



Skyye Primary School

Maths Games



# Our Vision

We believe that all students are mathematicians and should experience a Numeracy rich learning where the four proficiencies are taught in a collaborative learning environment.

Everyone should have access to manipulatives and productive struggle should be encouraged and celebrated, resulting in a feeling of success for all learners.

## Why Maths Games?

Maths games play a pivotal role in schools as they foster an environment where children can cultivate confidence and engagement in their learning journey. By participating in such games, students develop positive attitudes towards learning, as they experience both challenge and success, instilling a sense of accomplishment. Moreover, these games encourage children to contribute effectively to their peers' learning experiences, fostering a collaborative atmosphere. Through the interactive nature of Maths games, students are encouraged to utilize their imagination and curiosity, honing essential skills and processes crucial for problem-solving, hypothesising, experimenting, researching, and investigating. This process not only enhances their mathematical proficiency but also equips them with a versatile 'toolkit' of cognitive skills applicable across various disciplines, preparing them for the challenges of the future.

# Maths Open Afternoon

Thank you for joining us for our Maths Open Afternoon here at Skye Primary School. We are passionate about Mathematics and thrilled to share some of our favourite Maths games with you.

## How the afternoon works

Begin in your child's classroom, where the teacher will present an overview of the day's schedule. Your child will then guide you through a Maths task and introduce you to one of our engaging Maths games. After completing the task, you will receive your Maths passport. Follow the guide provided to proceed to the next game. Remember to submit your passport at the final game location for a chance to win an exciting Maths pack!

