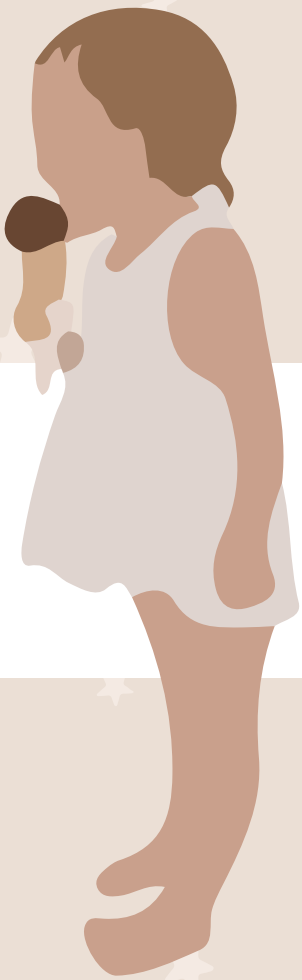
angels™
DAY NURSERY

Learning During Lockdown



Science Activities

Welcome to Lockdown learning with Angels

With the current situation with Covid-19, providing virtual support to children and families is key. Keeping you and your child healthy and safe is our main priority.

At Angels we have tried to provide you with a rich and varied range of learning opportunities. They are play based experiences and they fulfil and compliment so many curriculum areas. These are only guide lines and you can adapt the ideas, as you know your children best and can follow their interests. It is very much about laying a firm foundation in a fun and informal manner. This is about a quality, shared time together whilst also supporting their educational enrichment and development.

With all activities we ask you to reflect on the health and safety aspects. We know you will want to keep your child safe and happy. Please consider any risks. Remember adult supervision is required at all times.

Don't forget to take lots of photos and upload them to Tapestry!

Tapestry Log In

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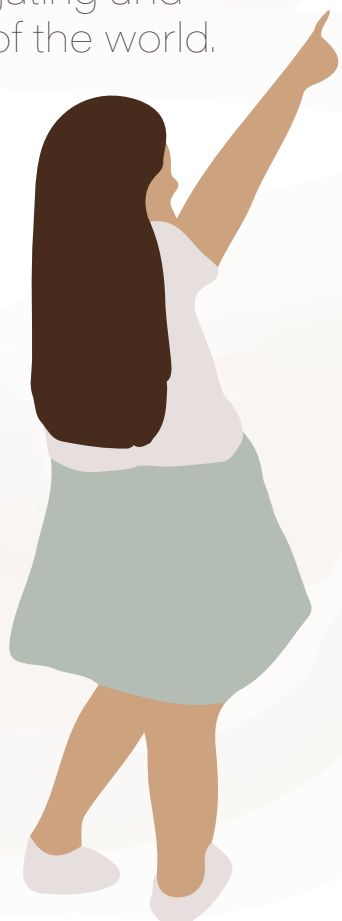
Science Activities

Early years science is all about being curious, investigating and experimenting to gain knowledge and understanding of the world.



Soap Bowl Science

Find a bowl and selection of containers suitable for using in water pouring activities. These might include pans, jugs, empty milk containers, plastic mugs, etc. Ensure the water is at a safe temperature.

Let your children empty and fill with the water. Which container holds the most?

How many cups of water go into the pan?

Try adding a drop of bubble bath to a container. What happens when you mix it in? Does it bubble? Does it smell different?

If you have soap flakes you could try adding a few to warm water (temperature safe). Try stirring and whisking. You have added a solid to a liquid. It should disperse and then with enough whisking become frothy and smooth. Discuss the texture, the aroma, what it looks like, the changes, etc.

Try some floating and sinking activities. You could see if sprinkled pepper floats on the surface, or salt, shampoo, oil, flour, etc. Then you could try coins, a Lego brick, a lolly stick, a key, etc.

You might even build a little boat, or improvise with an empty butter tub and see how much cargo it can hold until it sinks. Can you count the items?

Ice Melting

There's something about melting ice that's fun for kids, it's also a great opportunity to show how water turns into ice and then back to water.

Your can freeze water in containers or balloons to create fun shapes for your child to play with. Try add food colouring or glitter.

By putting warm water into squeeze bottles, get your child to play with the water and the ice, showing them how the warm water melts the hold ice.

Use words such as *solid, liquid, hot* and *cold*

You could also stick little treasures or toys inside the water before freezing them, to get your child to search for them.

