

## Today's Number

Number: Calculate

### Materials

- Bag of numbers
- Scrap paper and pencil

### How to:

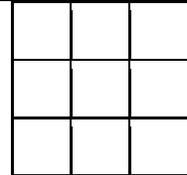
1. Make a two digit number from the numbers in the bag and write it at the top of your page.
2. Write different number sentences to make that total.
3. Are there any number sentences that belong together? Why? Can you rearrange the number sentences so they are in order? How can each set be extended?

## Dice Rolls

Number: Understand Number

### Materials

- A die
- Nine-square grid for each player



### How to:

1. Take turns to roll the die. Each number needs to be recorded in a digit box as it is rolled. Each player has a 'free zero' which they can place where they choose within any line. Each player has three lines going at a time.
2. The person who can create the largest horizontal number wins.
3. When you get really good at this try having the numbers run horizontally as well as vertically.

## Hide and Seek

Number: Calculate

### Materials

- popsticks
- Icecream container
- Scrap paper and pencil

### How to:

1. Place a bundle of popsticks on the table and count to find the total.
2. Player 1 closes their eyes while player 2 hides some of the popsticks under the icecream container.
3. Player 1 works out how many are hidden using the beginning number and how many are left outside the container.
4. Record the number sentence.
5. Players swap roles.

## Popsticks Game

Number: Calculate

### Materials

- Popsticks
- A die
- Scrap paper and pencil

### How to:

1. Each player puts twenty popsticks in front of him or her.
2. Player 1 rolls the die and takes that number of popsticks away from their collection. Player 2 does the same.
3. Record the game using number sentences.
4. Keep taking turns to roll the die and take popsticks away.
5. The winner is the first person to take away all of the popsticks from their collection. You must roll the exact number to finish the game.

## Subitize 1

Number: Understand Number

### Materials

· Pack of subitizing cards

### How to:

### SNAP

1. Deal the cards facedown to the players in the group.
2. Each player turns over one card at a time from their pile. 'Snap' occurs when 2 cards of the same value are placed on top of each other.
3. Players must say the number of spots on the card if there is a match to win that set.
4. The player with the most cards at the end of the game is the winner.

## Subitize 2

Number: Understand Number

### Materials

· Pack of subitizing cards

### How to:

### CONCENTRATION

1. Place each of the cards face down separately.
2. Players take turns to turn over two cards at a time.
3. If the pair have the same value, the player wins that pair and has another turn.
4. If the pair have a different value the cards are turned face down again and the next player has a turn.
5. The winner is the player with the most pairs at the end of the game.

## Subitize 3

Number: Understand Number

### Materials

· Pack of subitizing cards

### How to:

### MORE

1. Deal the cards facedown to the players in the group.
2. Each player turns over one card at a time from their pile.
3. Players must say the number of spots on their card when they put them down.
4. The player with the most spots in each pair wins the pair.
5. The player with the most cards at the end of the game is the winner.

## Matchsticks

Number: Calculate

### Materials

· Coloured matchsticks

· Scrap paper and pencil

### How to:

1. Take a handful of matchsticks.
2. Sort them into colour groups.
3. How many matchsticks in each group? How many altogether?
4. Record your answer as a number sentence.
5. Can you write it a different way?

## Cards 1

Number: Understand Number

### Materials

- Pack of playing cards
- A die

### How to:

#### HIGHEST NUMBER

1. Remove the picture cards and shuffle remaining cards.
2. Throw the die to get the amount of cards to deal for each player.
3. Write down your start number at the top of the page.
4. Take turns to throw the die and decide whether to add or subtract to your score.
5. Record the result and let your partner have their turn.
6. The winner is the first to reach exactly 100 or a higher number you both agree on.

## Cards 2

Number: Understand Number

### Materials

- Pack of playing cards

### How to:

#### FISH

1. The picture cards have a value of 10; aces are 1.
2. Deal out seven cards per player and put the rest in the middle.
3. Take turns asking a partner for a card to make a pair from the cards in your hand.
4. When you get a pair players must say what the two numbers add up to.
5. If you get a pair you have another turn. If you do not you pick up a card from the deck.
6. The winner has the most pairs at the end of the game.

## Cards 3

Number: Understand Number

### Materials

- Pack of playing cards

### How to:

#### CONCENTRATION

1. Place each of the cards face down separately.
2. Players take turns to turn over two cards at a time.
3. If the pair have the same value, the player wins that pair and has another turn. Players must state what the two cards add up to. Picture cards have a value of 10, Aces are 1.
4. If the pair have a different value the cards are turned face down again and the next player has a turn.
5. The winner is the player with the most pairs at the end of the game.

## Cards 4

Number: Understand Number

### Materials

- Pack of playing cards

### How to:

#### ADDITION FISH

1. The picture cards have a value of 10; aces are 1.
2. Deal out seven cards per player and put the rest in the middle.
3. Take turns asking a partner for a card to make a pair from the cards in your hand. The "pairs" must be compatible numbers to 10 such as  $6 + 4$ ;  $3 + 7$  etc.
4. When you get a pair players must say the number sentence aloud (3 plus 7 equals 10).
5. If you get a pair you have another turn. If you do not you pick up a card from the deck.
6. The winner has the most pairs at the end of the game.

## Reach My Number

Number: Understand Number

### Materials

- Place value chart
- A die

### How to:

1. Decide on a target number (100 to 500).
2. Take turns to roll the die.
3. Use your place value chart to keep score.

## Place Value Game

Materials: a deck of cards with the 10s and picture cards removed.

Pairs or small groups can play.

Rules:

1. The deck is shuffled and left face down on the table.
2. Players take turns to pick a card from the top of the deck and turn it over.
3. The player must decide if the card will be in the ones, tens, hundreds or thousands place.
4. The card must be placed before another is drawn from the deck.
5. The winner is the player who produces the largest number.

For example: 6 741 would be produced using a 6,7,4 and ace.

Variations:

Make the smallest number.

Make decimals.

For the younger children: draw two cards to make numbers. Graduate to three cards to make a number.

## What's Your Name Worth?

Make up an alphabet chart with a number value for each letter. Explore what each child's name is "worth" by adding the value of the letters in their name.

A	B	C	D	E	F	G	H	I	J
2	5	3	4	1	6	4	8	2	9

## Keep the Count

Use a 100/200/1000 chart to investigate the pattern of numbers, count forward, count backwards, by 2<sup>'</sup>/5/10 ... Be sure to begin at different start numbers and discuss what is happening in the pattern.

## Target Number

Choose a number within the child's ability. Child records all possible information about that number (eg operations that make that number, factors, write the number in words and digits; odd/even, special facts such as a dozen has 12 things in it, etc

## Other Ideas

Numbers, statistics and graphs in newspapers and advertisements; add the numbers on car number plates when driving; shopping using money, weights and measures; reading food labels for percentages and fractional parts of the whole; literature with a mathematics theme; Numero and other card games with a number theme; cooking...