# What Might Happen?

What are mathematical concepts? Mathematical concepts are abstract and complex. However, mathematical concepts may occasionally become engaging and vivid. Probability is a mathematical concept. It is a measure of the likelihood of something occurring. While it may sound difficult and abstract, we utilize it on a daily basis. "The probability of tomorrow is a rainy day is 90%", "Dad is likely to go out this afternoon", a probability implied in the sentences we utter every day. Hence, in order to encourage the students to demonstrate their understanding of the probability concepts, we created a game for students to create and manipulate their own probability.
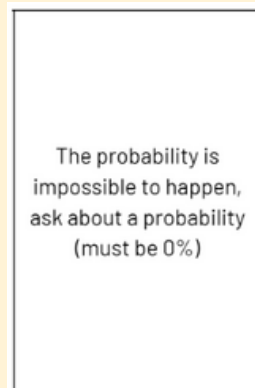
NUMBER OF PLAYERS: 2-4
PLAYING TIME: 25MIN
AGE RANGE: 11+

COMPONENTS

40 Probability cards
80 Elements Cards
64 Ability Cards
Game Board
4 Player Tokens
4 to 10 sided Dices, one for each

PROBABILITY CARDS

The probability is impossible to happen, ask about a probability (must be 0%)
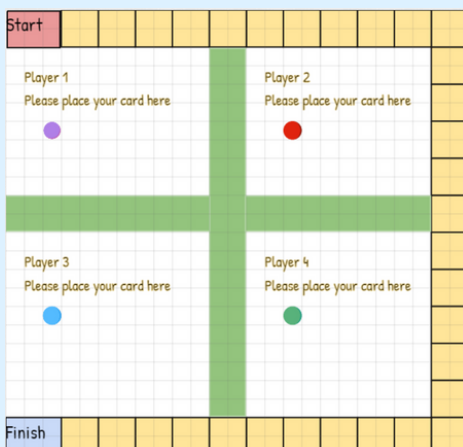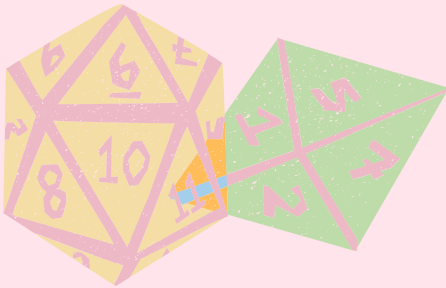
PROBABILITY CARDS

- What will appear on the card:
  - A random Fraction, Percentage, Decimal Number, or Likelihood will appear on the card
  - How to ask about the probability will appear on the card
- A Probability Card has two states, **Activate** and **Deactivate**.
- The Probability Card is **Deactivated** when it is drawn from the deck.
  - When the probability card is **Deactivated**, the player has to construct a random event that represents the probability.
  - The player then has to use ask about the probability based on the indication on the card.
- The Probability Card is **Activated** when it is won from the other player.
  - When the probability card is **Activated**, the probability on the card reflects the player's chances of receiving an ability card.
  - The **Activated** Probability Card will be discarded if the player decides not to use it in his turn.

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Elements Cards

Doctor
**Character**

ELEMENT
CARDS

- Elements Cards will serve as hints. Players need to come up with a random event using the elements cards. There are four types of Elements Cards.
  - Environment Cards: Described the setting of the random event
  - Festival Cards: Described the action that happened in the random event
  - Character Cards: Described the main character of the random event
  - Object Cards: Described the object in the random event
- All four types of cards will be put in one element cards deck.