### Locations:

Prep: Number Snake

Grade One: The Roller Coaster Game

Grade Two: Get Out Of My House

Grade Three: Three Guesses

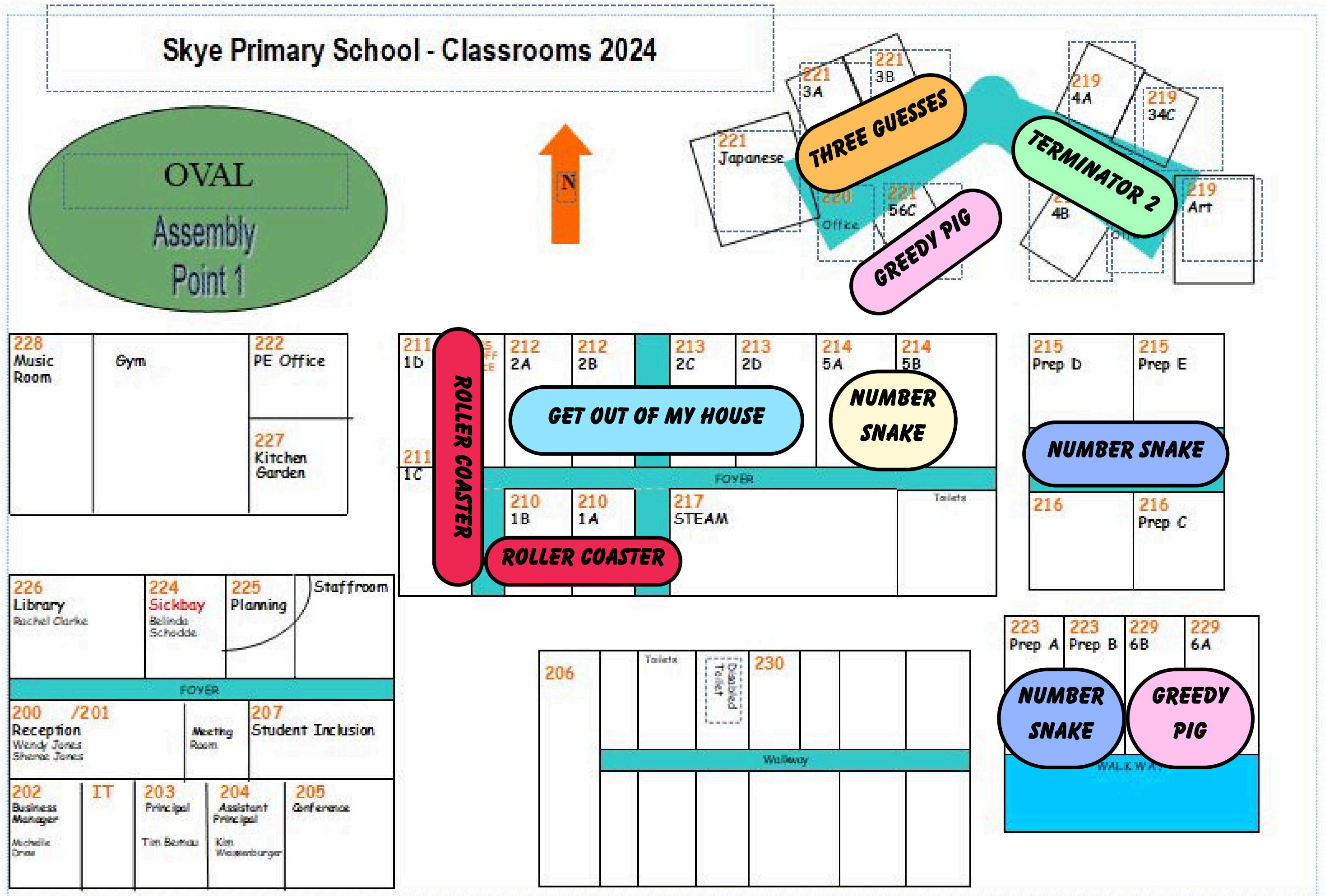
Grade Four: Terminator 2

Grade Five: Mathematic-Tac-Toe

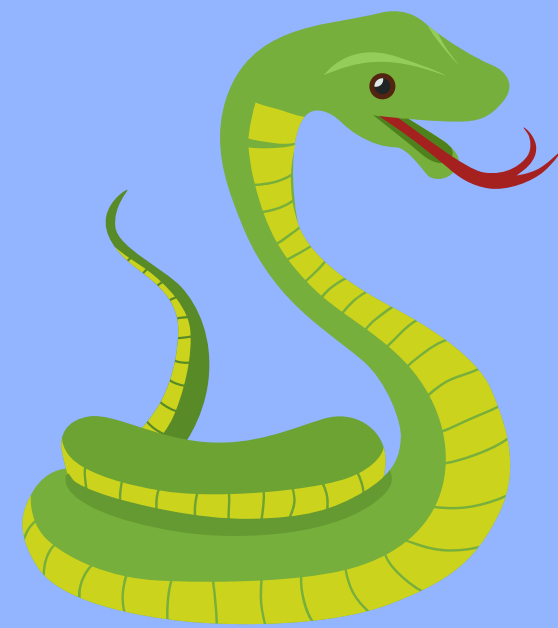
Grade Six: Greedy Pig



# School Map



# Number Snake



The Learning: Number Snake is a fantastic educational game! that covers a number of mathematical concepts such as number recognition, ordering numbers, numerical sequences and measurement. while also promoting social skills like turn-taking.

How to play the game:

Equipment:  
Deck of cards

Instructions:

1. Remove all the picture cards so you only have Ace up to 10
2. take it in turns to draw out a card
3. Place that card in the correct order from 1-10
4. Each number can only occur once in the sequence if you draw a number you already have it goes to the discard pile
5. First player to have their numbers up to 10 wins

Instructional video:



Good questions to ask while playing: "Can you read that number?"; "Why did you place the \_\_\_ card there?"; "What card would go before the \_\_\_?" (Or after, or in between); "What card are you hoping to get next?"

