

Science Challenge



Ice and Water

Ice is made from water. When it gets cold it freezes. When it freezes it can float on water. We can use this to make some boats.



Floating Ice Boats

Make some ice cubes or ice boats by freezing some water in different shaped tubs or containers. You could freeze water in balloons or plastic bags to make some interesting shapes.

If you want to add sails to your boats, blu-tac a stick to the bottom of the container before filling it with water then make a paper sail to put on later. You could add a little food colour or paint to the water to make your boats different colours. Put the boats in the freezer for quite a while until they are solid.

When your boats have frozen put some water in a large tub, plastic box or basin and sail your boats. Eventually the water will cause your boats to melt but you can always make some new ones.



Which shapes of boats will melt quickest/slowest?

Technology Challenge



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Cardboard Sculptures

This week's technology activity is making cardboard sculptures. These are very easy and just need cardboard, scissors (be careful – ask an adult for help) and maybe some felt tip pens to decorate. Cut the cardboard into rough square shapes and then make one or two small cuts up the sides of each piece to allow each square to slot into the next one. The children can then link the pieces of card together to make their own modern art design or a figure such as a robot! The designs can be taken apart and reused to make a new model.



After making small models you can start to think large! Could you try to recreate the small model above, it might be a bit tricky!

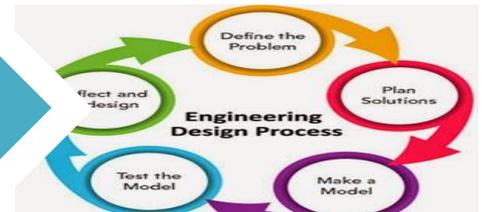


MORE CARDBOARD SCULPTURE IDEAS

Try using lots of different shapes.

Investigate whether it's easier to build with bigger or smaller shapes.

Engineering Challenge



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Wonderful water!

With all this lovely sunny weather we've been having, who else loves to get outside and play with water?

A great way to explore **gravity, angles and water flow** is through constructing a simple **water wall** in the garden. It helps develop your child's strength as well as control, balance and precision skills. Creating **different pathways** for the water is a fun way for children to explore and build their understanding of basic science concepts.

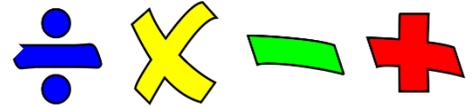


Create a DIY water wall: You can create a water wall using a range of **different materials** by **nailing them to a fence or post outside**, as long as some **movement** is still allowed so that your child can **change the direction the water flows**.

Possible materials: empty plastic drinking bottles with holes cut in the sides or the bottom cut off, drainage pipe, bendy tubing, foam tubing, funnels, yoghurt pots, empty ice-cream or margarine tubs, a bucket at the bottom to catch water, jugs, scoops, cups or measuring spoons to collect and pour.



Maths & Numeracy Challenge



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Shapes In A Bag

- Cut out a range of 2dimensional shapes, such as squares, rectangles, circles, triangles, from a cardboard box or cereal box.
- Place the shapes inside a bag which the children cannot see through.
- Children put their hand(s) in the bag to choose one of the shapes inside. By exploring the shape with their hands while it is still in the bag, they try to reason what shape it is, then bring it out to see their choice.

To begin with the children could be using everyday language such as curved, pointy, straight and wiggly to describe shapes, progressing to using mathematical language such as corner, side, circle, square, rectangle, triangle.

Children can begin to count the sides and corners of the shapes they choose.

To encourage mathematical thinking and reasoning, adults can be asking:

Describing

(While hands are still in the bag)

Tell me about the shape you have found.

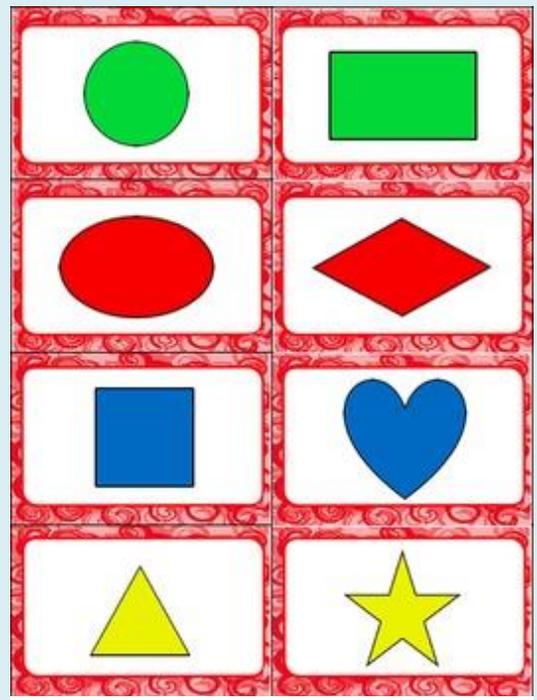
Reasoning

Why do you think it could be a ...?

