting Principle

To find the total number of outcomes using this method, simply multiply the outcomes for each event

Hence,

$$2 \text{ blouses} \times 3 \text{ pants} = 6 \text{ Ways Ayra can dress up.}$$

Therefore, there are 6 different ways Ayra can dress up.

ACT ON

Consider the experiment of tossing a coin and rolling a die.

1. What are the possible outcomes if you toss a coin once?

2. How many possible outcomes are there in number 1?

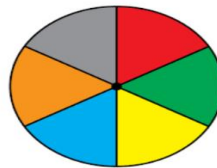
3. What are the possible outcomes when a die is rolled once?

4. What are the possible outcomes if a coin and a die are thrown together?

5. How many possible outcomes are there in all if a coin and a die are thrown together?

TRY MORE

There are 4 different coins in this piggy bank (25cents, 1-peso coin, 5-peso coin, and 10-peso coin) and six colors on the spinner (Red, Green, Yellow, Blue, Orange, and Gray), If you pick one coin and spin the spinner simultaneously, how many possible outcomes would you have?



Use the following methods to find the total number of possible outcomes.

A. Table

COLORS	COINS			
	25 cents	1-peso coin	5-peso coin	10-peso coin
Red (R)				
Green (G)				
Yellow (Y)				
Blue (B)				
Orange (O)				
Gray (Gy)				

Total number of possible outcomes = _____



B. Systematic Listing

Sample Space = { _____ }

= _____ possible outcomes

C. Tree Diagram

D. Fundamental Counting Principles

_____ X _____ = _____ possible outcomes

HARNESS SKILL

- A.** The Coffee House along Arnaldo Highway in the City of Gen. Trias, Cavite offers a combo sandwich for only P100.00. With combo sandwich meal you get 1 drinks and 1 side dish. Below are the given choices.:

Sides: chips, fries, slaw or fruits.

Drinks: Coffee or soda

Use *tree diagram* to find the number of possible different combos