Modifications

A little harder: draw two cards at a time and choose to add, subtract, multiple or divide them to create your sequence from 1-10. (e.g if I draw a 5 and a 2 I could choose to do  $5 \times 2 = 10$  or  $5 - 2 = 3$  and so on)

# The Roller Coaster Game



The Learning: This game is crafted to enhance individuals' addition/subtraction fluency, one-to-one counting, turn-taking, and number recognition skills.

How to play the game:

Equipment:

Dice,  
game board  
counters/tokens  
tens frames

Instructions:

1. Place your tokens on the starting position.
2. Each player starts with 10 points (you can use counters to represent this).
3. Roll the dice and move that number of places.
4. Where you land will tell you to add or subtract that amount from your 10 points.
5. Once you reach the end, the player with the most amount of points is the winner!

Instructional video:



Questions to ask while playing:

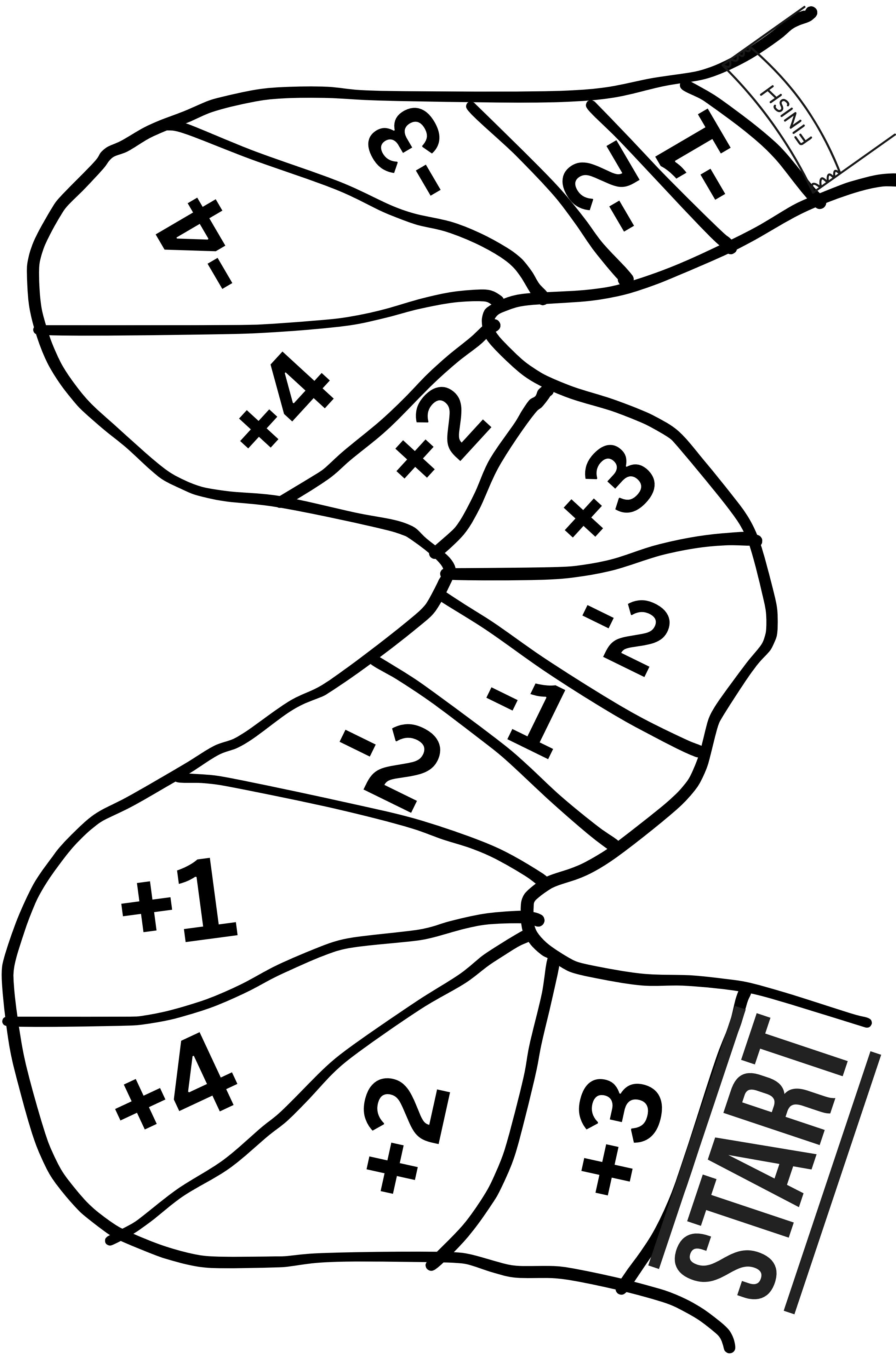
How many counters do you have now?  
Can you work this out without counting  
the whole collection?