Or you could put little dinosaurs in the water balloons to make them into dino eggs!

Magnetic Magic

Playing with magnets is a great activity for all ages and full of scientific learning and fun. This will help your child explore magnetic forces whilst keeping them engaged and happy!

Gather items from around the house in a plastic tub (risk asses Pick items that you think are magnetic, some that you know aren't and even some you are unsure of, this can be toys, items from the kitchen or garage.

With the magnet let you child explore what will stick to it and what wont.

Try to pick up as many magnet items as possible, let your child sort though the items that wont stick.

Maybe ask your child to guess which objects are magnetic and which ones aren't.

Show your child how some magnetic objects resist each other and bounce back.

Sink or Float

This sink or float experiment is a simple physics experiment that will encourage your child to make predictions and observations about buoyancy and density. This play-based learning activity combines a science activity and a water activity.

You can do this activity in a large plastic tub, a sink or that bath.

Collect some of your child toys that are water safe (no batteries) like bath toys that will float, you can use coins, keys, stones as objects that will sink.

Before adding your objects to the water, ask your children to predict which objects they think will sink and which will float.

Let your child play and splash in the water, and one by one add the items and observe what happens.

Once all of the items are in the water, you can giving your child a straws to blow the floating items around. This is a fun way to teach children about kinetic energy as the air they blow through the straw propels the floating items forward.

Growing Cress

Cress is a great experiment to do with your child to show them all the things that plants need to grow. Cress is really easy to grow and only takes 10 days, it will give your child the chance to see the growth every day.

All you need is egg shells (eat them first) boiled eggs are best to keep the shell intact.
Cotton Wool.
Cress Seeds.
Something to stand them in.

Prepare the empty egg shells by rinsing out with warm water so they don't smell. You way want to decorate your egg shell with pens, paint or glitter, be careful the shell is fragile.

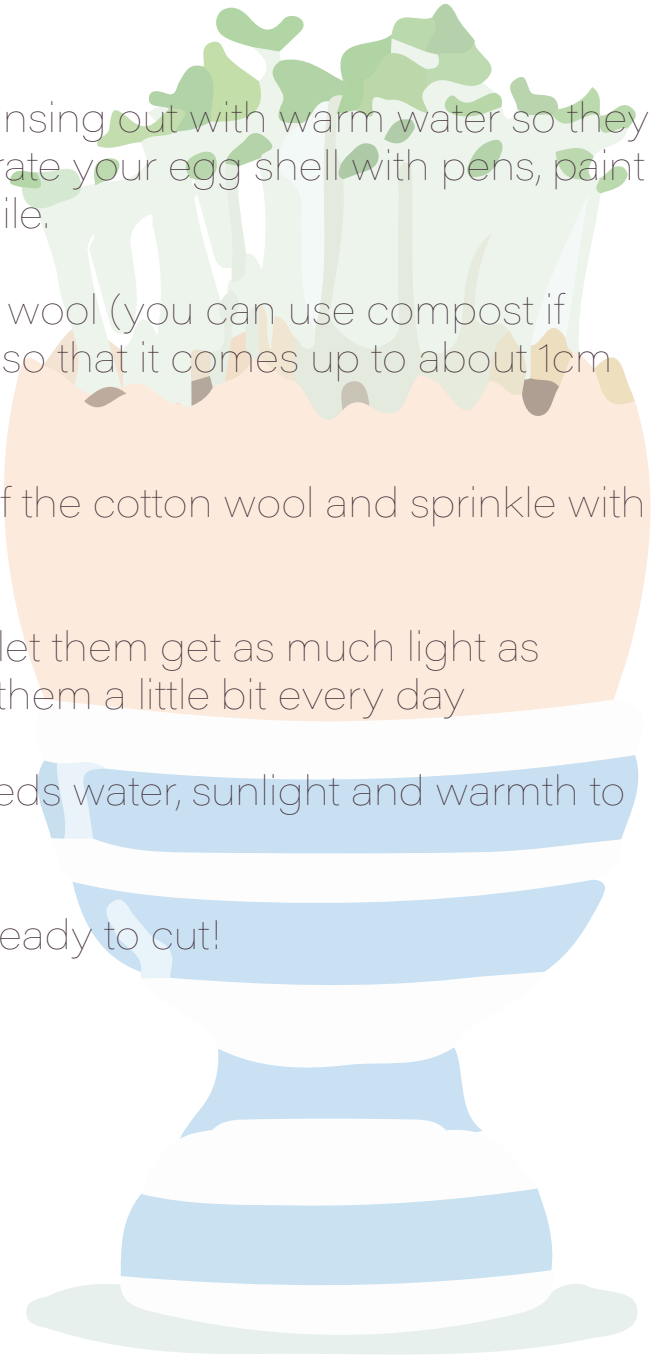
Start filling in your egg with cotton wool (you can use compost if you like) Put enough cotton will in so that it comes up to about 1cm below the top of the egg.

