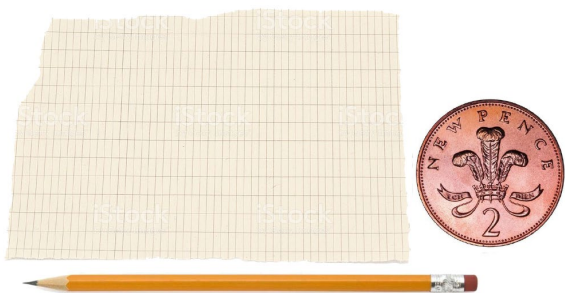


Exploring and measuring

*IMPORTANT Parent or Carer –
Check that you are happy with any weblinks or use of the internet.*

Activity 1 – Measuring using informal units

Find out how much your hand is worth

<p>What to do</p> <ul style="list-style-type: none">○ Set up the challenge – can we find out how much your hand is worth?○ Help your child to draw around their hand and then measure it by placing a coin and drawing around it as many times as it takes to create a line from top to bottom – <i>this will be tricky so give lots of help and encouragement.</i>○ How many coins did it take? Count in 2s to reach an amount and help your child to record the number on their hand shape, with a £ or p.	<p>What you need</p> <p>A coin: 2p or £2 piece (you can choose other coins, but these are easiest to draw around and count)</p> <p>scrap paper and a pen or pencil</p> 
<p>Extension</p> <p>Find out the worth of each person in the home's hands – create a display of hands with the worth recorded. Place the hands in order, highest to lowest.</p> <p>Try with a different coin – 10p and counting in 10s.</p> <p>Can we do the same with feet?</p>	<p>Questions to ask</p> <p>How many times did you draw around the coin?</p> <p>Can we count in 2s?</p> <p>How much is your hand worth? (in pence or pounds)</p> <p>Do you think my hand will be worth more or less than your hand? Why?</p> <p>Whose hand will be worth the most/least?</p> <p>How can we find out?</p>

Activity 2 – Sorting objects by criteria

Sorting toys by the material they are made from

What to do

- Set up the challenge – can we find out how which materials are most commonly used in toys?
- Gather together some toys and discuss the type of materials they are made from (*wood, plastic, metal, fabric, etc.*)
- Encourage your child to sort them by material. If you come across an object which is made of more than one, encourage your child to think of a solution (i.e. *have a 'mixed' group*).
- Check each group to see that all the items fit the criteria and count them. Compare the numbers to answer the question.

What you need

Toys of different materials, e.g. plastic ball, metal car, cuddly toy, wooden train
Paper and a pencil



Extension

Make a record of your findings by writing each material and writing the number next to it. Find out which material is most and least common by comparing the number in each group.

Think about why some materials are used more for toys.

Sing along with Maddie Moate's materials songs:

<https://www.youtube.com/watch?v=ys-IR2KGeoY>

<https://www.youtube.com/watch?v=WqKrGbPORfs>

Questions to ask

How can we tell which materials these toys are made from?

How can we group the toys to help us find out which material is most common?

What materials make good toys? What materials do we not usually make toys from? Why?

Activity 3 – Explore colour mixing

Create a colour mixing picture

What to do

- Talk about the different colour paints that you have – what colours do you have? Squeeze them out onto a palate or plate in coloured blobs.
- Say it is a shame that you don't have any other colours. Does your child know how we could get some different colours? By mixing.
- Help your child mix two colours at a time, predicting what the colour will be before you mix and then discussing what the result is.
- Create addition type sentences to show what happens when you mix each two colours. You could draw

$$\bigcirc + \bigcirc = \bigcirc$$

three times and your child can record their findings in the shapes, i.e.
red+yellow=orange

Extension

Use the mixed colours to make a colourful picture – you could make a butterfly by painting one side and folding the paper to print the other

Share your findings so your friends can make lots of new colours

Try mixing the secondary colours together (green, orange and purple) to see what colours you get

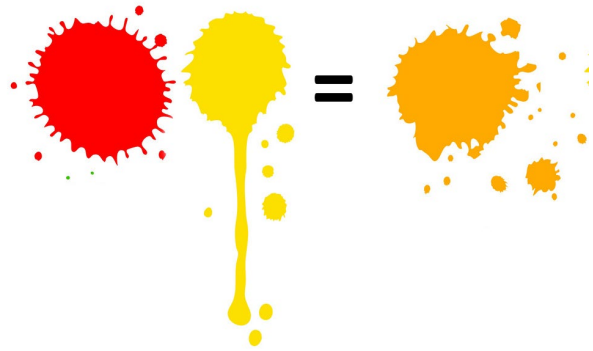
What you need

Ready mixed paint – yellow, blue and red
(primary colours)

A paint pallet or small plates for paint mixing

Paint brushes

paper



Questions to ask

How could we get different colours?

What happens when we mix two colours together?

What colour will we make if we mix red and yellow?

What happens if we add more of one colour?

Can we write a rule, so we remember how to make green?

Activity 4 – Measuring using informal units

Who can jump the furthest?

What to do

- Warm up with some jumping. Agree that we can jump up high but we can also jump across (like if we had to jump over a puddle)
- Ask who can jump the furthest in your home. Is there a way we could measure our jumps?
- Create a fixed starting point and a way of recording where people land (this could be a toy, a chalk mark or a coin).
- Have some practice jumps and then take turns to jump, record the landing point and measure by placing a shoe as many times as it takes to cover that distance. You are measuring in shoes.

Extension

Help your child to create a table to record everyone's jumping distance.
Challenge your child to increase their distance.
Use the internet to find out the jumping distance of other animals – mark out the distance using your shoe.

What you need

A shoe

A way of marking a start and end point:

Outside – chalk, cone, tape

Inside – toy, ribbon, cone



Questions to ask

Who do you think can jump the furthest?
How can we find out?
How can we measure the distance?
What if we used different shoes for each person?
How can we record/remember how far each person has jumped?