

Outdoor Learning

Activity Ideas



Biology topics

Learning	Activity
Identifying plant parts	Take whiteboards or pre-made plant labels with you. Ask children to use these to label the plants they find. Older children could compare two different plants. It can be useful to put a PE cone next to the plants you want children to focus on.
Pollination	Observe which types of insects pollinate different types of flowers in your setting. Small groups can act out pollination in the playground. Some children will be flowers and some will be pollinating insects such as a bee. 'Flowers' can be made using a small lollipop (stigma) inserted in a cone of coloured paper, surrounded by a salty snack, e.g. cheesy puffs (anthers & pollen). When the 'bee' visits each flower, pollen is transferred from one flower to the stigma of another flower. Alternatively, on a larger scale, sticky notes representing pollen can be transferred between flowers.
Habitats	Encourage children to observe closely by matching colours of plant parts to paint samples. Fill your buckets with chalk (or whiteboards and pens) and plant/animal identification cards. In groups, explore the flora and fauna of your school grounds and label what you see. Look at what everyone else has identified - did you find the same things?
Food chains	Use string and animal cards (one per child) to create giant food chains.
Skeletons	Collect as many sticks as possible in the playground (or use plant canes or art straws) to create a skeleton. Use whiteboards to write labels/notes.
Digestive system modelling	Can be made using household objects (e.g. funnel for mouth) and laid out on the ground outside. Label with white boards or narrate the journey of your lunch.
Circulation modelling	Put four PE hoops in the centre of the playground and label each part of the heart. Put other hoops further away and label some other body parts including the lungs. Show children how to walk the route of the double circulatory system. When they have mastered this, put a pot of small objects in the lungs hoop – children collect 'oxygen' token when they visit the lungs and take it via the heart to another part of the body. Then introduce 'carbon dioxide' objects in the other body part hoops which should be returned to the lungs.
Exercise	What is the impact of star jumps (or another exercise) on our body temperature? our breathing? our pulse?
Seasonal change	Take your buckets out and use them as seats for an outdoor classroom! Sit outside with your class and observe the weather! Do this throughout the year. Adopt a tree – visit your tree regularly to develop children's observations skills. What do they notice? Create photo diaries and annotate the changes.



Physics topics

Learning	Activity
Magnets	Take bar magnets outside. Which items in the playground are magnetic? What do notice about these objects?
Air resistance	Organise running races with some children holding sheet/parachute behind them. How does this feel?
Shadows	Put a tall object in the playground on a sunny day. Every hour, send a child from each group outside to draw the shadow created on the ground (different coloured chalks could be useful or put the object on large paper).
Sound	How far will sound travel outside? With data loggers if possible, or with two different coloured pieces of paper, children walk away from the source of the sound. Show one colour when you can hear the sound and the other when you can't. How do different sounds vary?
Electricity	Where does mains electricity come from? Go on an electricity walk in your area – look for pylons, distribution enclosures (substations), pad-mounted transformers and broadband street cabinets.
Space	Put the planets in order and see the relative distances between them. All you need is a bag of different size balls, a trundle wheel, and a distance chart for the distances between the planets. Model the relative motion of the Earth, moon and Sun in small groups. Start with the Earth rotating on its own axis (anticlockwise), then orbiting the Sun. When children have tried this for themselves, introduce the moon orbiting Earth.



Chemistry topics

Learning	Activity
Types and properties of materials	Take labelled buckets or buckets of labels. Can children find wood, plastic, glass, metal, water, rock? Can they find something rough/smooth/bendy etc.? See if objects float/sink in buckets of water.
Irreversible changes	Observe the effects of a chemical reaction by making film cannister rockets using Alka-Seltzer or vitamin C tablets & water.
Melting/evaporating modelling	Act out the solid/liquid/gas particle model in the playground.
Weather & Water cycle	Observe puddles, clouds, and rain over time. How long do puddles last in different locations? What types of clouds do you see? How does the amount of rain vary with the season? Blow bubbles to measure the direction and speed of wind.