

# Math Games

Active and fun games to enhance numeracy skills



For more math games please access our  
**Math Games Catalog** by scanning the QR code.

# Note to the Facilitator

This book has **20 Math games** designed to be physically engaging while also practicing math concepts. Each game has the following components:

The diagram illustrates the components of a game page. On the left, five blue boxes list the components: 'Name of the Game', 'Leading Question', 'Materials Needed + Instructions', 'Ideas for Variations', and 'Guiding Image'. Blue arrows point from each box to a sample game page titled 'Game 1 LINE UP!'. The game page includes a leading question 'Can you line up in number order?', materials needed (Paper and Pencil), and instructions for play. It also features a lightbulb icon for variations and an illustration of three children holding number cards (5, 6, 7).

- Get children to think and discuss the leading question.
- Teach simple concepts such as English numbers, shapes, etc. before starting the game, whenever needed.
- Children can practice numbers and concepts in Pashto/ Dari but introduce English as much as possible.
- Adjust the rules of the game depending on the children's age and levels.
- Encourage older children to facilitate games for the younger children.
- Repeat games over time and try new variations too!

## Pashto Numbers

۰	۱	۲	۳	۴	۵	۶	۷	۸	۹	۱۰
صفر	يو	دوه	درې	څلور	پنځه	شپږ	اووه	اته	نهه	لس
sifer	yaw	dwa	dre	calor	pinja	shpazh	owa	ata	nah	las
0	1	2	3	4	5	6	7	8	9	10

## Dari/Farsi Numbers

۰	۱	۲	۳	۴	۵	۶	۷	۸	۹	۱۰
صفر	يك	دو	سه	چهار	پنج	شش	هفت	هشت	نه	ده
sefr	yek	do	se	chahār	panj	shesh	haft	hasht	noh	dah
0	1	2	3	4	5	6	7	8	9	10

# Progress Tracker

Tick (✓) the boxes when you complete an activity.

Done  
once

2 to 4  
times

5+  
times

## Math Game



1	Line Up			
2	Ball Games			
3	Jump for Math			
4	Treasure Hunt			
5	Bull's Eye			
6	Bowl Them Over			
7	Let's Make 10!			
8	Number Relay			
9	What Shape Are You?			
10	Grouping Game			
11	Toss Game			
12	Coin's Luck			
13	Puddle Jump			
14	Hopscotch			
15	Place Value Race			
16	Goal, Goal!			
17	Round and Run!			
18	Who Says?			
19	Shape Hunt			
20	Hit The Target			

## Can you line up in number order?

### Materials Needed

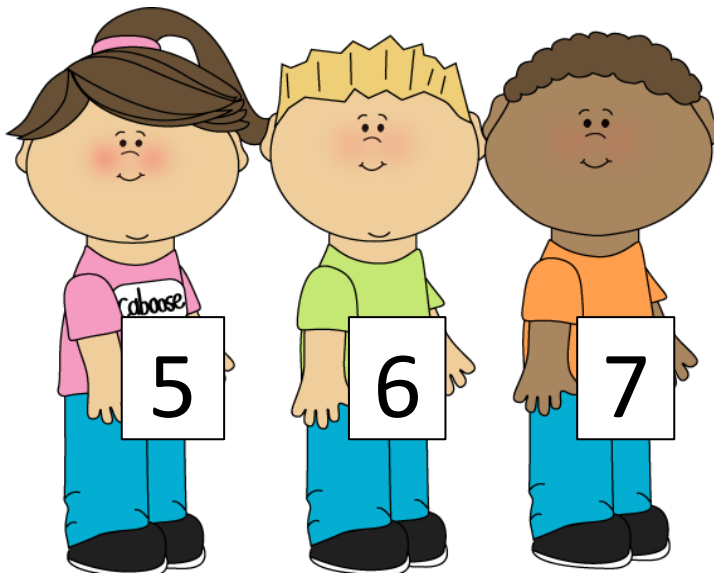
Paper and Pencil

## How to Play

- Make 2 or 3 teams of players.
- Each team member is given a number.
- The team must line up in the correct number order from small to big without talking.
- The first team to line up wins and runs to catch the players from other teams!



