Fun, easy, every day Maths Activities

that encourage your child to think Mathematically

St Mary's Toukley 2015

Handfuls

Counters (or other objects).

How to play:
Kids get/are given a 'handful' of counters. They estimate how many they think are in their hands. Kids then arrange the counters so that they can easily 'count' them (not 1, 2, 3...).
Ask: "How many do you have?"
"Can they be arranged in a different way, too?"
"What is one/ten more/less?"
"Can you write your number (paper/phone/calculator)?"
"Can you count forwards/backwards from your number?"
More difficult: A counter is worth 2, 5, 10, 25, 100, 3, 0.5, 2.5 etc.

What Number am I?

How to play:
Give 3-5 clues for a certain number and the other person needs to guess the number. Sometimes there might be more than one answer that fits the clues and that's okay! eg. I am a two-digit number, I am even and I have a 3 in the tens column. What number am I?

Array Hunt

How to play:
Arrays are everywhere and help us to know how many we have in an arranged group without having to count them all. If you spot an array, together work out how many of the object there is, without counting by 1s. Then ask "What if there was one more row?", or "How many if I added one more column?"

Round the Track

2-4 players, round-the-track board, 1 pack of playing cards (ace - 9 only), blank cards with a '0' on them, 1 dice (1-6).

How to play:

Each player gets a certain amount of cards (generally, the same amount of cards as their grade) and make a number with. Players take it in turns to roll the dice and move their counter on the board. Players then alter their own number according to what they landed on. You can negotiate if the winner has the highest number, lowest number etc.

More difficult: Use more cards, include decimals, change the numbers on the game board.

- *1 or 2 cards: +1, -1, +2, -2, +5, -5, +10, -10*
- *3 or 4 cards: +10, -10, +5, -5, + 20, - 20, +100, -100*
- *5 or 6 cards: + or – 1, 5, 10, 100, 50, 500, 1000, 4, 7*
- *More difficult: + or – 3, 8, 45, 650, 0.5 etc.*

Race to 20

2-4 players, 20 counters each, 2 ten frames each, 1 dice (1-6).

How to play:

The aim of the game is to get to 20 first. Each player has 2 ten frames and twenty counters. Players take it in turns to roll the dice. Roll, take that number of counters and place them on your 10 frame. As you play, ask:

"How many do you have?" "How do you know?", "How many more do you need to make 10/20?"

The winner is the first person with 20.

More difficult: You must roll the exact number to get to 20 to win. You could race to 10, 50 or another number with 1 counter representing more than '1'.

Tug-of-War

2 players, one bead kebab, one dice (1-6).

How to play:

Split the beads in half – 10 each side. The first player rolls the dice and takes that number of beads from their partner. After moving the beads they say how many beads they have and how many their partner has (without counting by 1s!). Take turns rolling the dice and taking beads from each other's total. The winner is the person with 20 beads.

More difficult: Each bead is worth 2, 5, 10, 7 or 0.1, 0.5 etc. Great for pointing out or practising times tables.

3-in-a-Row Bingo

2 players, a measuring tape or empty number line, a dice (0-9), paper clips.

How to play:

The winner is the person who places the 3rd number in a row on a number line. Player 1 rolls the dice twice and creates a number (a roll of 2 and 7 makes the number 27 or 72). Once deciding on a number, the player adds a paper clip/peg on the measuring tape. Player two then has a go. As soon as a player makes 3 numbers in a row (using any marker, not just the numbers they have made themselves), that player wins.

More difficult: Use an empty number line, roll three times and the numbers can be from 0-999.

Higher/Lower

2 or more players. Paper and pencil/pen.

How to play:

The 'teacher' writes down a number, e.g. 67, not showing it to Player B and Player C. Player A says that the number is under 100. Player B guesses a number under 100. The 'teacher' says "higher" or "lower", eg. if Player B said 89, the 'teacher' would say "lower". Player C then guesses. The 'teacher' responds with "higher' or "lower", eg. if Player C said 40, the 'teacher' would say "higher". Continue until either player guesses the correct number.

More difficult: You may choose to have 'two thousand three hundred and something' (2 3_ _), 'seventy six thousand five hundred and something' (76 5_ _) or perhaps a decimal like 'zero point something' (0._ _).

