



Caring

We have a duty to teach our children to care about plants, animals and the natural environment. We can never start too early!

Planting Cress

One of the quickest and easiest plants to use. What do they need to grow? How do they feel, smell and taste like? Try planting them in eggshells. Adding faces also gives an opportunity to talk about how the eggs are feeling!



Vegetable Tops

This easy activity gives the opportunity for children to ask questions, notice changes and begin to understand growth and decay. All you need to do is add a layer of cotton wool balls to a dish and place a carrot top on top. Add enough water to the cotton balls so that they are damp but not flooded with water, then place your dish in a sunny spot like a windowsill. Make sure to check that your cotton balls stay damp throughout your growing period.

Beans in a Jar

Pop one dried kidney bean between a paper towel and the glass jar. What will happen? What can you see? Has the bean **germinated**? Can you see the root/shoot/leaves? Talk about what plants need to grow.



Plant Dissection

Take the opportunity of cut flowers that have died or roses with dead heads, for children to fully dissect what's there. Talk about the petals, stalks etc.



Strawberries

This is a fairly easy plant to cultivate and creates a wonderful opportunity to see the stages in a strawberry's life cycle.



Sunflowers

Planting a sunflower seed, caring for it as it grows, taking measurements and collecting seeds to plant again, is another ideal opportunity to teach a child about a plant's lifecycle.



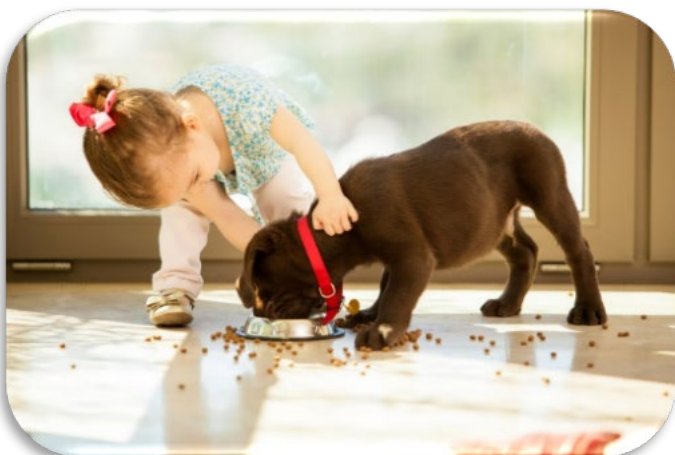
Tomatoes

A further opportunity for growing and can be done inside if you don't have access to a garden.



Growing Vegetables

If you do have access to a garden, growing vegetables provides opportunities not only in learning about plant lifecycles, but also physical development, new vocabulary and even measurement.



Caring for Animals

We may not all have the opportunity for a real pet at home, but imaginary/pretend ones can be just as good a learning opportunity. Making a bed, feeding, watering and cleaning them out, can all be done this way too.

Farms & Zoos

Farms and zoos often include hands-on activities for children to feed and interact with the animals.



Butterflies at Home

Home 'butterfly gardens' are available to buy on-line and give a hands-on opportunity to watch a caterpillar turn into a butterfly. If you are feeling really adventurous, you can also get living chicken or duck eggs on a short-term basis.

Changes

Support your child in talking about the differences between materials and any changes that they notice about them. How and why do they change? Examples are changes to ingredients when baking e.g. dissolving. What happens to bread when it is toasted? Why does ice cream melt? What happens when you boil a kettle?



Make a Rainbow

Cut kitchen towel into the shape of a rainbow. Colour a rainbow with felt tips to about 2cm up on both sides. Attach a paper clip to the top. Fill each small container with water. Hold the rainbow with the ends slightly submerged and then watch your rainbow grow.



Home Made Lava Lamp

Colour half a cup of water with a bright food colour. Pour vegetable oil into another glass to fill it to three quarters full. Add the coloured water to the oil, but leave a gap at the top of the glass. Drop pieces of an Alka Seltzer tablet into the glass, one piece at a time.

Suggested Activities:

Make Rain

Put a tea strainer or colander over a bowl. Place cotton wool at the bottom of the strainer. Fill a glass with water and add blue colouring. Add water slowly until the cotton wool is saturated and the water begins to drip through into the bowl. Talk about how the clouds become full of water and then it begins to rain.



Flowers & Coloured Water

Buy some white flowers (carnations work well) place each in a cup or vase with different coloured water using food colouring. Watch how they change. Talk about what's happening.