- Larger numbers for older kids.
- Challenge them to read numbers in English.



## Can you count to 10?

### Materials Needed

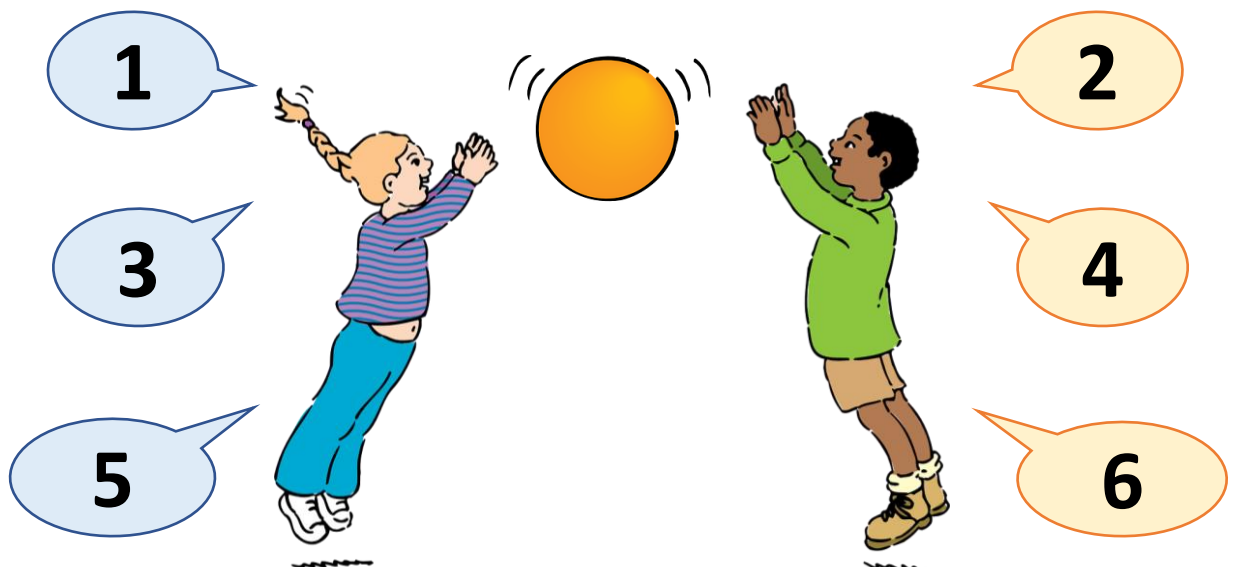
1 ball per pair of players

### How to Play

- Give each pair a ball / soft object.
- The pair throws and catches the ball.
- When players catch the ball, they count out loud.
- If the ball drops, start from the beginning.
- First team to get to 10 (or a larger limit) without dropping the ball wins!



- Partners try skip-counting.
- With a net in between, make 2 large teams and play the same game!



## Can you add numbers?

## Materials Needed

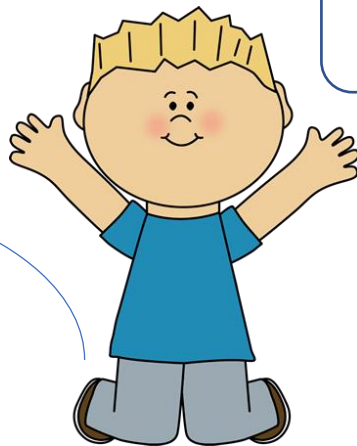
Paper and Pencil

## How to Play

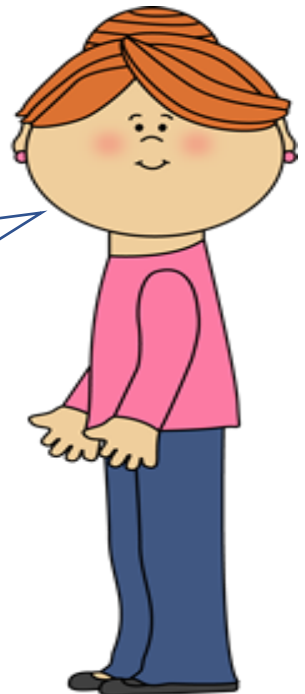
- Write and lay out numbers on the floor
- Call out addition questions: "1 + 2".
- Players need to jump to the correct answer (3) on the floor. Give 1 point for the right answer.