Modifications

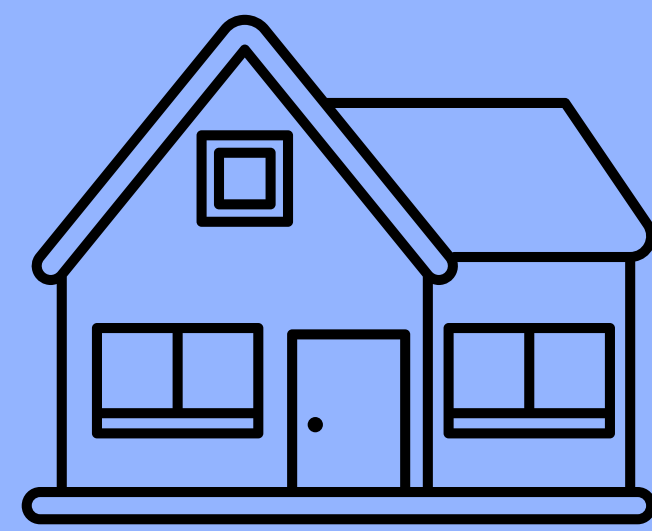
A little easier: Tokens and tens frame may be used.

A little harder: Use multiplication and division facts on the game board.





# Get Out of My House



The Learning: This game fosters sequencing numbers, recognizing numbers, developing before and after vocabulary, turn-taking, and resilience.  
How to play the game:

Equipment:  
Deck of cards,  
counters/tokens,  
paper and pens

## Instructions:

1. Draw a game board of 12 houses and place the numbers from 0-11 in each house.
2. Remove the kings, jacks, and jokers from the deck of cards (queens equal 0).
3. Each player needs 7 tokens (e.g., coins, LEGO pieces, etc.).
4. Flip a card and place a token on a house that is a number that comes before or after the card number (e.g., if you flip a 10, you can place your token on the 9 or 11 house).
5. If Player 2 can place their token on your house, you will be kicked out, unless you have 3 tokens in that house.

Instructional video:



Questions to ask while playing:

"What's the other number you can place your counter on?" (Students might initially focus on what number comes after their card and not what comes before.)

"Is it a good idea to place lots of tokens on the one square? Why/why not?"

"What would you do differently next time you played?"

## Modifications

A little easier: place the house numbers in order

A little harder: create a multiples game board i.e multiples of 10 houses (0, 10, 20, 30, 40.....up to 110)

flip a card i.e. 7 ( $7 \times 10 = 70$ ) place token on 70



# Three Guesses???

The Learning: Three Guesses is a game that encompasses a variety of concepts, such as even/odd numbers, square numbers, prime numbers, and greater than/less than comparisons.

How to play the game:

Equipment:  
deck of cards  
paper and pens

## Instructions:

1. Remove kings, jacks, and jokers.
2. Assign a value of 0 to the queens.
3. Place the deck face down on the table.
4. Player 1 begins by drawing 3 cards and creating a 2-digit number, then gives the first clue.
5. Player 2 guesses; if correct on the first turn, they receive all 3 cards; if incorrect, Player 1 gives another clue.
6. Player 2 guesses again; if correct, they receive 2 cards; if incorrect, Player 1 gives a final clue.
7. Player 2 guesses for the final time; if correct, they receive 1 card; if incorrect, all cards are returned to the deck.

