Card games

These card games use the cards 1 (Ace) to 10

Stage	Why play this game?	Game
		Snap
Kinder Year1 - 2	Recognising numbers. Numbers before and after a given number. Combinations to 10	Divide the cards amongst the players. Snap the cards that are the same. Snap the cards that come after the one played. Snap the cards that come before the one played. Snap the cards that add up to 10.
		Fish
Kinder Year 1 - 2	Recognising numbers	Deal out seven cards to each player. Each player finds pairs of numbers from their hand and places them down in front of them. The game begins when player 1 asks the player sitting to their left if they have a card that matches one of theirs so that they can make a pair. If they do have the card, they give it to player 1. If they do not have the card they say "fish" and player 1 picks a card from the pack. Play continues in this way. After all the deck has been used, players count the number of pairs they made. The winner is the one with the most number of pairs. **_Variation_** Players collect cards that add to 10 instead of pairs
		24
Year 1 - 4	Addition and subtraction using mental strategies	Deal out all the cards, an equal number to each player. The person to the dealer's left goes first and the game continues clockwise. The first person turns over a card and places it face up in the centre of the play area. The next player turns over a card and adds it to the card already played, says the sum out loud, and places the card on top of the previously played card. The next player turns over a card and adds the card to the sum of the first two cards. Play continues in this way until someone adds a card that makes 24 or more. If the sum is exactly 24 that player wins. If the sum is over 24 the value of the card is taken away from the previous total. Play continues until someone gets a total of exactly 24.
		Make the largest number
Year 4 - 6	Numeral recognition	Short deck, cards 1-9 Players take turns drawing one card at a time until they have 5 cards. Each player makes the largest number they can and says the number. The person with the largest number receives a point. Play continues in this way. After using all the cards in the pack, the player with the most points is the winner.

Stage	Why play this game?	Game
Year 2-8 and adults can have fun with this.	Addition and subtraction Multiplication and division	**Salute** Short deck, cards 2-10 (3 players) Deal one card each, face down. When the dealer says "salute", each player raises the card to his or her forehead. The dealer states the total of the cards. Each player has to determine the value of the card being held to his or her forehead by looking at the other person's card and subtracting this amount from the total. This can also be played with multiplication ***Variation*** The dealer looks at the colour of the cards. If the colours are the same the dealer adds and if the colours are different, the dealer multiplies. This time, the player has to state both the colour and the value of the card being held.
Year 2 - 8	Addition and subtraction	**Flip 4 and add** The first player flips 4 cards to make two 2-digit numbers and adds these together. The next player also flips 4 cards and adds the two 2-digit numbers together. The player with the largest number gets a point. The player with the most points wins. ***Variations*** • Flip 6 cards and make two 3-digit numbers to add together. • Begin with 50 and flip 2 cards to make a 2-digit number. Subtract the number from 50. The next player flips 2 cards and subtracts their 2-digit number. Play continues by subtracting a number when it is your turn. The person closest to zero is the winner.
Year 4 - 8	Addition, subtraction, multiplication and division.	**Make 20** Players are given 4 cards each. Using any of the four operations, (÷, ×, +, -) the player tries to make a total of 20. If the player makes exactly 20, they score 10 bonus points for making 20 plus their score of 20 (30 altogether). The next player has his or her turn. If they are unable to make 20, their score is the number they have made that is less than 20. Play continues with players trying to make 20 with another four cards. After each turn the scores are added to the player's total. The first player to reach 200 is the winner ***Variation*** • Select another number to begin the game
Year 2 - 6	Addition and subtraction	**Add or subtract** Start with a selected two digit number such as 35. Players take turns to turn over a card. If the card is black it is added to the number (35). If the card is red, the number of the card is subtracted from the number. Play continues by adding or subtracting the card turned over from your total. The player with the highest number at the end of the game is the winner.

Stage	Why play this game?	Game
Kinder Year 1 - 2	Numeral recognition Numbers before and numbers after a given number	**Place in order** Place all the cards 1(ace) -10 face down in rows of ten so that there are four rows with ten cards in each row. The aim of the game is to have the cards in order in each row. (cards places 1 – 10) The game begins when player 1 turns over the first card and tries to work out where it should be in the row and places the card down. The next player picks up the card where player 1 placed their card and then works out where to put that card. Play continues in this way until all the rows are from 1 – 10.
Year 1 - 3	Addition of number facts	**Addition snap** Cards 1(ace) – 9. two players Players divide the cards evenly between themselves. At the same time each player turns over one card. Players add the two numbers together as quickly as possible and say the answer aloud. The player who says the correct answer first, keeps the two cards. Play continues until one player collects all the cards.
Year 1 - 6	Addition and subtraction facts	**Addition and subtraction** Cards 1 (ace) – 10 Players divide the cards evenly between themselves and place one card face up in the middle. The first player places their card next to the card in the middle. If it is a black card the cards are added together. If it is a red card subtract the number from the previous total.
All ages	Sequencing in ascending or descending order.	**Up and Down** A deck of cards 1 -10 Each player is dealt four cards face up. The remaining cards are placed in a pack in the centre. The aim of the game is to be the first player to arrange the cards in ascending or descending order. Starting with play to the dealer's left, each player takes turns to exchange cards from the pack or discard pile to arrange their four cards in order. The first player to arrange his/her cards in order is the winner of that round and receives a point. The first player to accumulate five points is the winner of the game.