- Try subtraction.
- Start the numbering from 2-digit numbers,



$$1+2$$



1

2

3

4

5

6

## How many numbers can you find?

### Materials Needed

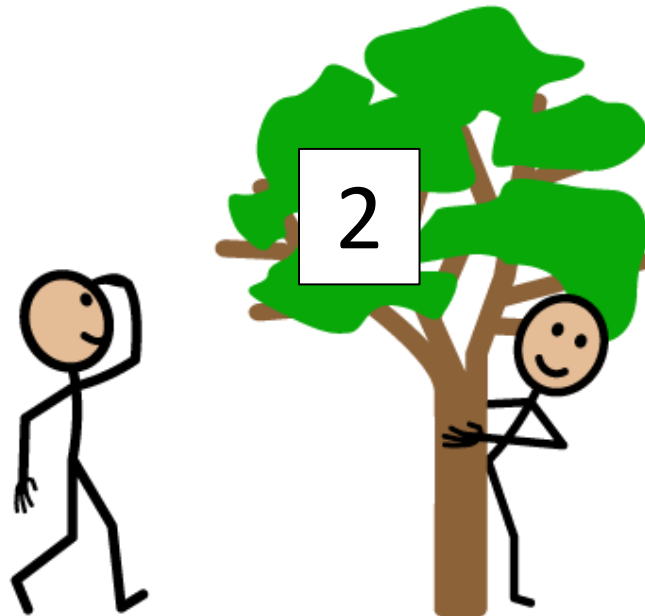
Paper and Pencil

### How to Play

- Write out numbers from 1-10 on paper (repeat the numbers many times)
- Hide the papers in the common are/villa/compound.
- Have 2 or 3 teams look for the numbers.
- The team that finds one paper per player and orders themselves first from 1 to 10 correctly first, wins!



- To simplify, draw pictures of objects to count instead of actual numbers.
- Use larger, 2-digit numbers.



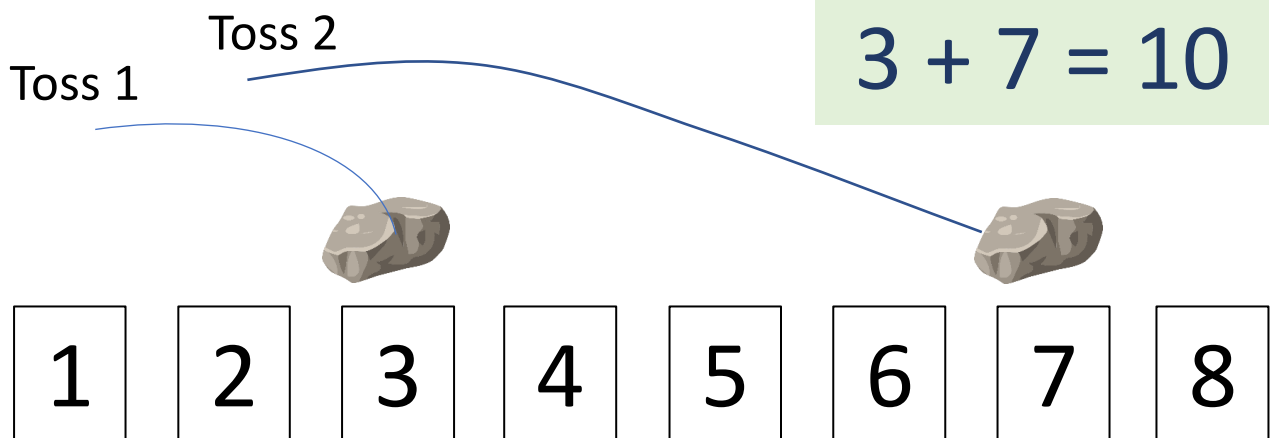
## Can you make number bonds?

### Materials Needed

Paper, Pencil and Pebbles

### How to Play

- Write out numbers from 1-10 on paper and place it on the ground far away from each other.
- Group players into 2 teams.
- Player take turns tossing the pebbles onto a number.
- Another player should toss the pebble to the number that should be added to the previous number to make the sum 10 and record the equation.