Swap turns and repeat the process.

Instructional video:



Questions to ask while playing:

"Why did you choose to make \_\_\_ as your number?"

"What other clues could you have given for that number?"

## Modifications

A little easier: alter to a single digit number

A little harder: alter to a 3 or 4 digit number

# Terminator 2

The Learning: This game not only sharpens addition, subtraction, multiplication, and division skills through dice rolling and score calculation but also encourages turn-taking and critical thinking as players strategize when to roll again or stop to maximize their scores.

How to play the game:

Equipment:  
six-sided dice  
paper and pens

Instructions:

1. Draw a game board with dimensions 5x3.
2. Place the numbers 1-15 in the board in any order.
3. Each player chooses a color.
4. Roll 3 six-sided dice.
5. Use an operation (addition, subtraction, multiplication, or division) to reach the number on the game board.
6. Place a colored cross on the corresponding number on the board if you successfully reach it.
7. The player with the most colored crosses on the board at the end wins.

Instructional video:



Questions to ask while playing:

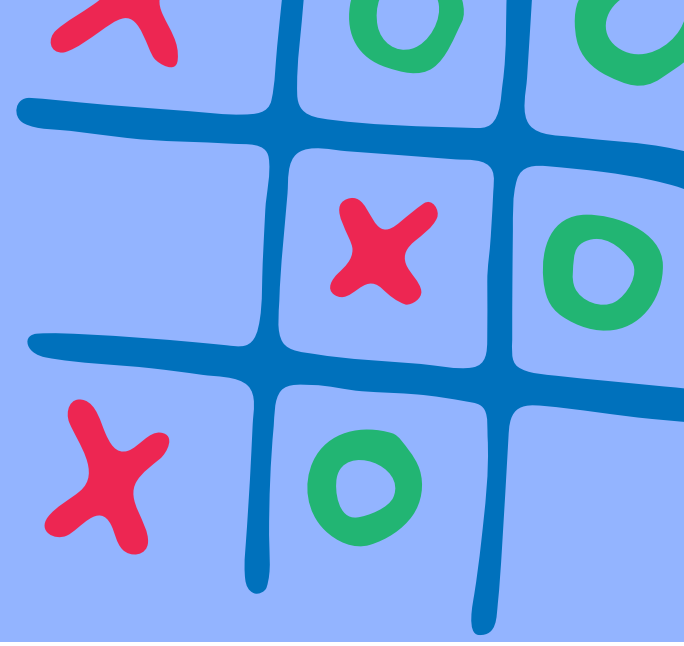
"What number are you trying to make now?"

"Explain to me how you got \_\_\_?"

"What if you use multiplication (or subtraction etc.)?" (offer suggestions when students need help but DON'T tell them how to arrive at a number.)

A little easier: use 2 dice and change the board to 12

# Mathematic Tic Tac Toe



The Learning: This game fosters critical, multistep thinking strategies for addition/subtraction facts toward a target number.

How to play the game:

## Equipment:

Paper and pens

## Instructions:

1. Draw a Tic Tac Toe grid.
2. Place the numbers 1-9 at the bottom of your page.
3. Set a target number of 15.
4. Decide who will be the attacker (Player who needs to make 15 with 3 numbers in a row) and the defender (Player who needs to block the attacker).
5. All numbers 1-9 can only be played once on the board.
6. Players MUST NOT enter a number in the center box of the grid on their first go.

Instructional video:



Questions to ask while playing:

Why did you put the \_\_\_\_ there?"

"Who do you think has a better chance of winning- the attacker or the defender?"

"What would you do differently next time?"