Dissolving

Gather 'ingredients' such as sugar, oil, salt, food colouring, rice, flour and vitamin tablets. With each 'ingredient' ask your child if they think it will dissolve or not? The word 'disappear' may help. Then add each item to water and mix.





Skittle Experiment

Arrange the Skittles in a circle on the outer curve of the plate. Carefully pour warm water into the middle of the plate so that the sweets are half submerged. Watch as the colour of the sweets slowly starts to creep towards the middle of the plate, making an amazing rainbow effect!

Viscosity

Get together liquids of different densities and colour them with food colouring. Starting with the highest density liquid add it to the bottom of a jar, being careful not to touch the sides. Continue with the next density liquid and so on. If your last liquid is rubbing alcohol, use a dropper to add if possible or it will mix with the layer beneath. Suggested liquids in order are: honey, corn syrup, washing up liquid, coloured water, olive oil, rubbing alcohol.



Dancing Raisins

Fill a glass with fizzy lemonade. Drop raisins into the glass. Wait a while and they will start to dance.

Gummy Bear Experiment

Put a gummy bear or two into different solutions and see how they change over time. Make predictions and measure the bears. Record your measurements.





Gravity

Ball games are an ideal way to introduce the concept of gravity. What happens when they let go of the ball? Can they make a ball fall upwards? Do balls move on a flat surface? Experiment with pushing, rolling, kicking, throwing, bouncing, stopping and hitting the ball.



Speed

Make simple ramps from empty paper towel rolls or bent pieces of card. Attach together to make them longer. Time how long it takes for cars to reach the bottom. Which is the quickest? Why do you think that is?

Types of Force

Forces are either pushes or pulls. They can't be seen, but their effects can. Forces can make things stay still, start to move, speed up, slow down, change direction or change shape.



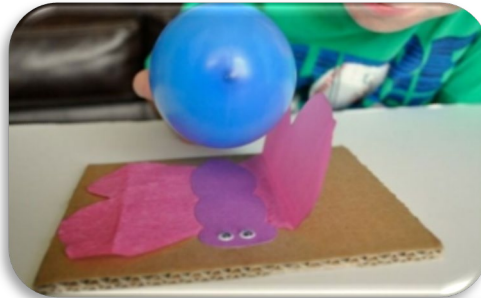
Play Dough

A perfect material to investigate pushing pulling and changing shape. Ask them to pull, push, squeeze, squash, twist, cut and roll it. What happens? How can you make it longer?



Static Butterflies

Make a tissue paper butterfly and attach to cardboard. Blow up a balloon, rub it on your clothing to create static electricity and then use it to make the wings move and the butterfly 'fly'.



Friction

Create ramps with bricks/blocks/containers and a plank/piece of wood/piece of cardboard. Take the same vehicle and measure how far it will travel. Change the height of the ramp and if possible, the texture of the ramp e.g. add material. Talk about speed and friction.



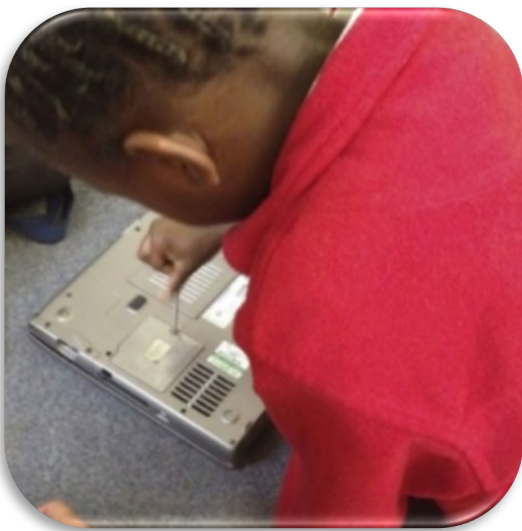
Spinning Tops

Make spinning tops from card and cocktail sticks. How do they make them spin? Can they make them spin faster/slower? How can they stop them from spinning?



Parachutes

Make people and parachutes from bun cases, tissues, cloth and pipe cleaners. Drop them from the top of the stairs or a window. Which lands first? Which went faster/slower? Why?



Disassembling

Find obsolete IT equipment. Allow your child to use real tools to take the equipment apart. What force are they using? This not only encourages questions about force, but also supports their fine motor skills too.

Balloon Powered Lego Cars

Build a car and attach a balloon. Blow up the balloon and see the car move. What has happened? Why?



Push & Pull Toy Box

Make holes in an empty shoe box and encourage your child to push and pull straws, in and out of the holes. Does twisting help? Time them to see how quickly they can push them all in and pull them all out. Which is quicker? Why?