- The team with the most recorded equations in a given time limit (*Eg: 5 minutes*) wins the game!



Can you add numbers from 1-10?

### Materials Needed

Markers, Ball, 10 Plastic Bottles

## How to Play

- Write one number from 1-10 on the plastic bottles and lay them out as shown.
- Group the players into 2 teams
- Players take turns rolling the ball to knock down the bottles.
- Players add the numbers of the bottles they hit to get their score.
- Team with the highest score wins!



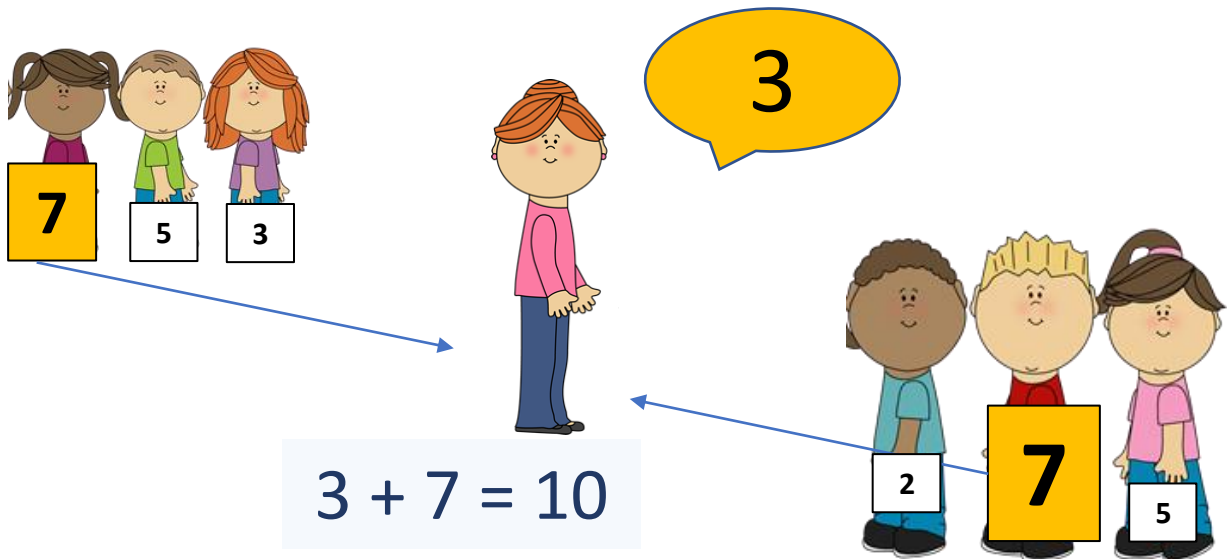
## Can you make number bonds?

### Materials Needed

Pencil and Paper

## How to Play

- Divided the players into two groups.
- Each team gets one set of cards from 0-10.
- The 10 cards are divided between the players.
- Stand between the two teams and call out a number.
- The players from both teams with the number that adds to it to **make 10** runs to the middle (7)
- First player to reach the middle gets a point!



## Can you say numbers in English?

### How to Play

- Divide the players into 2 groups.
- Get each player to bring one object they can easily carry.
- Mark the start and finish line.
- Each player stands at a certain distance from each other, like in a relay race, and carries one object.
- The first player says “One”, runs to the 2<sup>nd</sup> player and passes their object to them.
- The 2<sup>nd</sup> player takes their object and carries their own and says “Two” before running to the 3<sup>rd</sup> player.
- The first team to finish the race wins!



- If they miss saying the number or an object drops, they have to stop for 4 seconds.
- Practise skip-counting.



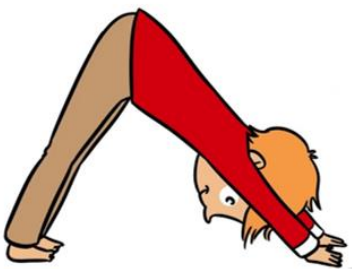
## Do you know the names of shapes?