Bundles

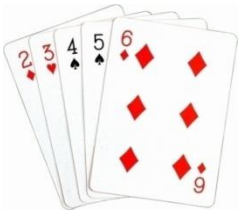
2 or more players, popsicle sticks (loose and in bundles of 10), cards/paper with 2 digit numbers written on them.

How to play:

Turn over a card with a two digit number written on it. Players race to get that many popsicle sticks using either the bundles or loose sticks. The winner gets a point for getting it right the quickest and another point if they can answer either one more/less or 10 more/less (without counting them or getting more popsicle sticks).

More difficult: You might use objects rather than sticks to represent different amounts Eg. A matchbox car = 10, while a lego man = 1.

Card Games



Friends-of-Ten Snap

Playing cards (ace-9), 2-3 players.

How to play:
The aim of the game is to win the most/all of the cards. Shuffle the cards ace-9 and distribute them equally amongst players, leaving none left over. There are two piles created next to each other, one of the red cards and one of the black cards. Players take it in turns to place a card on a pile (depending on the colour). When the cards on top of each pile together make 10, player 'snaps' and takes all of the cards. The game continues until there is a winner.

Fill in the Blanks

36		**45**			**86**	

Playing cards (ace-9), a blank row of squares (at least 7, up to 30, with some of the spots filled in with numbers).

How to play:
The player to finish the number sequence correctly is the winner. Players turn over 2 cards and use those to make a number (4 and 2 makes 42 or 24). Players take turns to put a number in. If they are not able to go, the next person takes two cards.

More Card Games

21 or Bust

A deck of cards.

How to play:
The dealer deals two cards to each player. Each player adds the cards to get a total (eg. 7 and King = 17). A player might like to take another card if they think they might be able to get closer to 21 without going over. The winner is the player who gets closest to 21 without 'busting'.

Number Fun

Playing cards (ace-9), calculator, 2 or more players.

How to play: Player 1 randomly chooses 2 cards, creating the largest number possible, eg. 82. Player reads and writes their number. Player 2 does the same. Player 1 repeats the process, this time adding their first number (82) to their second number (eg. 53) mentally. They record their answer (135), reading and writing it. Player 2 repeats the process. Both players continue the game until each have had **x** number of turns (eg. 5). The player with either the highest number or the highest points wins.
How to earn points: 1 point for reading the number correctly, 1 point for writing the number correctly, 2 points for adding the number correctly, 5 points for the highest score after **x** number of turns.

Even More Card Games

Winners Cards

Full deck of playing cards using 2-10 only. 2 or more players.

How to play:

Turn over 2 cards face up (eg. 3 and 6). The players multiply the numbers and the first one to say the correct answer (18) wins. Continue until one person has reached a pre-designated score, e.g. 5 or 10. Either player can be the one to turn the cards over.

More difficult 1: For younger children you can just play with the cards 2, 3, 4 and 5. For older children you can play with mostly cards 4, 5, 6, 7, 8 and 9.

More difficult 2: If you have 3 players, one person becomes the teacher whose job it is to turn the cards over. The other 2 players compete against each other with the winner then taking the turn of being the teacher.

Ordering Numbers

Deck of cards (ace-9).

How to play:

Using a shuffled deck, a child races against the clock to order the cards from 1-9 as quickly as possible, by placing them in a number line. If a card has already been placed down, just place the same on top of it.

More difficult: Make cards with teen numbers on them and use those, or numbers like 10, 20, 30 etc.

Maths Around the House

→ Play a board game like 'Snakes and Ladders'. Encourage thinking about adding the number on, rather than counting by ones. Use two dice and add them together.

→ Ask your child to help you work out how many more items you need when you are shopping.

→ Look at house numbers as you go for a walk. Can you add any numbers together? Is it odd/even? Is there a pattern? What's the difference between the biggest and smallest number you saw?

→ When preparing dinner, ask things like "If we all have two potatoes each, how many should I cook altogether?"

→ When reading a book with contents page, work out how many pages a certain story/chapter is. What page number will be in the middle of the story/chapter?