Ability Cards

ABILITY
CARDS

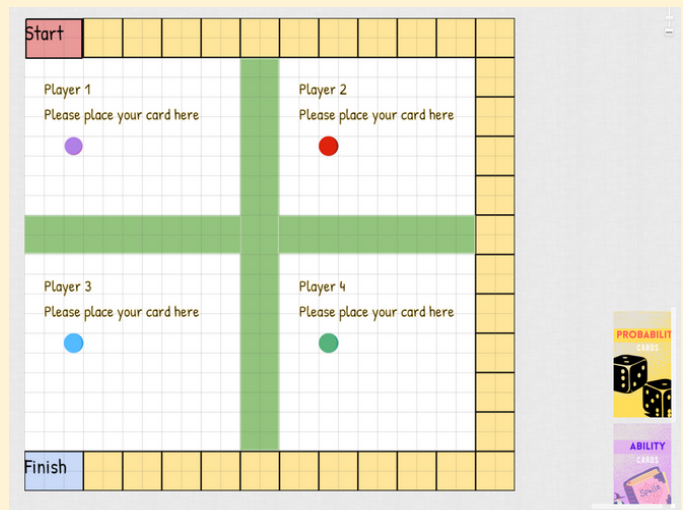**Apply to Your Token on the Board**

Move Forward Two Steps

- The Ability Cards are used for players to gain advantages on the board.
- There are 24 types of Ability Cards.
- The Ability Cards are divided into two sections. The upper section describes the affected range, and the lower section describes the movement.
- The Ability Card can only be drawn when an Active Probability Card has been used.
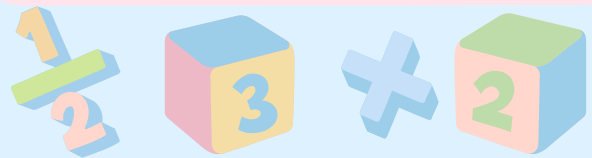
Setting Up the Game

- Shuffle the Probability Cards, the Elements Cards, and the Ability Cards.
- All players roll six-sided dice.
- The player who gets the largest number will go first. If players roll equal maximums, the players with equal numbers reroll the dice until a size is determined.
- The game goes clockwise.
- All players are required to choose a player token to represent themselves.
- Place the token at the starting position of the game board.

Start

Player 1
Please place your card here

Player 2
Please place your card here

Player 3
Please place your card here

Player 4
Please place your card here

Finish

PROBABILIT

ABILITY

What Might Happen?

Turn Overview

Each player takes a turn until the game is completed. A player's turn consists of the following **Five** basic actions:

1. The player rolls a **six-sided dice** and moves the token on the board according to the number rolled.
2. The player then draws one Probability Card and two Elements Cards.
3. The player needs to come up with a random event using the Probability Cards and the Elements Cards in their hand.
4. After that, ask the next player about the probability of the random element.
5. If the next player gets the probability right, give the Probability Card to the next player.
   a. If the next player gets the probability wrong, the player will reserve the Probability Card.
   b. If the player fails to come up with a good random event with the desired probability, the player will lose this round. The Probability Card in the player's hand will go back into the deck.

Win Condition

The first player who moves to the endpoint on the board will win the game.

The Activated Probability Card

The **Probability Card** gained after describing a random event will become Active. Place the **Activated Probability Card** on the board. One who has an **Activated Probability Card** on the board can use the card to draw the **Ability Card**. Additional actions before the basic actions if an **Activated Probability Card** is in one's hand:

Decide
The player needs to make a decision based on the **Activated Probability Card** he or she gets.

1. **Decision 1**: To roll a dice and move as a normal round
2. **Decision 2**: To use the **Activated Probability Card** to get the special bonus.
   a. **Roll a Dice**: The player can roll a dice based on the **Probability Card**. If the **Probability Card** is 90%, then the player will need to roll a ten-sided dice. If the player gets any number between 1 to 9, then the player will be able to draw an **Ability Card**.
   b. **Move**: After drawing the **Ability Card**, the player can utilize it to influence the Token's placement on the board.

The **Ability Card** and the **Activated Probability Card** can not be stored. If the player decides not to use the cards, the cards will be discarded.

Game End

The game will end when one player reaches the endpoint.