### Materials Needed

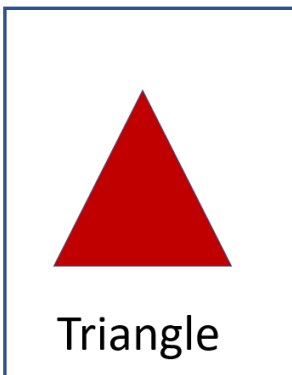
Pencil and Paper

### How to Play

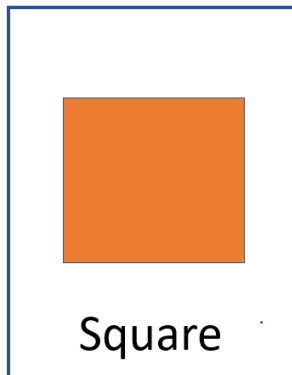
- Draw shapes on paper cards and write their names in English. Go through it with the players.
- Divide the players into two teams.
- A player picks a card and acts out a shape.
- If the other team guesses the shape correctly by drawing it out, they get a point! Earn a bonus point if they say the name of the shape in English.



Triangle



Square



Star



## Can you divide numbers?

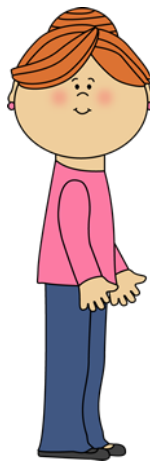
### Materials Needed

Music

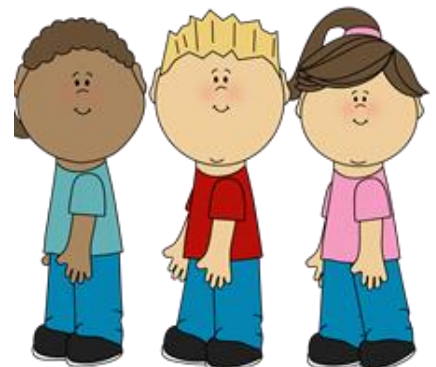
### How to Play

- Play music and have the players move/dance around.
- When the music stops, call out a number.
- The players group themselves according to the number called out.
- Any group with an incorrect number of players is out.
- Encourage older learners to write the equation.
- The last pair of players left win!

$$6 \div 3 = 2$$



3



## Can you add numbers from 1-15?

### Materials Needed

Numbered Paper Cups, Paper Ball

### How to Play

- Players take turns tossing the paper ball into the numbered cups from a distance.
- Once the ball lands in the cup twice, players add up the two numbers to get their score.
- The player with the highest score wins!



- To simplify, learners only identify the larger number.
- Older learners can multiply or subtract numbers.



# What do you know about probability?

## Materials Needed

Coin

## How to Play

- Players are divided into two teams.
- Players take turns to toss the coin.  
If it lands on heads, team 1 jumps a step forward.  
If it lands on tails, team 2 jumps a step forward.
- The first team to reach the finish line wins!
- Repeat this game and discuss if it's better to be heads or tails.



Can you arrange numbers in ascending order?

## Materials Needed

Paper and Marker or Chalk

## How to Play

- Write numbers on paper or on the ground using chalk. They should be at a jumping distance from one another.
- Players have to jump from one “puddle” to another in ascending order of the numbers. (small to big).
- Record how much time each player takes. The fastest player wins!



- Include operations for older learners. ( $4 + 2$ ,  $5 - 3$ , etc.)
- Play in teams. Each team sets up the “puddles” for the other.





## Do you know how to multiply numbers?

**Materials Needed** 1 Pebble, Chalk

### How to Play

- Use chalk to draw out a hopscotch game as shown below and write numbers in each box
- Players toss the pebble onto a number.
- Give an operation: “(The number)  $\times 2 = \underline{\quad}$ ”
- The player must answer correctly and jump through the squares to get a point.



