Help with maths

+	-	x	÷	=
add, plus, total, more than, altogether	subtract, take away, less than, difference	times, repeated addition, lots of, multiply	divide, share, groups of	equals, make, come to, same as

Digit: any one of the numbers 0-9

23 is a two-digit number, 123 is three digits

Maths operations

+ - x ÷

Place value and partitioning

1 1 3

1 hundred, 1 ten, 3 ones

What each digit is worth in a number (place value) when it is split up (partitioning)

Number bonds/pairs

3 + 7 = 10

6 + 4 = 10

5 + 5 = 10

2 + 8 = 10

Pairs of numbers added together to make another number

Number sentence

A combination of numbers and operations which require solving

7 + 5 = 12

44 - 10 = 34

5 x 4 = 20

35 ÷ 7 = 5

Number fact family

A group of 4 calculations using the same 3 numbers

5 - 3 = 2 2 + 3 = 5

5 - 2 = 3 3 + 2 = 5

Odd

Numbers ending in

1, 3, 5, 7, 9

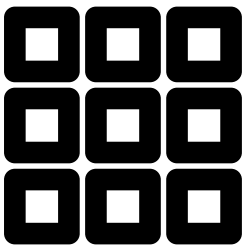
Even

Numbers ending in

0, 2, 4, 6, 8

Array

order of objects in rows and columns



3 x 3

Inverse

opposite e.g. +/- and x/÷

For more information about our work, and for more ideas about helping your child learn at home, see our website: www.questforlearning.org.uk

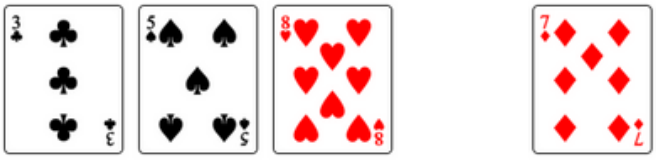
Questfor Learning

Activities and games

Diamonds are Forever

Before you start: remove jacks, queens, kings and jokers from a pack of cards

- Place 1 (ace)-10 of diamonds in order face up
- Shuffle the remaining cards and place them in a pile face down
- Take it in turns to pick the top three cards from the pile and turn them over
- The player tries to combine two or three of their cards into a calculation where the answer is one of the diamonds left. Any operation can be used: + - x ÷
- If the answer is correct the player wins that diamond
- The winner is the player who wins the most diamonds.

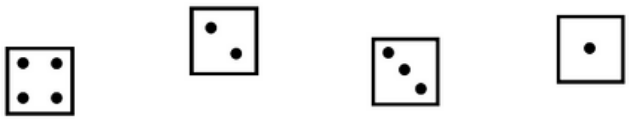


Example using the cards above: 3 x 5 - 8 = 7
The player wins 7 of diamonds

Make 24

You will need: 4 dice, pen and paper, numberline to help with calculations

- Take it in turns to roll the four dice
- All players to use the numbers on the dice to make the answer 24
- Some or all of the numbers showing on the dice can be used
- Any operation can be used: + - x ÷
- After a few minutes, each player shows the different ways of making 24
- Each player explains how they made 24, clearly describing each step.



Examples using the dice above:
3 x 4 x 2 = 24
4 x 3 x 2 ÷ 1 = 24
2 x 3 x 4 = 24
1 + 2 + 3 x 4 = 24

Higher or Lower

You will need: small pieces of paper, counters, cards saying 'higher' and 'lower' for each player

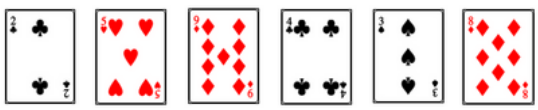
- Use the paper to create a set of cards with 2 or 3-digit numbers on
- Put the cards in order from lowest to highest
- Next shuffle the cards and place them face down in a row
- Turn over the first card; each player predicts whether the next card will be higher or lower than this one

- All players risk 1, 2 or 3 counters on their prediction, then turn over the next card
- Players whose predicted correctly win the same amount of counters they risked. Players whose prediction was incorrect lose their 'risked' counters
- Continue to play in this way
- The winner is the player with the most counters at the end of the game.

Add and Grab

Before you start: remove jacks, queens, kings and jokers from pack of cards

- Decide on an agreed total between 10 and 20
- Deal pack face down between the players
- Each players turns over their top card at the same time
- Turned over cards are placed face up so that all players can see them
- Any player who can see a set of cards that make the agreed total wins the set
- Once a set has been won, players turn over another card
- When all possible cards have been used, the player with the most sets wins.



Example using the cards above: The agreed total is 15.
The player adds 5+8+2=15 and grabs the card set.

More ideas are available from National Numeracy at www.nationalnumeracy.org.uk/free-family-maths-toolkit