Now put some seeds on the top of the cotton wool and sprinkle with some water.

Place the eggs on a windowsill to let them get as much light as possible and don't forget to water them a little bit every day

Explain to your child that cress needs water, sunlight and warmth to grow.

After 10 days the cress should be ready to cut!



Bubble Snake

Children love bubbles, it's a fun and engaging activity that's really simple to do. All you need is a mismatched sock and a water bottle.

Ingredients:
1 cup of distilled water
2 tbsp dish soap
1 tbsp glycerin (available at ASDA in the baking section)

Mix everything together, and then wait at least 24 hours before you start using it.

Use a pair of scissors to cut off the bottom of a water bottle, stretch out the sock and slide it over the open end of the water bottle.

Dip the end of the bottle and sock into the bubble solution. Then blow on the mouth piece of the bottle to make the bubbles.

The harder you blow, the better your bubbles will turn out. Blowing hard makes a snake. Blowing lightly kind of makes a big ball of bubbles on the end of the bottle.

Let your child have a go at blowing bubbles, if they have got the hang of it try to make a long bubble snake.

If not blow the bubbles for them, let them chase the bubbles, explore the feel and texture of them.

You can add a drop or two of food colouring to the end of the sock to get coloured bubbles if you want.

Colourful Eruptions

These type of experiments are great fun, it allows your child to be curious and explore the reactions between the components. With a few simple ingredients you can make an exciting experiment for your child to play with.

Ingredients:
Baking soda
Vinegar
Food colouring
Squeezy bottles
Small containers

Place a few drops of different colour food colouring into each small container and cover with a spoonful of baking soda.

Fill up the squeezy bottles with vinegar and set up an invitation to play eruptions.

Be prepared for mess!

Allow your child to experiment with putting vinegar into the baking soda. Ask what they see. "is it bubbly or fizzy" ask what colours they can see coming out.

Maybe mix all the foam together to get new colours.

Magic Milk

This particular science activity is lots of fun and a great introduction to those children who haven't had much experience in observing chemical reactions.

Ingredients:
Plate
1/2 cup – 1 cup milk
1 drop of washing up liquid
Food colouring
Toothpicks

Simply begin by pouring milk onto a plate. You will need to ensure you have enough milk to cover the base of the plate.

Add a few drops of food colouring to the milk, in a pattern or randomly.

This will give you a great opportunity to talk about colours and point out if any of them mix together to form new colours.

Carefully add one drop of washing up liquid to the middle of the milk.

Quickly a chemical reaction will occur, which will see the colours begin to spread away from the washing up liquid drop and begin mixing and churning the colours.

Slowly it mixes together and pushes the colours further away from the washing up liquid and having it sink to the base of the plate.

Allow your child to use a toothpick to encourage the swirling motion and seeing how they all mixed around each other and created something new to look at.

Exploring Seeds

Exploring the seeds in fruit and veg that you use to prepare dinner is a great way to allow your child to have a better understanding of the food they eat.

Get a range of fruit and veg and cut them to expose the seeds, peppers, apples, oranges and tomatoes work well.

Get a some large tweezers and let your child pick them out and place them in a bowl.

Not only is this activity perfect for vocabulary and investigation, it's perfect for fine motor development as well!

Talk about their shape, colour, and their purpose.

Are the seeds big or small? How many seeds are there? How do the seeds grow?

Once the seeds all pulled out, get a magnifying glass and explored the seeds even further.

Maybe even dry them out and plant then to grow your own fruit and veg.

Gravity Painting

This gravity painting activity for kids combines science and art to demonstrate the force of gravity that promotes creative thinking.

Discuss what gravity is with your child, gravity is what keeps people and objects on the ground and causes objects to fall toward the Earth. Give examples like apple falling from tree, pencil falling from table, etc.

Prep your work space with a sheet and something to support the canvas upright.

