

Mental Arithmetic Games

1.0 Counter Dash

Materials you need...

- 1-10 dice
- +/- dice
- Counters / Base 10 blocks / beads

Take turns to throw the dice and add to your previous score. Create rows of 10 (for base 10 you can exchange 10 ones for a ten!).

First to 100 wins.

You could also play this game starting at 100 and subtracting your throw each time... winner is the first to reach zero.

OR you could start at 50 and also throw the +/- dice to decide whether you add or subtract your throw. First to 100 wins.

2.0 Breaking the Boundary

Materials you need...

- 0-9 cards x4
- Number line

Players take it in turn to pick two cards followed by another two cards, both times making the biggest two-digit number they can. Add the numbers by representing them on the number line.



Start with the biggest number and add the smallest. Do your first arc on the number line to the biggest number you made. Then break the second number into its tens and units. Draw an arc to add the tens on. Then draw another (possibly two arcs) to represent the ones. Two arcs are needed if you cross over a tens boundary (break the number to reach the boundary then another to represent what is left over).

Biggest number wins.

3.0 Which sign?

Materials you need...

- Mathematical sign cards
- 1-9 cards x4

Shuffle the sign cards and put in a pile face down. Shuffle the number cards and put in a pile face down.

Pick one number card each to start. Then take it in turns to pick a sign card followed by a number card.

Keep a track of your score each round. You may need to use written formal methods to find your answer (especially for the multiplication and division). For division you need to just find the whole number and ignore the remainder.

4.0 Domino Addition

Materials you need...



 Dominoes (if you have the dominoes that go up to 12:12 even better!)

Mix up all the dominoes face down. Pick six each.

Double 12 starts (or double six). (Or any other doubles if no one has the double 12 (or six).)

The person to the left goes next by trying to match their dots on one side to the twelve (or six). If you can't go you pick up an extra domino.

Each player then takes turns, picking another domino if they cannot go with the ones they have (they can place the one they pick if it will go down). They can either match a side to the sides at each end of the domino trails OR they can branch up or down off a domino by matching the sum on the placed domino with the sum of the domino they are placing down.

Winner is the first to use all their dominoes.

5.0 Sum Search

Materials you need...

- 1-50 Cards
- Games Grid

Fill the Games Grid with numbers between 0-25.

Shuffle the cards and place face down.



Players take it in turns to pick a card and try to find two cells next to each other, horizontally or vertically, that sum to the number shown on their card. If they can they win a point.

Winner is the player with the most points at the end.

6.0 Back 2 Back

Ask each Child to write a number between 20 and 50.

Then announce, "the sum is..." or "the difference is...". The child to shout out their opponents' number first is the winner.

7.0 Domino TU

Materials needed...

- TU Grid
- Dominoes

Mix up the dominoes face down. Each pick two dominoes. Look at the value on each of the sides of the domino. One side is going to represent tens, the other units. You would like to make the biggest sum possible.

Use the TU Grid to record your values and their sum. Biggest number wins.

8.0 Popcorn Bingo



Materials you need...

- 3 x 3 Grid
- Pen and paper
- Bowl

Write out the numbers 0-25 twice on white paper, and the signs + and – 13 times each on yellow paper.

Ask each child to write a number in each cell of their 3x3 Grid. The Numbers need to be between 0 and 50.

Then pick two pieces of white "popcorn" and one coloured at a time. Arrange to give an equation and find the answer. Then replace them to the bowl. If a child has the answer announced they cross that number out.

The first to get 3 in a row (vertical, horizontal or diagonal) wins.

9.0 Ascent/Descent Game

Materials you need...

- 10 x 10 cm square paper
- Coloured pencils
- 6-11 dice (1-6 dice with numbers changed)

Players take it in turns to throw the dice. They then colour in the amount representative of their roll.

They should write out their sum; starting position + throw. And state how they break their throw to bridge if they go past a 10 boundary.



First to fill the 100 squares wins.

This can be played as an adding game or subtracting game.

10.0 Countdown

Materials needed...

- 0-9 cards x3
- 1-10 cards x3
- 25, 50, 75, 100 Cards x2

Keep the number cards in their sets and shuffle each pile.

Pick six numbers with at least two cards from 1-10 and one from the large number set.

Then pick 3 numbers from the 0-9 cards, facing up each in turn to give a three digit number.

Give everyone one minute to work with how they can use the 6 numbers to get as close as possible to the three-digit number.

Exact match 10 points
Within 5 7 points
Within 10 5 points

11.0 Rolling towards 999

Materials you need...

• 3 x 0-9 dice



Base 10 blocks

Everyone has 5 turns. On each turn you throw the three dice and make a three digit number from the dice. Create the number using the base ten blocks. Add to your previous score. You may need to exchange 10 ones for a ten, or 10 tens for a hundred... if you go past 999 your score drops back to 0.

After everyone has thrown 5 times the person closest to 999 is the winner.

12.0 Plus or Minus

Materials you need...

• Plus or minus template

Fill in the outer squares with numbers. Then decide how you will combine the numbers in what order using + or - (you could use x and \div to make it more complicated). The target answer goes in the centre.

Players have a minute to try to find the correct equation.



1	2
3	4
5	6
7	8
9	0













+	total	plus
and	more	sum
add	increase	
-	difference	less
minus	subtract	take away



	CIC	
deduct	decrease	
X	multiply	product
times	lots of	by
•	divide	share
group	how many	goes into
=	is/are	makes



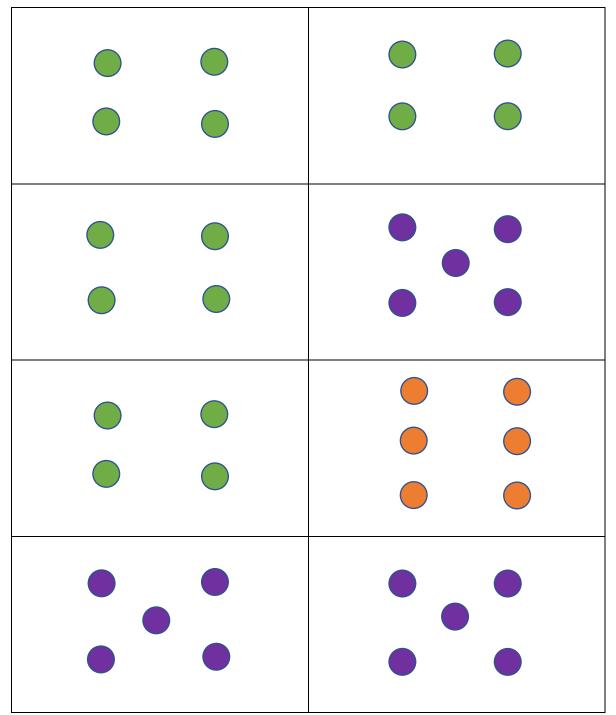
equals	

















1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16



17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	32



33	34	35	36
37	38	39	40
41	42	43	44
45	46	47	48



49	50	



T	U





25	50
75	100
25	50
75	100