## Modifications

A little easier: Play as odd and even players, player to get 3 odd or 3 even in a row wins the match.

A little harder: Set a target number incorporate multiplication/division facts.



# Greedy Pig



## The Learning:

This game nurtures skills in probability, addition, and critical thinking.

How to play the game:

Equipment:  
Six-sided dice,  
paper and pens

## Instructions:

1. Each player creates a scorecard with 6 rows and 3 columns labelled "Round," "Score," and "Total."
2. Roll the dice and record the number rolled.
3. Decide whether to stop or risk rolling again; however, if you roll a 2, your score for that round becomes 0.
4. Roll as many times as desired each round and add your scores at the end of each round to calculate the total.

Instructional video:



Questions to ask while playing:

"Why did you decide to stop when you did?/ Why did you decide to keep going?"

"Do the numbers you roll influence your decision on when to stop or not? Explain why/why not."

"What is the chance of rolling a 2?"

"What would you do differently next time you play?"

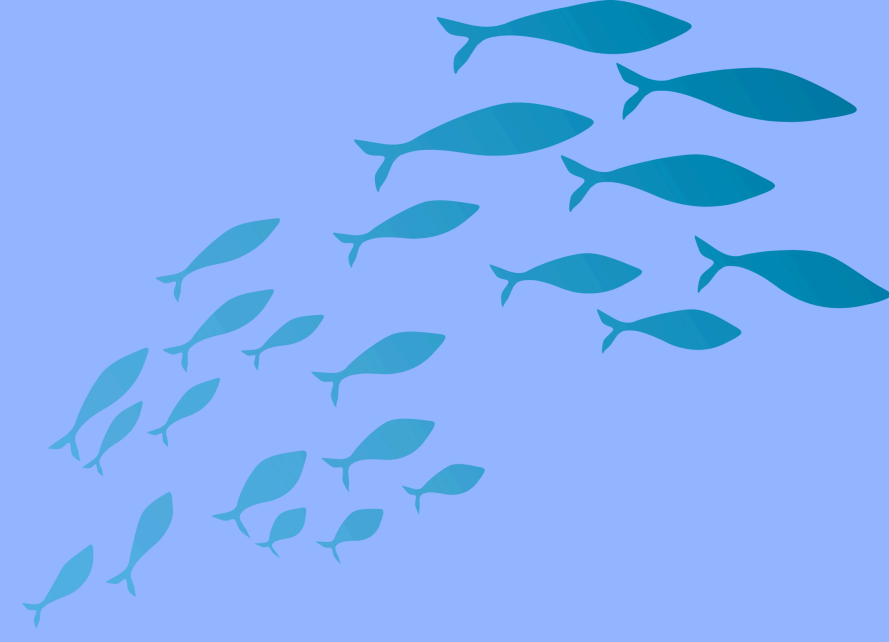
## Modifications

A little easier: provide with counters or hands on objects to support adding

A little harder: extend to multiplication

**BONUS**  
Play at home

# Go Fish (Make 10)



The Learning: Go Fish (Make 10) offers an excellent opportunity to hone addition and subtraction facts to 10, number recognition, turn-taking, and critical thinking

How to play the game: skills.

Equipment:  
Deck of cards

## Instructions:

1. Remove the jacks, kings, and jokers from the deck.
2. Scatter the cards face down on a table.
3. Each player starts with 3 cards.
4. Identify pairs where two cards add up to 10.
5. Players ask for the missing number to complete a pair (e.g., if one has a 3 card, they need to ask for a 7 card to make 10).
6. The player with the most matches of 10 at the end wins!

\*Play until all cards are matched

Instructional video:



Questions to ask while playing:

What goes with \_\_\_ to make ten?"

"If I asked for a \_\_\_, what card does that mean I must be holding?"

## Modifications

A little easier: Original go fish number match

A little harder: extend this game to doubles "If I have a 3, double 3 is 6 I ask for a 6 that makes my pair"