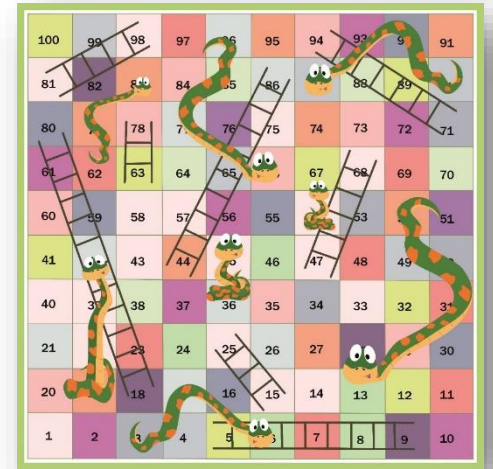
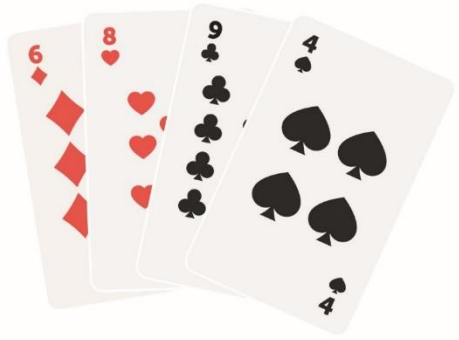


# Maths Everywhere Games and Activities



# Collections

Take a basket or bag, go outside and collect some items such as pebbles, twigs and leaves.

Help the children to count the objects in ones and then in twos.

They pick up an object in each hand and place it as a pair in front of them.

If the final objects counted make a pair, the number is even. If it is alone, the number is odd.

Once they have counted all of the objects, ask:

- Could you pick up all of the objects in pairs?
- Were there an odd number of ... or an even number?
- How do you know?
- How many groups of two could you make?

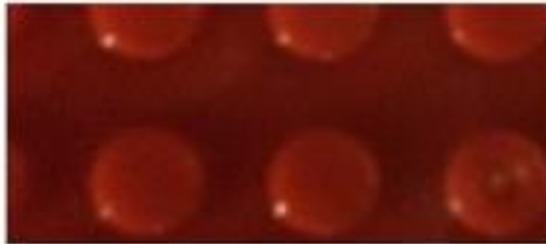


# Array Hunt

An array is an arrangement of objects into equal rows.  
This array show two rows of three ice lollies  
 $3 + 3 = 6$



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 and tiles in the bathroom.

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



# Collections and Equal Groups

Take a basket or bag, go outside and collect some items such as pebbles, twigs and leaves.

Ask questions such as:

- How many rows of three can you make from your pebbles?
- Did you have any left over?
- Are there enough pebbles for each of us to have five? Show me.



Show me a collection where we would get the same number if we shared the objects between me and you.



I need half of those ... Can you give me half?



If we wanted me, you and (another person) to have the same number of pebbles, how many would we each have?





# Meal Times



**Provide children with knives, forks and plates.**

**Ask questions such as:**

- **Have we got enough knives for every person?**
- **Are there more plates than bowls?**
- **Have we got enough grapes for everyone to have ten?**
- **How many more do we need?**

**Ask children to help you serve food (which isn't hot).**

**Ask questions such as:**

**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?**







# 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 write this.**



**Ask questions such as:**

- **Which coins are you going to pay with?**
- **Why did you choose those coins?**
- **Is there another way your could have paid me using different coins?**





# What's the Time Mr Wolf?

- You or a child can be the wolf! The wolf stands with their back to the other game players at an agreed distance from them.
- The other players ask, “What’s the time Mr Wolf?” The wolf says a time such as, “Two o’clock!” The others take two paces towards the wolf.
- Repeat until the wolf feels like the players are quite close. The wolf shouts, “Dinner time!” and chases the others until they catch one to be the wold on the next go.
- If the wold is tagged before saying ‘dinner time’, they are the wolf again.

Show children what one o’clock and two o’clock look like on an analogue clock.

If you have any old analogue clocks or watches, let the children try making hour times by turning the hands.

Point to the clock regularly and say, for example: “It’s nearly two o’clock. Tell me when it’s two o’clock so we can make some biscuits or go for a walk.”





# Buckets of coins



Fill a bucket up with water.