- To simplify, give easier operations ( $<$ ,  $>$ ,  $+$ ,  $-$ )

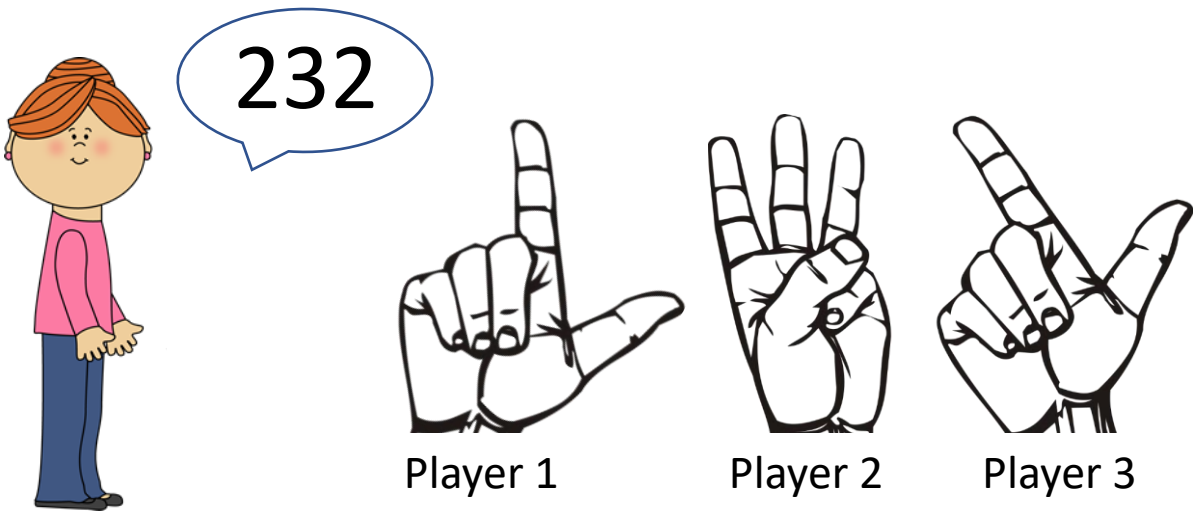
$$1 \times 2 = 2$$



Do you know numbers from 100 -999?

## How to Play

- Divide players into groups of 3
- Call and write out a 3-digit number (Eg: 232)
- Teams show the number on their fingers like this:



- The first team to hold up the correct numbers in the correct order and **says the number out loud** wins a point!



- Line up number cards from 0 to 9 (multiple sets) at a certain distance. Team members need to run and pick up the card to form the number.

## How fast can you add and multiply?

### Materials Needed

Football and a wall, Markers and Paper

### How to Play

- Split the group into 2 equal teams.
- On the wall, stick numbers at different heights and distances.
- Players take turns to kick the ball to a number and keep adding them for the score.
- The opposite team can have a goalie to stop the ball from reaching the number.
- The team with the highest score wins!



Play an actual game of football and try to get as many points as possible by kicking the ball to the numbers!



Can you round numbers to the nearest 10?