Mix your paint with a splash of water. You want to water down the paint so it can flow easily down the paper.

Drip the paint on the paper with a spoon and watch gravity do it's work. You may wish to manipulate the drips by turning the board as the drips run down.

Once your paper has dried, ask your child "what you can turn the drips into?". You may wish to turn your painting upside down or on its side to spark an idea. Use your imagination to think creatively about what you see in the drips.

Use pens collage or more paint to create a masterpiece!

Colour Changing Flowers

This experiment demonstrates how plants drink water. Absorbing it through their roots and into their stem and petals using capillary action. It's a great way to show your child this process though the colour full water and the veins in the plant.

To start you will want to trim down the stems of the flower (white carnation and roses work best) so they fit your cups or glasses.

Add water to each cup.

Then put about 10-15 drops of food colouring in the water and stir around a bit.

Add at least one flower to each glass of coloured water.

Check in on the flowers every couple of hours and observe any changes.

You will start to see changes within a couple of hours. Some of the flowers started showing faint streaks of colour along their petals.

Explain to your child how plants drink water from the ground up through their roots. The water travels up the stem and into the petals of the flower. Although, our flowers didn't have roots anymore they were still able to pull water up from the cup into the stem and up through the flower to the petals.

Weather

Children are always curious about the weather, its a great opportunity to teach them the different types of weather and what they mean.

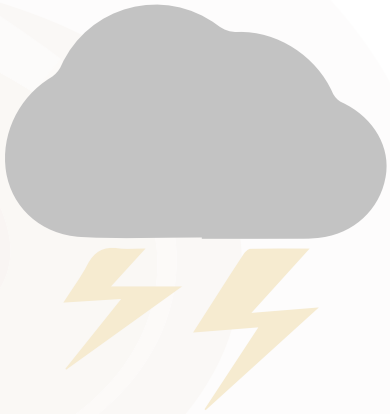
Make weather sounds, have your child start by rubbing their palms together, then snap their fingers, clap their hands, slap their legs and stamp their feet to create the sound of a rainstorm. Then reverse all the movements as the storm begins to fade. You can even turn the light off and on to make some lightning

Give a weather forecast, pretend to be a meteorologist and give the weather forecast, show them through the window what the weather is doing.

Draw the weather, grab some paper and a pencil, head outside, and draw how the weather looks outside.

If the weather is nice go cloud watching, go outside and find a comfy spot to relax and look up at the sky. Observe all the different clouds. How do they look? Can you tell which direction they are moving? Do any of the clouds resemble anything?

On a rainy day place a container outside and catch the rain. Measure how much rain your container collects each hour or on various days.



Static Butterfly

Static Electricity is a fascinating subject, especially for young children. It stirs up all sorts of fun conversations about electricity for your curious child.

To demonstrate the effects of static electricity. What will happen if we charge a balloon by rubbing it in our hair, and then hold it over tissue paper wings of a butterfly?

Use your pencil to draw butterfly wings on your tissue paper and a butterfly body out of your card stock paper, cut them out and glue only the middle it down on some paper, leaving the wings free.

Ask your child to decorate their butterfly with coloured pencils and maybe googly eyes.

Now blow up your balloon, rub it in your hair to give it an electric charge. Now hold the balloon on top of your butterfly, close but not touching it, and watch the wings raise and lower as you move the balloon closer and farther away.

Wax Resist Art

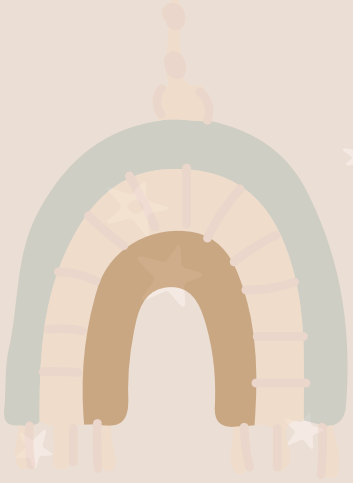
Wax resist, is a really cool art and science project for children of all ages. Resist Art is a process in which you use two materials which resist or repel each other. You can using a white crayon, or candle and water colours to create the art.

Take your white crayon, and draw an image or write your words on your white paper. You won't really be able to see what you're writing but don't worry about being perfect here.

Get the water colours and paint over the wax and see your message or drawing stand out.

Explain to your child how the pain doesn't stick to the wax.

You can make greeting cards or landscape paintings, get creative with the different colours and wax.



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