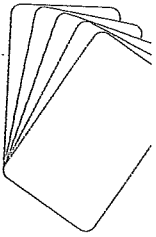


# Place Value Pack



**Purpose**

- Read and say whole numbers into the thousands.
- Compare and order numbers into the thousands.
- Identify the value of the digits in each place on the place value board.

**Materials**

You will need a deck of cards with the 10s and picture cards removed.

**Organisation**

A game for pairs or the whole class.

**Aim**

To create the largest number.

**Rules**

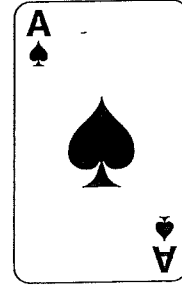
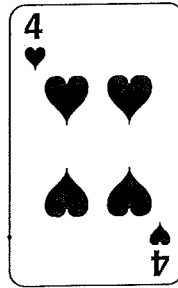
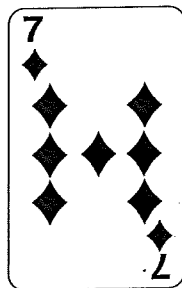
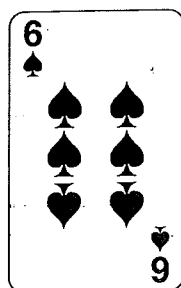
- The deck is shuffled and left face down on the table.
- Players take turns to pick a card from the top of the deck and turn it over.
- The player must then place his/her card in front of them in either the ones, tens, hundreds or thousands place, and tell other players the value of the card. A Place Value board will help. The card must be placed before another is drawn from the deck.
- Continue until there is a card in each section of the board.

- The winner is the player who produces the largest number. For example 6 741 was produced using a 6, 7, 4 and ace. 7 641 was the best number might have been formed. Players need to read numbers aloud. Players can place their numbers either ascending or descending order.
- Overall winner is the first player to make the largest number 5 times.

**Variations**

- Make larger/smaller numbers. Include decimal.
- Use a scoring system where the person with the lowest amount scores zero while all the other players score the difference between their number and the lowest number.

Thousands	Hundreds	Tens	Ones



# I Spy

## Purpose

- Identify cards that add to a given total.
- Use language associated with addition. eg combine, and, join, sum, total.
- Understand the terms horizontal and vertical.
- Allow students the opportunity to explore all possible number combinations that add to a given total, eg  $6, 5 + 1, 4 + 2, 3 + 3, 2 + 4, 1 + 5$ .

## Materials

- Deck of cards (picture cards removed).

## Organisation

A game for two players.

## Aim

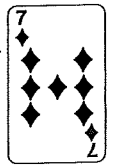
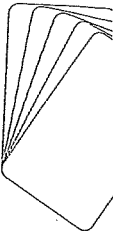
To win as many cards as possible.

## Rules

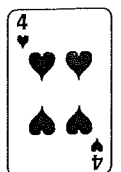
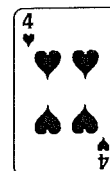
- The forty cards are dealt face up in a  $10 \times 4$  or  $8 \times 5$  array.
- One player challenges the other player to find two cards next to each other that add to make a particular number by saying ***"I spy with my little eye two cards which add to make \_\_\_\_\_"***
- The other player then looks for two cards that are next to each other either horizontally or vertically that add to make the number and then picks this pair of cards up and any other pair next to each other that add to make the stated number.
- If the second player misses any pairs that add to the chosen number, then the first player may claim them.
- Players swap roles and continue until the table is cleared.
- The winner is the player with the most cards at the end of the game.
- As large gaps appear the size of the array may be reduced to help fill the gaps.

## Variations

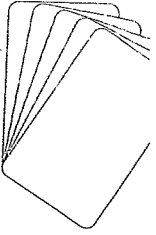
- Allow children to add three cards together.
- Allow children to use pairs of cards that are diagonally opposite each other.
- Change operations: i.e. Use subtraction or multiplication.



Note: Vary the language used to describe addition, eg combine, join, sum total.



# Flipper



## Purpose

- Mentally add a series of numbers using appropriate strategies.
- Rearrange numbers so that compatible numbers (eg 7 and 3, 6 and 4) are placed together.

## Materials

- Deck of cards (picture cards removed)
- Ace = 1

## Organisation

A game for the whole class.

## Aim

To correctly add a series of single digit numbers using different strategies and beat previous best times.

## Rules

- Each student shuffles his/her deck and lays it face down on the desk.
- The teacher calls out "go" and then the students flip over one card at a time, keeping a running total.
- After thirty seconds, one minute or two minutes, depending on the ability of the class, the teacher says "stop".
- The players then record the total they reached and the number of cards flipped in order to reach the total.

