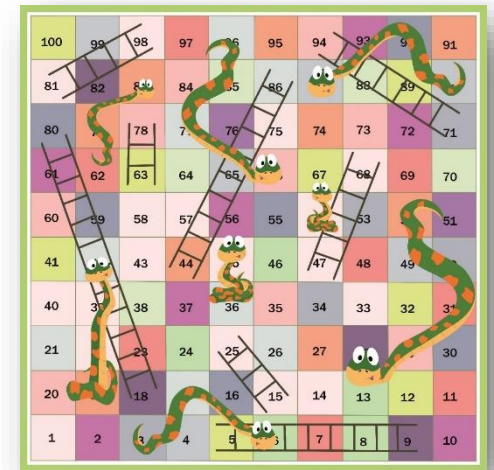
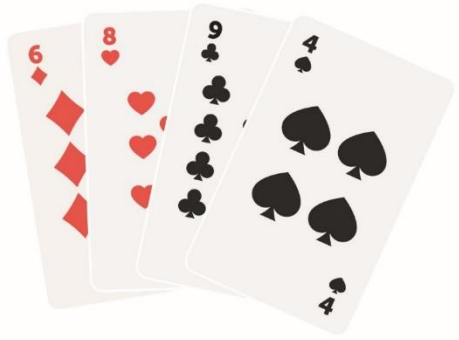


Maths Everywhere Games and Activities



Collection Patterns

On a walk in the garden or local area, ask children to collect objects that they can use to make a pattern.

All members of the family can do the same.

- Make some repeating patterns.
- Describe the patterns: “ My pattern goes stick, pebble, cone, stick, pebble, cone ...”
- Talk about the repeating part and how many times it repeats. For example: “There are four lots of stick, pebble, cone.”
- Compare this with other patterns made.



Challenge children to make different repeating patterns and describe them.



Array Hunt

An array is an arrangement of objects into equal rows.
This array shows two rows of three ice lollies.



Here are some mystery arrays. Can your child work out what the array is of?



Go on an array hunt around your home and allow your child to take photos of some arrays such as egg boxes, muffin trays, chocolate boxes or tiles in the bathroom.

Talk about how many rows there are and how many in each row.
How many altogether?

Meal Times

Ask children to help you serve food (which isn't hot).
Cut the cake into ... equal pieces.
How did you know that everyone has the same amount?



If I cut these two apples into quarters, how many pieces will I have?
How many people could have half an apple?



Ask child(ren) to pour the drink into three/four glasses so that everyone has the same amount.
Talk about thirds/quarters of all of the drink.
We each have a third/quarter of the drink.
Three thirds/four quarters is all of the drink.
Here is one third of all of the drink. How much is left of the drink?





Buying Snacks



**Provide children with a tray or purse with some coins.
Whenever they want a snack or drink, ask them to pay using one of the coins.**

**Make a price list with your child for favourite snacks and drinks.
Let them decide which snacks they should pay more for and ask them to record this.**



Ask questions such as:

- **Which coins are you going to pay with?**
- **Why did you choose those coins?**
- **Is there another way you could have paid me using different coins?**
- **What change will you get if you give me 50p or £1?**





Time



1. Use a stopwatch and timer on a phone to set challenges. For example, “Jump when you think the stopwatch has reached 10 seconds / 30 seconds / 1 minute”.

2. I’ll set the timer for 2 minutes – how many ...

- Star jumps can you do?
- Times can you write your name?
- etc



3. Regularly count around the clock in fives – five past, ten past, 15 minutes past, twenty past until half past and then 25 to, 20 to, 15 minutes to etc. until you reach the hour.

4. Ask children to predict the time. Check the clock.

How close were you?

What time will it be in five minutes?

What time was it five minutes ago?





Buckets of coins



Fill a bucket up with water and place an object like a pebble at the bottom of it.

Provide the child(ren) with all coins except £1 and £2 coins.

Challenge them to use eight coins and see if they can drop them one at a time into the bucket and hit the pebble.

Ask questions such as:

- If we add up all of the coins that hit the pebble how much would that be?
- If one more coin had hit / not hit the pebble, how much would that be?
- If we take out all of the coins that hit the pebble, how many coins are there left and how much money is that altogether?

Repeat but with only 2p or 5p or 10p coins.

Help them to count in twos, fives or tens to find out how much money hit the pebble / didn't hit the pebble.





