

Fluency Games for addition and subtraction

Tug of war

You need

- Tug of War board
- Two or more dice (1-6 or 0-9. Choose the dice depending on the level of challenge you want.) □
- One counter

Instructions

Version 1 – Odd and even

1. Players choose to be either red or blue. Start the game with the counter on the 'start' box.
2. Player 1 rolls both dice and calculates the total. If the total is odd, the counter is moved one place to the left. If the total is even, the counter is moved one place to the right.
3. Player 2 then rolls both dice and calculates the total. Again, if the total is odd, the counter is moved one place to the left. If the total is even, the counter is moved one place to the right.
4. As the game is played the counter will move along the line, depending on whether the total is odd or even.

The winner is the player to get the counter to the end of their line – red or blue, or the player who has the counter on their side of the line when the time is up.

Version 2 – More and less

1. Choose a target number and write this in the 'exactly' box.
 - If using two 1-6 dice, the target number should be 7.
 - If using two 0-9 dice, the target number should be 9
 - If using one 1-6 dice and one 0-9 dice, the target number should be 8.
2. Players choose to be either red or blue.
3. Start the game with the counter above the 'exactly' box.
4. Player 1 rolls both dice and calculates the total. If the total is less than the target number, the counter is moved one place to the left. If the total is more than the target number, the counter is moved one place to the right. If the total is the target number, the counter stays in the 'exactly' box.
5. Player 2 then rolls both dice and calculates the total. Again, if the total is less than the target number, the counter is moved one place to the left. If the total is more than the target number, the counter is moved one place to the right. If the total is the target number, the counter returns to the 'exactly' box.
6. As the game is played the counter will move along the line, depending on whether the total is more or less than the target number, or is exactly the target number.

The winner is the player to get the counter to the end of their line – red or blue, or the player who has the counter on their side of the line when the time is up.

Turntable

This game is good played in pairs as a collaborative game.

You need

- Turntable track
- Two or more dice (1-6 or 0-9. Choose the dice depending on the level of challenge you want.) □
Pencil and rubber or counters

Instructions

- Roll two (or more) dice and calculate the total.
- Make a mark or place a counter in the correct place on the track, e.g. if your total is 6, draw a dot or place a counter in the space after the 5, which is marked on. By only showing some numbers on the track, the children develop their number sense about the relative position of numbers.
- If you make the same total twice, rub the dot off the board or remove the counter.
- This game can be timed. How long does it take you to fill all the possible totals on the track?
- Alternatively, put a time limit on the game and see how many spaces you can fill in the time.

NB – It will not be possible to cover all the spaces on the track. This will depend on the number and type of dice used.

Four in a Row

You need

- A number grid □ Two 1-6 dice.
- Counters – a different colour for each player (or coloured pencils)

Instructions

1. Player 1 rolls the dice and calculates the total.
2. Player 1 can place counters on (or colour) EITHER the total of the dice, OR any other two numbers which are equal to the total.
 - a. E.g. If the player roll 5 and 4, they may cover 9, 5 & 4, 6 & 3, 7 & 2, or 8 & 1.
3. Player 2 rolls the dice and covers appropriate numbers, as in the previous step.

The winner is the player to cover four squares in a row (vertically, horizontally or diagonally)

2	8	4	5	7	3	4
6	5	9	10	6	8	3
9	3	7	5	8	10	11
5	12	6	2	5	4	8
4	9	5	10	6	9	7
11	6	8	3	7	12	6
2	8	5	4	1	2	10

Card Race

You need

- Number cards (1-9) for each player. (Playing cards can be used with the ace as '1'.) □
- Two 1-6 dice.

Instructions

1. Each player lays their cards in front of them in order 1-9, facing upwards.
2. Player 1 rolls the dice and calculates the total.
3. They can then turn over the card showing the total, or two or more cards which add to the total of both dice.
 - a. E.g. If 2 and 6 are rolled, the player can turn over 8, 7 & 1, 6 & 2, 5 & 3, 4 & 3 & 1, etc.
4. The next player rolls the dice and turns over cards as described in the previous step.
5. If a player cannot turn over cards to the value of their roll, they miss a turn.

The winner is the player who is first to turn over all their cards.

If the game ends before either player has turned over all their cards, the winner is the player with the lowest total value of the cards which remain face up.



Find the Difference

You need

- Number cards (1-9) for each player. (Playing cards can be used with the ace as '1'.) □
- Two 1-20 dice. (An easier version can be played with two 0-9 dice)

Instructions

1. Each player lays their cards in front of them in order 1-9, facing upwards.
2. Player 1 rolls the dice and calculates the difference.
3. They can then turn over the card showing the difference, or two or more cards which add to the difference of both dice.
 - a. E.g. If 8 and 1 are rolled, the player can turn over 7, 6 & 1, 5 & 2, 4 & 3, or 4 & 2 & 1, etc.
4. The next player rolls the dice and turns over cards as described in the previous step.
5. If a player cannot turn over cards to the value of their difference, they miss a turn.

The winner is the player who is first to turn over all their cards.

If the game ends before either player has turned over all their cards, the winner is the player with the lowest total value of the cards which remain face up.



Total Blast Off!

You need

- A pack of cards with the picture cards removed. The ace will be used as '1'. □
- A timer or stopwatch

Instructions

1. Start the stopwatch.
2. Deal the first 2 cards facing upwards next 2 each other.
3. The player calculates the total as quickly as possible.
4. If the player is correct, they keep the cards. If they are wrong, the dealer keeps them.
5. The next two cards are then dealt face up and steps 2 and 3 are repeated.
6. When the pack of cards has been used, the timer stops and the game ends.

Can you beat your time?

Adaptations

- Rather than the whole pack, a selection of cards can be used to help work on facts that the child is finding difficult
- Picture cards can be used as 10.

Difference Blast Off!

This is played in the same way as Total Blast Off, but the child calculates the difference between the two cards.