Flipped cards are then handed to the closest player who checks they add to the stated total. Encourage children to rearrange cards so that compatible numbers are placed together, eg 3, 2 and 3 and 5. Compatible numbers are easy to add.

Children can build up a chart similar to the one above to monitor their own performance.

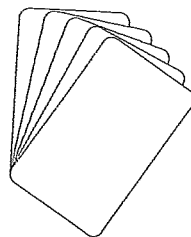
Allow children the opportunity to share their mental strategies used to keep a cumulative total, eg bridging to 10, near doubles.

## Variation

- Remove the 7, 8, 9 and 10s for younger players.

DATE	TIME	CARDS	TOTAL	CHECKED
4/7	30 sec	8	37	✓

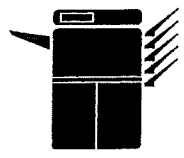
# Flipper Playing Board



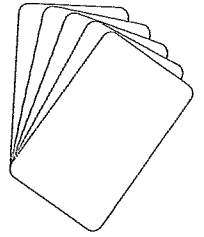
DATE	TIME	CARDS	TOTAL	CHECKED
		Flipped card player who Encourage		
		compatible 3, 2 and 3 to add.		
		Children ca above to r		
		Allow child mental stra eg bridging		
		Variation		
		Remove th		

ds are then handed  
checks they add to  
children to rearrange  
numbers are played  
and 5. Compatible m  
to build up a chain  
monitor their own  
then the opportunity  
strategies used to reach  
to 10, near doubles  
e 7, 8, 9 and 10 for

CHECKED



# Counting Cards



## Purpose

- Add on from a starting number other than zero
- Mentally add a series of numbers using an efficient strategy
- Use language associated with addition: join, and, add, sum

## Materials

- Deck of cards (picture cards removed)

## Aim

To add numbers to a specific total.

## Organisation

A game for pairs or small groups.

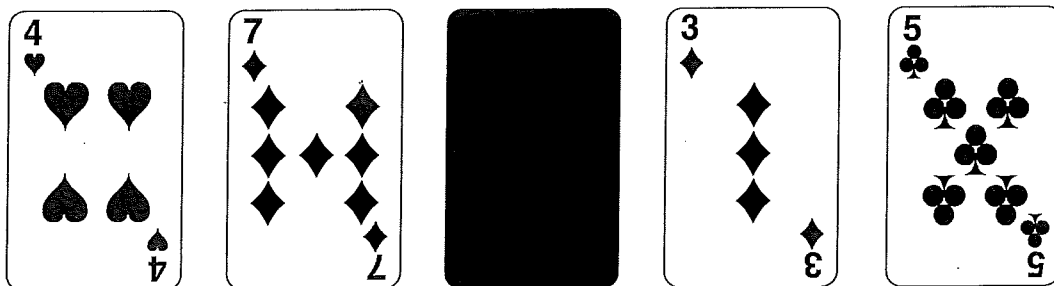
## Rules

- Prior to starting the game a target number should be chosen (e.g. 15)
- Each player is dealt 5 cards.
- Four cards are dealt face up and the remaining deck placed in the middle.
- Players take turns to place one of their cards on one of the four cards that is face up and add the values to try to reach the target number. Depending on the size of the target number, players may place more than one card on a single pile. Cards may only be laid down if the exact total can be produced. A player's turn is over after he/she produces the target number or chooses a card from the deck.

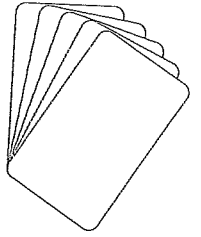
- Players choose a card from the deck if they cannot lay down a card or cards.
- Players reaching the target get to keep the cards in a separate pile. The values of these cards are added at the end of the game to determine a winner.
- Once a pile is removed a card is turned over from the deck to replace it.

## Variations

- Change the target number.
- Set a target to be reached by multiplication rather than addition.



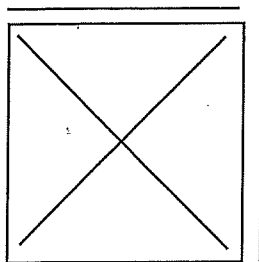
# Card Conundrum



- Remove all of the Aces and picture cards from a deck of cards and form a  $4 \times 4$  array in which each row and each column contains one Ace, King, Queen and Jack.