## Materials Needed

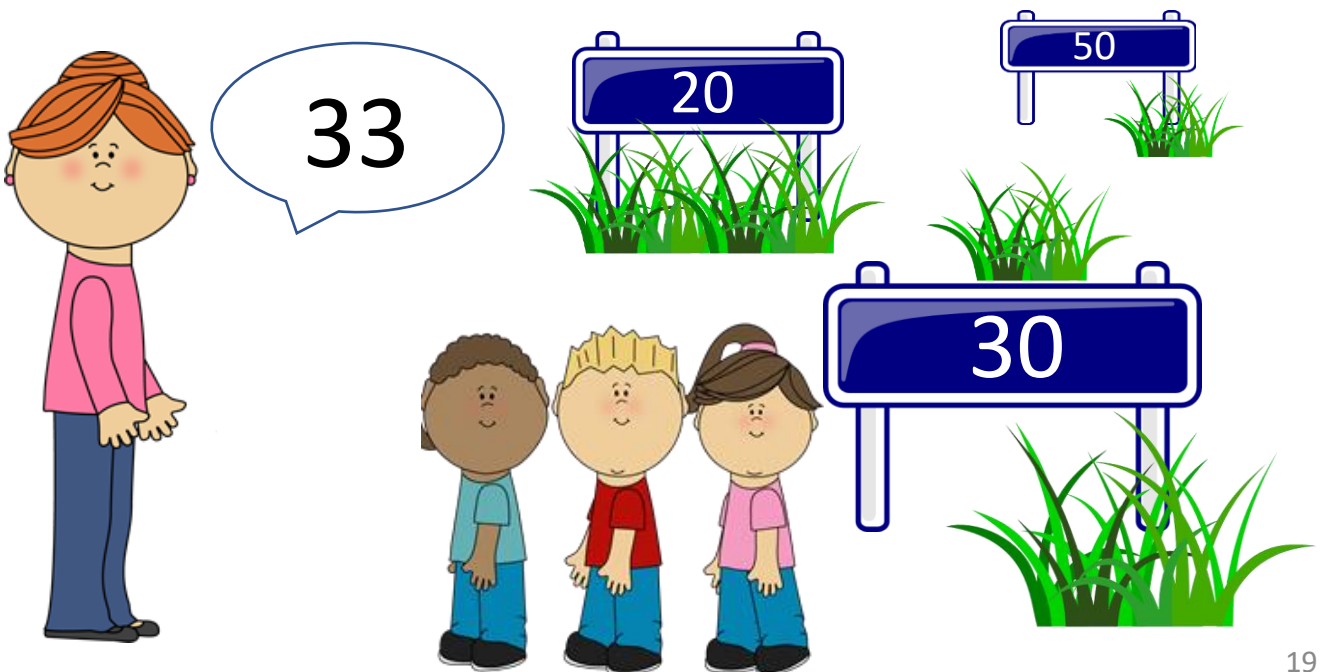
Paper and Marker

## How to Play

- Designate locations for 10, 20, 30, 40, 50, 60, 70, 80 and 90 (*Make signs using paper and a marker.*)
- Call out a number (e.g., 33)
- Players must run to the nearest 10.
- The first player to run to the correct location (30) gets 1 point.
- The player with the most points wins!



- Try the same game with the nearest 100s!



Do you know numbers from 1-50?

## How to Play

- Players sit in a circle.
- Players take turns to call out any number from 1 to 50.  
(Eg: 12)
- The first player to jump (*or do any other action you collectively decide*) says a number before (11) and after (13) the number called out.
- If said correctly, they get a point.
- The player with the most points wins!



- Older learners can perform other operations (Ex: multiple by 3, add 15, etc.) on the number called out.



Can you identify shapes around you?

## How to Play

- Divide the players into 2 teams.
- Call out a shape or draw it out (*Eg: Rectangle*)
- Teams run and bring as many objects that have that shape as possible within a time limit.  
(*Eg: Box, Book, Tray, etc.*)
- The team with the most number of objects earns a point.
- Repeat the activity with different shapes.



- To simplify, call out numbers and players bring that many objects.
- For Older Learners, teach 3D shapes and do the activity.

### 2D Shapes



Rectangle



Square



Circle



Triangle



Oval

### 3D Shapes



Cuboid



Cube



Sphere



Cone



Cylinder

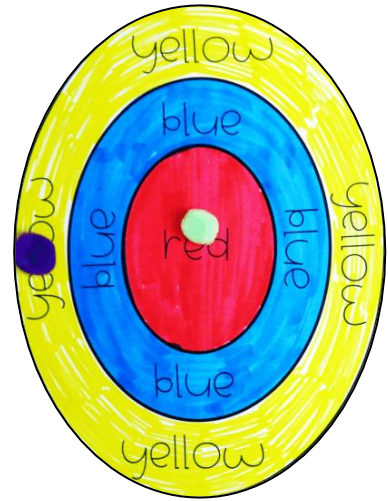
## Can record data using tally marks?

### Materials Needed

Marker and Paper/Chalk/Tape, Pebble

### How to Play

- Make a target, as shown, on the ground. (Use tape, chalk, or paper.)
- Divide the players into 2 teams.



TARGET TOSS		
YELLOW		total 6
BLUE		total 8
RED		total 6

- Make 3 columns and write the names of the colours. Give this paper to each team.

- Players from each team take turns to toss the pebble to the target from a distance and mark the tally on their team's sheet.
- Teams calculate the total tosses and multiply the colour value to get their score (**Red= 10, Blue = 2, Yellow=1**)
- The team with the most points wins!