Place an object like a pebble at the bottom of it.

Provide children with 1p, 2p, 5p and 10p coins.

Challenge them to use five 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 added 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 2ps. Help them count in twos to find out how much money hit the pebble / didn't hit the pebble.







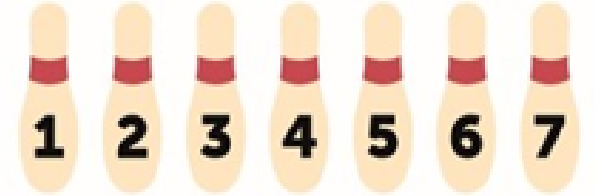
# Target Practice

Play with numbered skittles and a ball or hoops or draw some circles on the ground with numbers 0-6 on them and provide three throwing objects.  
Use a container of pasta like penne or shell pasta.

Ask children to knock skittles down or throw three 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 2 instead of a 3?



Play again.

Let your children 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 10).

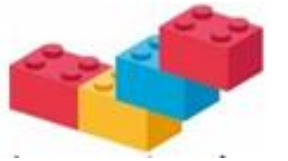




# Estimating



**Provide children with amounts of small objects, such as pasta, studded bricks, crisps or raisins. 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 and phrases like ‘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 and 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.**





# How big is my hug?



Give your child a big hug and say, “I wonder how big a hug is?”

Outstretch your arms and ask your child to decide how to measure your arm span from finger tip to finger tip.

They can choose what to measure it with, e.g. hand spans, bricks made into towers, cushion widths or a tape measure.

“Wow, my hug is five cushion widths/forty brick/123cm”

Help them to cut a piece of string that is the size of their hug. Then measure their hugs with different items.

Let them know that as they grow, their hugs will get even bigger.

Ask: “What else shall we measure?”

Support them to measure other parts of their body e.g. hand span. “Can we use cushion widths to measure that or shall we try pasta shells? Why?”





# Build a shelter



Building shelters and dens helps children to see three dimensional shapes from the inside and outside.

If you live near woods and can get out, help them to build a shelter against a tree. If not, provide chairs and duvet covers and challenge them to build a den that's big enough for me and you to fit into.

Ask questions such as:

- How many people could fit in here?
- What happens to the space at the pointy bit of the shelter?
- Could we have a build a den with a curvy roof?
- How many sides had our den got?
- How many pointy bits has it got?





# 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

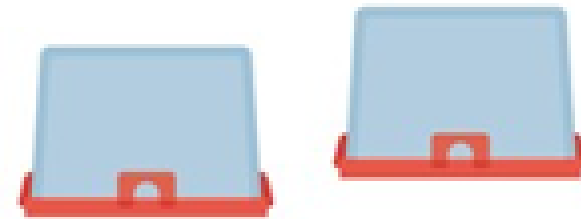
Underneath four flower pots or bowls, place some pebbles or other objects.  
Show what is underneath each pot / bowl in turn.

Is there the same number under each pot?

Using only the pebbles under the four pots, rearrange them until all of the piles are equal.

Rearrange a number of pebbles so that there is an equal number under each pot, e.g. two pebbles, and challenge your child(ren) to say how many pebbles are under all four pots all together. Help them to count in twos.

Say the number of objects under the pots altogether.  
There is the same number under every pot.  
Can you work out what that number is?



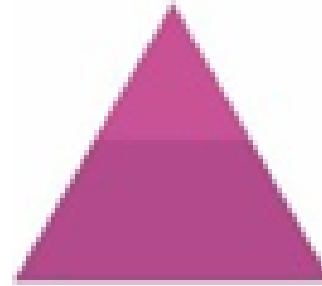
They can use another group of objects with the same total number to share into four groups to help them.



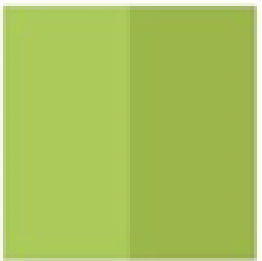


# Paper folding

Provide children with some paper squares, rectangles and triangles.  
Show them a triangle folded like this.  
*Is this triangle folded in half?*



Support them to see that both parts are not equal and so the triangle is not folded in half.  
Challenge them to fold their shapes in half and to look at the shapes of the halves made.



Challenge them to run the folded halves into quarters.