Is there another shape it could be?

Encourage children to notice shapes around them, both in the home and beyond. If they walk around with an example of a particular shape, they may find it easier to discover more of that shape in the environment.

Try this task in the garden or on your daily walk. Count how many different types of shape you can find.



Literacy Challenge



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Superhero

Create a Superhero Cartoon Character



What would your Superhero look like?
What would their power be?
Would they have a special costume?
Would they need any special equipment?



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Draw and label your Superhero. Describe their superpowers to an adult and if you can try to make up a story for your character.

When making up your character think about- colour, costume, features, powers, equipment.



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Health & Wellbeing Challenge

Sleep is important!

Have you ever had a bad night's sleep before? How did you feel the next day? What does someone look like if they are feeling tired?

Did you know, 3-5 year olds need between 11 and 13 hours of sleep each night? Sleep is really important for our brain and body to recover from all the things we get up to during the day.



After a busy, exciting day, sometimes it is hard to unwind and get ourselves prepared for bed. Having a **bedtime routine** is a great way to help children calm down and get ready for a good night's sleep. Experts suggest starting a bedtime routine **30 minutes to an hour before bed** and to do calm activities such as having a bath, reading a story, talking about the day and brushing their teeth. This link takes you to a [pdf bedtime checklist](#) which you could use with your child.

This link takes you to the [Cbeebies bedtime hour stories page](#). There are lots of **pre-recorded stories** for you to listen, relax and enjoy with your little one.

You might like to have a go at [following the instructions on this blog](#) to create a **glowing sensory bottle**. If you are having trouble sleeping, try counting the stars and enjoy watching the colours shimmer and flow gently.

Talk about the **difference between night and day** with your child. How can you tell it is day or night? What kinds of things do we do during the day? What do we do at night? **Have a go at creating a piece of night sky scratch art**. Using yellow, white and orange wax crayons, colour in a piece of paper, leaning on it heavily. Then mix a small amount of liquid soap into black paint and paint over the top of the wax crayon. When it has dried use a cocktail stick to scratch on stars and the moon.



Social Studies Challenge



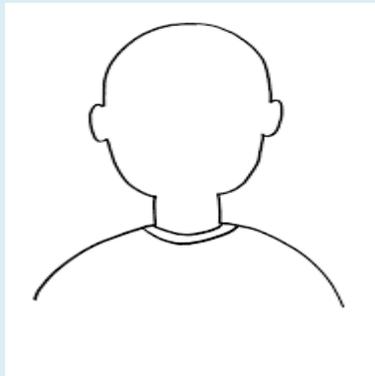
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My Timeline

Lots of exciting and important things have happened to you in your life. Perhaps you have:

- learned to walk and talk,
- got your first tooth,
- learned to ride a bike
- started school or nursery
- planted your first seed in the garden
- became a big sister or brother

Can you draw a picture of yourself and write down around your picture all the important things that have happened to you or that you've learned to do? If you need help remembering an event then ask an adult to help.



Once you have drawn your picture and written down your important events, can you number the events in order? For example, the day you were born would be number 1, your first tooth might be number 2 and so on. Again, ask an adult for help if you don't know which order some things happened in. This is your life timeline.

Expressive Arts Challenge



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Clapping Rhythms

Syllable Fruit

Say the name of the fruit and then clap the syllables.

* * *

1 syllable gets one clap- pear, plum, grape,

* * * * * *

2 syllables get 2 claps- apple, orange, grapefruit

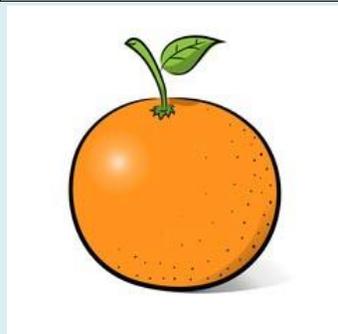
* * * * * * * * *

3 syllables get 3 claps – strawberry, pineapple, banana



Either draw pictures of fruit or use real ones. Lay out a few fruit and clap the rhythm they make.

Apple	Orange	Pear	Apple
* *	* *	*	* *



Can you make a Syllable Fruit Clap Song?