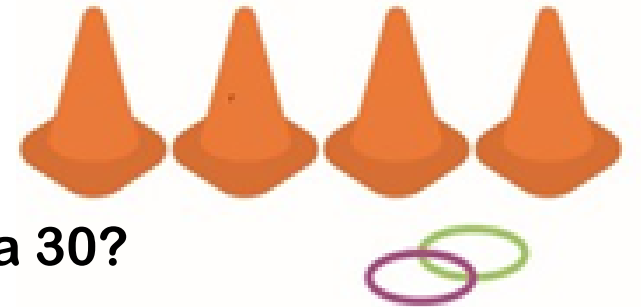
Target Practice

Play with numbered skittles and a ball, numbered hoops or draw some circles on the ground with numbers 10, 20, 30, 40, 6, 7, 8, 9 on them. Provide three throwing objects.

Ask child(ren) to knock skittles down or throw three throwing objects into the hoops / circles.

Ask questions / make suggestions such as:

- What was your score?
- Which (skittles / circles) will you aim for to get a higher score?
- What would be your score if your stone landed in a 20 instead of a 30?



Play again.

Let your child(ren) decide on some playing rules, perhaps changing where the higher scoring skittles or circles are.

Change the numbers on the skittles / circles (not more than 100).





Estimating

Provide children with amounts of pasta, studded bricks, crisps and raisins, for example. Start with numbers in the 20s and then increase over time up to 100.



Challenge them to estimate how many of each item there is. Encourage them to use words / phrases such as 'less than', 'fewer than', 'more than' and 'about' when estimating. "I think there will be more than fifty but less than one hundred."

Count the objects with the children in ones. Say, "Counting in ones is going to take us ages! How can we count them so it's quicker?"

Count in different ways and then suggest making groups of ten.

"There are two groups of ten and three more pasta shells."

Touch each pile and count in tens, "That's ten, twenty and three more, twenty three."

Support your child to do this with other amounts.

Help them count in tens – ten, twenty, thirty, forty etc.





Number hunts



Go for a walk.

Allow your child to take some photos of numbers they see on their walk.

Look for numbers that help us, like speed limits, number plates and door numbers, to take photos of.

Ask questions such as:

- **Can you find me a number more than fifty?**
- **What do you think that next door number will be? Were you right?**
- **Where is the house with the number (the child thought it would be)?**
- **What is the biggest number we found?**



1234

Hide a number of objects around the house or garden.

Challenge children to find them.

Provide clues such as 'in the bedroom' or 'near the wardrobe'.





Hidey pots



Place some pebbles or other objects underneath 5 flow pots or bowls.
Show what is underneath each pot / bowl in turn.

Are there the same number of pebbles under each pot?
Rearrange them until all of the piles are equal.



Hide an equal number of pebbles under each of 5 pots. Show the pebbles under one pot.
Challenge your child(ren) to say how many pebbles are under all 5 pots altogether if all of them are hiding the same number. Help them to count in twos, fives or tens or to use a fact they know.

Say the number of objects under the pots altogether.
For example, 30 pebbles under six pots.
There are the same number of pebbles under every pot.
Can you work out what that number is?





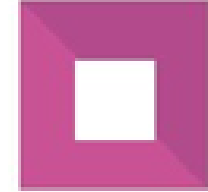
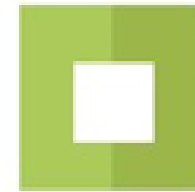
Paper cutting symmetry



Provide children with some paper squares.

Challenge them to fold their shapes in half and to look at the shapes of the halves made.

Fold the paper in half again and show children the folded edges.



Challenge children to cut a shape that leaves a square / triangle / rectangular holes when they unfold the paper.

Repeat making different cuts with the paper folded into quarters.

Look for symmetrical patterns that have been created.



Make paper snowflakes by folding a circular piece of paper in half three times.

Find some examples of symmetry around the home or in the garden.



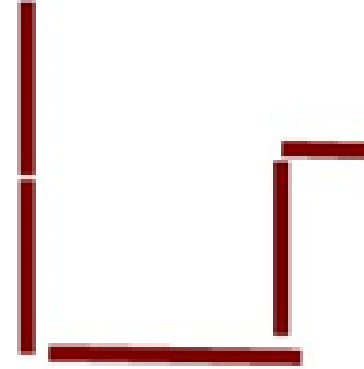


Stick Trails



Collect lots of sticks.
Challenge children to make a trail using the sticks.

Decide on rules for when the sticks will ‘make a corner’, such as:
“Every third stick must be used to make a corner.”
Show a corner made with sticks



Ask children to write instructions for how to get from one end of the trail to the end using language such as:

- Half / quarter turn
- Left / right
- Forward

Provide obstacles for children to build their trail around e.g. “Start here and make a stick trail to the plant pot. Go around the pebbles I’ve put out.”