- Try again, but this time form a  $4 \times 4$  array in which each row, column and *diagonal* contains one Ace, King, Queen and Jack.
- Form a  $4 \times 4$  array in which no two cards of the same value or the same suit appear in the one row, column or diagonal.

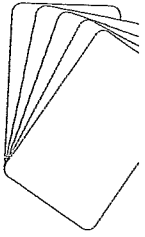
Remember to check both diagonals.



This is really hard. My brain hurts!



# Snap +/- 1



## Purpose

- Identify numbers before and after counting numbers 1–10.

## Materials

- Deck of cards (picture cards removed).
- Ace may equal one or eleven.

## Organisation

A game for two players.

## Aim

To win cards by slapping the card pile where there is a difference of one.

## Rules

- The game is played along similar lines to 'snap'.
- One player deals all the cards face down to the players.
- Each player turns over their top card. Instead of slapping the pile of cards when the values on the two cards match, the pile of cards should

be slapped when the values differ by one. For example if a 7 is placed on the pile and the 8 is discarded on top a player may slap the pile and pick up all the cards.

If an 8 was on the pile and a 7 was discarded then the pile of cards could also be slapped.

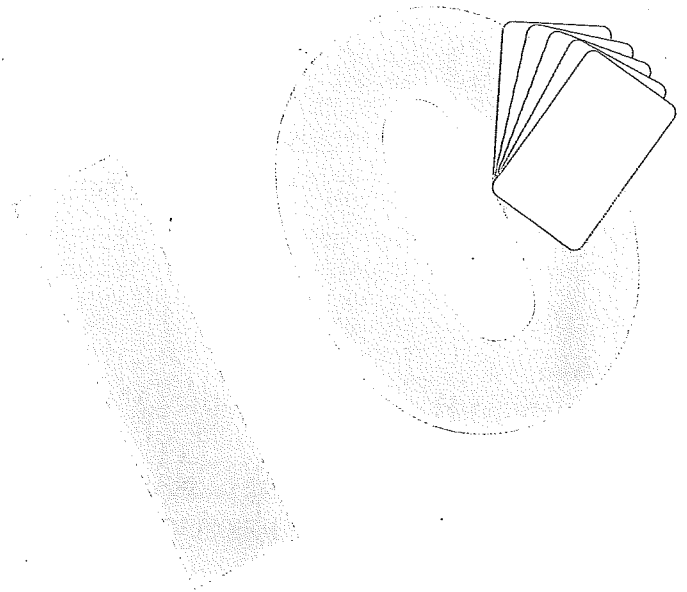
- The winner is the player with the most cards after a set period of time or the player who ends up with all the cards.

## Variations

- Play the standard game of snap to develop number recognition.
- Play Snap +/- 2.  
i.e. snap when the values differ by two.



# Make 10 Again



## Purpose

- Identify two or more cards that total to ten.
- Rearrange numbers to make them easier to add.
- Recall basic addition facts to ten.

## Materials

- Deck of playing cards (10s and picture cards removed).
- Ace = one.

## Organisation

A game for one or two players.

## Aim

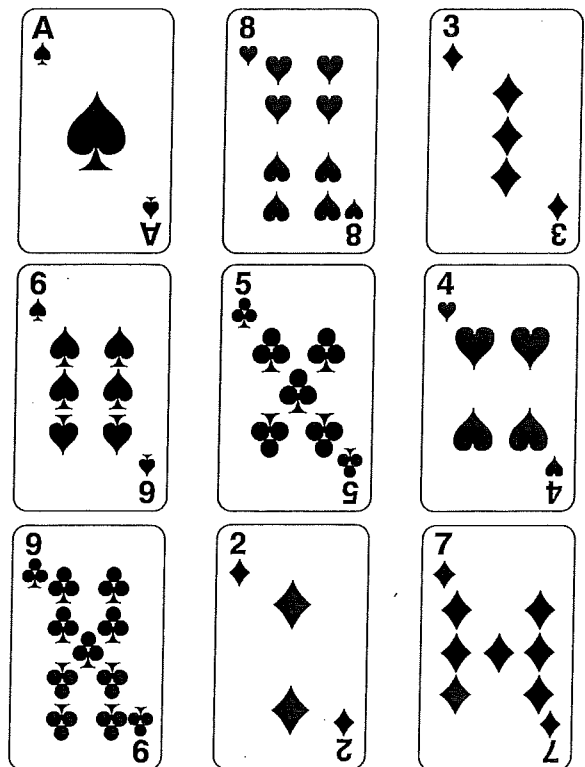
To make combinations that add to 10.