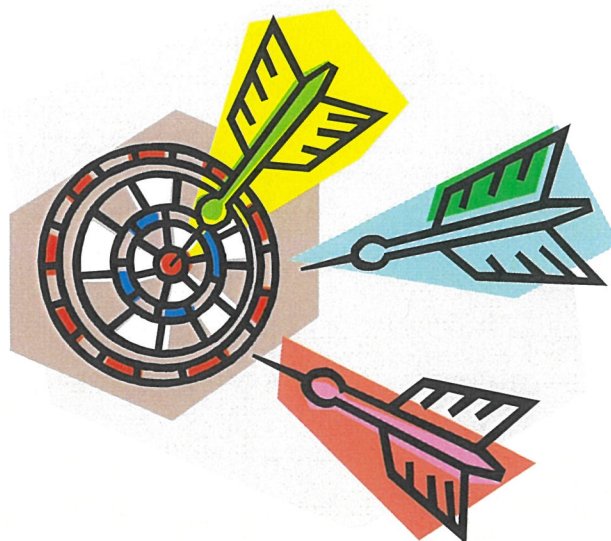| Stage	Why play this game?	Game
		Make 10
K - 2	Addition	A pack of cards 1-10 One player deals out ten cards and places them face up in a row. The first player then looks across the row of cards for combinations that add up to 10 (any number of cards is fine). Only one combination can be removed. The aim of the game is to collect as many cards as possible, so combinations that require more cards are favoured. Once a combination of cards has been removed the cards are replaced with new ones from the pack. Play continues until there are no more cards or combinations to 10. The winner is the player with the most cards. *Variation* • Choose a different target number for the combinations.
		Fast Facts
Year 2 -10	Multiplication Number facts	A pack of cards 1 – 10. A game for two players. Deal out half the cards to each player. Both players lay out a card face up. The first to multiply the two numbers together wins the cards. Play continues and the winner is the one with the most cards at the end. *Variation* • Remove cards which are beyond children's ability, e.g. 8, 9 • Use addition or subtraction
		Card Calculations
All ages	Addition Subtraction Multiplication Division	A pack of cards 1 - 9 Each player is dealt 4 cards face up. Each player then tries to make a number sentence which gives a single digit answer using their four cards. The answer becomes the score for that player. e.g. If the four cards were 2, 6, 3 and 7 Answers could be: $7 + 3 + 2 - 6 = 6$ 6 points $6 + 7 - 3 - 2 = 8$ 8 points $36 - 27 = 9$ 9 points The winner is the player with the largest score after five rounds. *Variations* • Aim to produce the lowest score • Deal out more or less cards

301 – A family game of darts

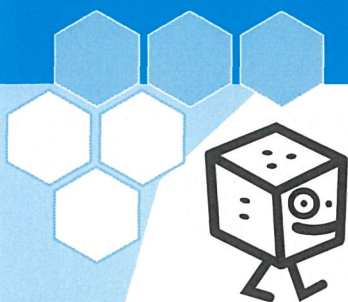## Equipment

Dart board, darts, pencil and paper

How to play

- The object of the game is to count down from 301 to exactly zero with each player finishing the game with a double.

- In turn, each player throws three darts and deducts the total of the three darts from 301. Encourage mental computation to work out the score.

- To record the score, write 301 on a piece of paper or on the dart blackboard and draw a line down the middle. For each turn, the total of the three darts can be recorded and progressively subtracted from each player's total.

Dice games

Stage	Why play this game?	Game
Kindergarten	Recognising numbers and counting	**Collect 10** A game for pairs of students, with each student having a regular dice (the dice used for this game can be varied according to the needs of the students). Counters are also required. The players roll the dice and the player with the higher number showing scores a counter; if both throw the same number they both score a counter. The first player to collect 10 counters is the winner. ***Variations*** • The player with the lower number scores the counter each time. • Start with ten counters and the player with the higher number on the roll of the dice takes away this number of counters. The first player to have no counters is the winner.
Kindergarten Year 1	Addition	Same as ***Collect 10*** above, but each student has 2 regular dice and the total is obtained by adding the numbers rolled.
Year 1 - 2	Addition	Same as ***Collect 10*** above, but the total is obtained by adding three regular dice. Note: Encourage the students to find quicker ways of adding the numbers. 1. Doubles, eg 4 + 4 2. Doubles plus one, eg 4 + 5 (4 + 4 + 1) 3. Doubles less one, eg 4 + 3 (4 + 4 - 1) 4. Combinations to 5, eg 1 + 4 5. Combinations to 10, eg 6 + 4

Stage	Why play this game?	Game
Year 1 - 2	Addition	**Cross out** Cross out is an activity for two students. Each student writes the numbers 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12 on a piece of paper. They take turns to roll two regular dice, add both numbers rolled and cross out the total on their piece of paper. The first player to cross out all the numbers is the winner.
Year 2 - 6	Subtraction	**Take 100** Each student begins with 100 points. In turn, students roll a regular dice and subtract the number from their 100 points. The first player to reach zero is the winner. ***Variations*** • Change the number of points to begin. • The students may roll two regular dice and either add or multiply the numbers together before subtracting from the total.