→ When driving, find numbers on signs. Do you know what number is 5, 10, 20, 50, 100 more or less? Can you count by 2s forward or backwards from that number?

→ When driving, find numbers on signs. Can you find the total of all of the numbers you saw on the trip?

→ Let your child help you share food for your family. How many slices will I need to cut so that everyone gets two? We each need 4 cherry tomatoes on our plate, how many should I get out of the fridge?

→ Share toys evenly/fairly with others.

→ Count the number of buttons as your child does up their shirt.

→ Count how many steps from one place to the next (door to mailbox, kitchen to bedroom).

→ Count the pegs used to hang out the washing. If I started with 20 pegs and there are only 3 left in the basket, how many are on the clothes line?

→ Play mini golf/beach cricket and keep the score of each player. Who had the biggest score, by how many? Can you put the scores on a number line?

→ Have your child to count as far as they can (by 1s, 2s, 10s, 5s, 3s, 9s) and encourage them to join you while you continue counting. You could also start at an appropriate number and go backwards.

→ Ask your child to count from a number other than one.

→ Collect and sort shells at the beach.

→ Play dominoes to help your child recognise dot patterns.

→ Say and add numbers on number plates. Make it a game where the person who finds the number plate with the highest/lowest/closest to 20 total is the winner.

→ When you pay for an item at the shop with coins or a note, ask your child to estimate how much change you will receive eg. "My coffee and your drink come to $7.20. If I use a $10 note, how much change will I get back?" Alternatively, ask how much more is needed to get to the next whole dollar.

→ Order 5-10 grocery items from tallest to shortest or heaviest to lightest.

→ Use kitchen scales to weight items around the kitchen.

→ When cooking, talk about the measurements of the ingredients.

→ Talk about different patterns you see in your house or when you are out. Become pattern explorers together.

→ Play games with your child on the website www.abc.net.au/countusin/

→ Begin a pattern with blocks, lego etc. for your child to continue or ask your child to make a pattern for you to continue.

→ Use a piece of string as a measuring tape and measure items in the house and compare them as 'longer', 'shorter' or 'about the same' as other items.

→ Turn Maths into a story to show children the link to their everyday lives. eg. "There are 5 pieces of fruit in your lunch box, 3 strawberries and 2 pieces of apple.

→ Throw a ball, balloon or other item to each other and count how many times you can do so before you drop it.

→ Use the terms 'half' and 'double' in everyday activities.

→ Tally the scores of a favourite team/code over a week/season.

→ Discuss the length of time something takes in minutes and hours or minutes and seconds eg. "The football goes for 80minutes, how many hours and minutes is that?"

→ Estimate how far you walk/drive in kilometres or metres.

→ What is the difference between the minimum and maximum temperature for the day? How much hotter is it at _____ to here?

→ Count money in a piggy bank.

→ When travelling on a bus or train, look at the timetable and work out the quickest trip.

→ Investigate the cost of a family trip out eg. the movies, a sporting event, a theme park, dinner etc.

→ Try puzzles like Sudoku.

→ Talk about fractions like cutting a pie, cake or apple into 6 equal pieces, half filling a glass with water.

→ Read the time together, ask what it would look like as either digital or analogue. Ask "How many more minutes until 10.30am?", "How many minutes left in this show?", "How long until we leave for soccer training if we leave at 4.15pm?"

→ Use a TV guide on your TV, such as Foxtel, to find the length of time a show goes for, how long until it starts etc.

150 Chart

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128	129	130
131	132	133	134	135	136	137	138	139	140
141	142	143	144	145	146	147	148	149	150

When in doubt..... ask these questions!

- Why do you think that?
- How do you know?
- Is it odd or even?
- Is there a pattern?
- What is the pattern?
- Can you prove it?
- How would you explain/convince a Martian?
- Is there another way?
- Is there a faster way?
- What's another way you know?
- How do you visualise it?
- How many if there are ___ more?
- How many if there are ___ less?
- How many is half?
- How many is double?
- What if there was 3 times as many?
- Can you draw it?
- Could you put it in an array?
- Could you tell me a story about your number?
- Where could you see this number?

By repeatedly asking these questions, your child expects to have to answer them and it becomes part of their 'self talk' and mathematical thinking.