## Rules

- One player deals all 36 cards, face up in a 3 x 3 array.
- There should be four cards in each pile.
- Players take turns to pick up any number of cards, which when added make 10. As cards are taken from the pile a new card is revealed underneath.
- Play continues until all the cards have been used or until no more combinations that add to ten can be made.
- The winner is the player with most cards at the end of the game.

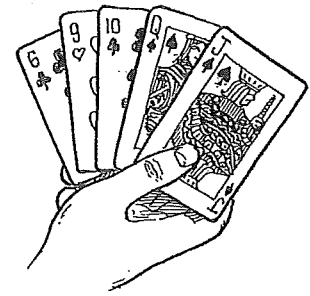
## Variation

- Choose a different target number eg twelve.





# Double and Half



## Purpose

Children will double and halve small numbers.

## Materials

A pack of cards, Ace = 1, Jack = 11, Queen = 12, King = 13.

## Organisation

Two players.

## Aim

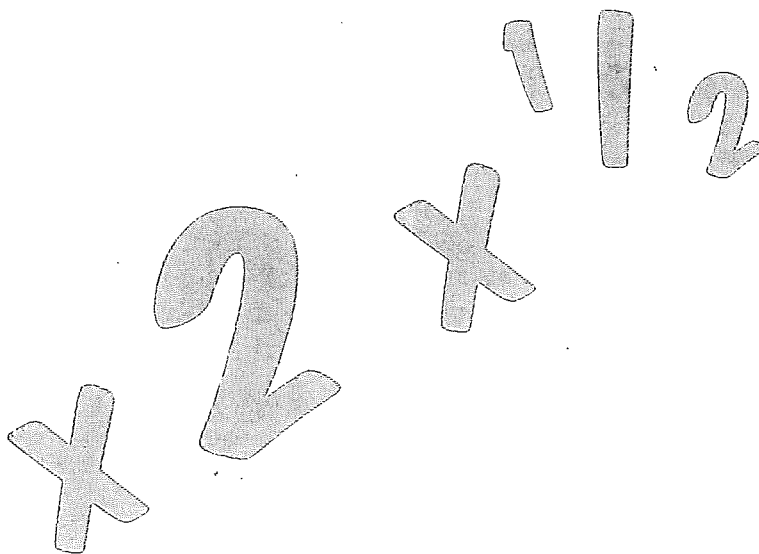
To be the player with the highest total.

## Rules

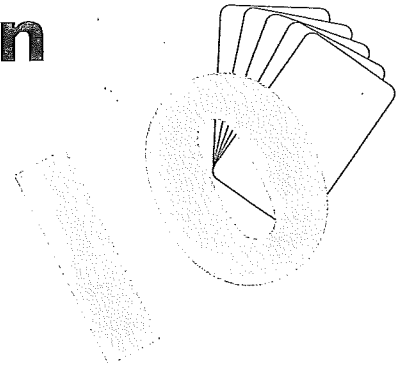
1. The cards are placed face-down in a pile in the centre of the table.
2. Each player in turn, takes a card from the top of the pile and turns it over.
3. If the card has an odd number value, the player doubles it and writes down the score.
4. If the card has an even number value, the player halves it and writes down that score.
5. Once a card has been drawn from the pack it is placed to one side.
6. Play continues until the pack is exhausted.
7. Players keep a cumulative total throughout the game. The player with the highest total is the winner.

## Variations

1. Play until one player reaches a set total, eg 50 or 100.



# Make to Ten



## Purpose

Children will make pairs of numbers that add to ten.

## Materials

A pack of playing cards with the picture cards and tens removed. Ace = 1.

## Organisation

Three or more players.

## Aim

To collect as many tens as possible.

## Rules

1. Deal out the cards so that each player has the same number of cards. Leftover cards are placed in a pile to the side.
2. Players should NOT pick up their cards but leave them FACE-DOWN on the table.
3. The first player turns the top card from their pack over.
4. The next player does the same.
5. If any player sees two cards that add to make ten, then that player calls out:  
**TEN TEN TEN**  
and picks the two cards up.
6. Play continues with each player in turn flipping a card over from the top of their pile and placing them in a line.
7. Once a player has three face-up cards in front of them a fourth card cannot be turned over unless one of the three face-up cards is returned to the bottom of his/her pile. At any time there may only be three face-up cards in front of a player.
8. Play continues until one player runs out of cards or no more tens may be made.
9. The winner is the player with the most tens.

## Variations

1. Change the total to another number, eg 12.
2. Allow students to combine three or four cards to make 10.
3. Change the game so that the aim is to win the most cards.
4. Allow students to take a card from another player's pile.