Year 2 - 4	Addition	**Make 24**
		This game for individuals requires only 1 dice. The player throws the dice repeatedly, listing the numbers thrown in columns as follows.
		
		  1 2 3 4 5 6
		  1 2 4 6
		      2 4
		      2
		
		The player has to keep a running total of each column in their head and stop when one of the columns reaches exactly 24 (The fifth column will never reach 24). Players play the game several times and compare their findings.

Year 4 - 8	Addition Subtraction	**Make 100** An activity for two players. Equipment: two regular dice, paper and pencil

Stage	Why play this game?	Game
	Multiplication Division	The aim is to make a total of 100 or as close to 100 as possible. Players take turns to roll the two dice and combine the numbers with any operation to produce a score. The player who reaches 100 or is closest to 100 is the winner. Encourage players to record their choices and calculations. For example:

Dice throw	Calculation	Running total
4 and 6	4 x 6 = 24	24
1 and 4	1 + 4 = 5	29
2 and 5	2 x 5 = 10	39
6 and 6	6 x 6 = 36	75
5 and 3	5 x 3 = 15	90
2 and 3	2 + 3 = 5	95
6 and 1	6 − 1 = 5	100

Stage	Why play this game?	Game
Year 4 - 8	Multiplication Division	**Double, halve or stay** An activity for two to four players Equipment: two different coloured regular dice Decide on one coloured dice to represent the tens and the other to represent the ones. Choose a target number between 5 and 122. Players take turns to roll the dice. Once the dice are rolled a number is formed. The player then makes a decision to produce a number that is as close as possible to the target number. They can choose to: • double their number • halve their number • keep the number as is The player closest to the target is the winner.
Year 4 - 8	Addition Subtraction Multiplication	**Total three** An activity for two players. Equipment: two regular dice, paper and pencil Players take turns to roll the two dice and complete the following calculations on each roll:

Stage	Why play this game?	Game
		• add the two numbers shown on the dice
		• find the difference between the two numbers
		• multiply the two numbers
		• add the three numbers to produce the score for that round

For example

$$6 + 3 = 9$$
$$6 - 3 = 3$$
$$6 \times 3 = 18$$
$$\text{Score} = 9 + 3 + 18$$
$$= 30$$

After 10 rounds the player with the highest total is the winner.

To make the activity more challenging change the type of dice used to 8, 10, 12 or 20 sided.

| Year 2 - 6 | Addition Strategy | **Cross out 9** |

An activity for two to four players.

Equipment: two regular dice, paper and pencil

Each player writes the numbers 1 to 9 on a piece of paper. The first player rolls the two dice then crosses out the numbers shown on the dice or the sum of the two numbers.

For example
On this roll, the player may cross out 2, 3 or 5 (2 + 3).

When six numbers or less are left only a single dice is used. The player's turn continues until they cannot cross off any more numbers. The remaining numbers are totaled and this is the score for that round. After five rounds the player with the smallest total wins.

Domino teaching activities

Emergent activities
- ➤ Make a domino train by matching the domino pattern with another domino.
- ➤ Turn over a domino. Count the number of dots and find the number to match the dots.
- ➤ Find a pair of dominoes by counting the dots on the dominoes.
- ➤ Roll a dice. Find a domino that has the same number of dots as the dice pattern.

Perceptual activities
- ➤ Work in pairs (BLM 1)
  - o Each student takes a domino.
  - o Count the number of dots to determine the total.
  - o Record the total on the recording sheet.
  - o Write the number after the total and the number before.
  - o Partner checks the recording.
  - o Change roles.

- ➤ Work in pairs or small group.
  - o Dominoes are placed face down.
  - o The first player selects a domino to place on the "Follow the Leader" mat (BLM 2)
  - o Students take turns picking up dominoes one by one and placing them on the mat in the appropriate columns.
  - o Each student explains why they have put their domino in that space.
  - o Another student has their turn.

Figurative and Counting on and back activities
- ➤ Parking lot (BLM 3)
  - o Students choose 6 number cards and place them on the recording sheet.
  - o Students then find dominoes that total the number on the card.
  - o Students record the number sentences.

- ➤ Work in pairs.
  - o Each pair of students is given a number between 15 and 30.
  - o Each student finds 4 dominoes that altogether have a total matching the number on the card.
  - o Students record number sentences.
  - o Use a calculator to verify partner's total.

BLM 1 - Domino recording sheet

My domino	Total dots	One less	One more
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____

BLM 2 – Follow the leader
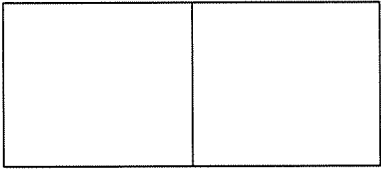
Leader

Less than	Equal to	Greater than

BLM 3 – Parking lot

Number cards