

Name of session		Science through the Seasons	
		Level: Key stage 1	Length of session: 2 hrs (half day)
		Available at: Sutton Ecology centre	
Curriculum Links			
Science			
Working scientifically			
<ul style="list-style-type: none"> observing closely, using simple equipment using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions. 			
Plants			
Pupils should be taught to:			
<ul style="list-style-type: none"> Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees Identify and describe the basic structure of a variety of common flowering plants 			
Seasonal Changes			
Pupils should be taught to:			
<ul style="list-style-type: none"> Observe changes across the 4 seasons Observe and describe weather associated with the seasons and how day length varies 			
Geography			
Human and physical geography			
<ul style="list-style-type: none"> identify seasonal and daily weather patterns in the United Kingdom 			
Previous knowledge expected from students		Key concepts/key words	
Look at photos of the Ecology Centre in winter/ previous season and think about how things might be starting to change?		Seasons, winter, spring, buds, evergreen, deciduous, clouds, sunny, windy, calm, rain, snow, temperature,	
Learning objectives			
To be able to make observations and recordings about the weather.			
To learn about the changes from winter to spring at Sutton Ecology Centre.			
To be able to use appropriate language when talking about weather in different seasons.			
To experience a variety of plants and trees in their habitat.			
Outcomes			
Pupils will have recorded observations about the weather and used a thermometer.			
Pupils will have observed seasonal changes from winter to spring at Sutton Ecology Centre.			
Pupils will learn the difference between deciduous and evergreen trees. Pupils will be able to name some spring flowers.			
Starter (20 mins)			
Welcome, and introductions.			
Putting photos of the Ecology Centre from different seasons into order, in groups. What are the main differences?			
Introduction			
Timings	Student Activity		
10mins	Weather recording. Each pupil has a recording sheet to record the type of weather today. We will put out thermometers for the day to record temperatures from later.		
20mins	Become a weather forecaster In groups/ pairs they use props to help them tell weather forecasts for different seasons		

Main Activities	
Timings	Student activity
45mins	<p>Seasonal Detectives With a spotter sheet, we investigate the Ecology centre to find different signs of spring. Using winter photos pupils spot differences at different locations around the Ecology Centre and record signs of spring spotted. This can be done individually or in adult lead groups depending on ability. This will include looking at Deciduous trees and Evergreen trees, spring flowers, eggs, birds, catkins and buds.</p> <p>Collecting As we go, pupils collect fallen items such as petals, leaves, buds etc that will remind them of signs of spring. (reinforcing parts of a plant).</p> <p>Sounds of spring Listening for signs of spring in a quiet place.</p>
10mins	
Plenary (15mins)	
<p>Back at the centre, check our thermometers and record min and max temperatures. Re-cap the seasonal changes we saw and signs of spring. Talk about what might happen next further into spring and into summer.</p>	
Extension work	
<p>Baby animals: imagine you are a baby animal just been born: a baby bird just popped out of an egg, a caterpillar just hatched, what can you see, smell, hear. How big are you?</p>	
Pre-course preparation work	
<p>Discussion to establish prior knowledge and what the children would like to find out. At school, collect different signs of the changing seasons e.g. leaves – these could be used to make a wall collage of a hedgehog and what different animals do at different times of year do can be discussed e.g. hibernating/finding a mate/laying eggs/feeding young, etc. Homework: watch a weather report. At school, the children could write weather reports and perform them (different groups do different seasons).</p>	
Further Work (post course)	
<p>From feelings and sensory activities from the visit, generate some descriptive words. Create a class spring poem. Continue recording daily weather charts, spot the changes. Take pictures of a deciduous tree each week through spring, get pupils to put them in order.</p>	
Alternatives (field sites and wet weather)	
<p>This session is not translatable inside, and therefore will go ahead in wet weather. The introduction and plenary can be done inside if the weather is wet or too cold/windy. The session will be cancelled only due to severe weather warning such as flooding, high winds and stormy weather.</p>	
Opportunities for evaluation	
<p>Teacher evaluation: Photograph pupils in action for evidence, observation throughout the session, assess understanding post session through activities and questioning. By providing appropriate level of adult/child ration to ensure pupils are kept 'on task'.</p>	
<p>Leader evaluation: The session leader will assess progress throughout the day by open ended questioning and plenary session. Through observation, the session leader will ensure that all pupils are engaged in learning and complete the tasks required.</p>	
Resources	
<p>Weather worksheet Weather forecast pictures for weather boards. Thermometers Clipboards, pencils Seasonal Detectives Worksheet: spring spotter sheet with sticky collecting strip down the side.</p>	
Key H&S	
<p>Sutton Ecology Centre provide one Education Officer for your group. Schools must provide a suitable number of adults to ensure pupils safety and engagement in the tasks.</p>	



Dress and prepare for the outdoors. Long trousers due to tall grass, brambles and nettles.
Sensible footwear in all weather conditions.
Waterproofs in wet weather. Sunhats, suntan lotion and water bottles in hot sunny weather.
All pupils and teachers should wash their hands prior to leaving the site or eating.
Teachers should arrange a pre-visit to discuss specific health & safety requirements to generate their own risk assessments.
Course leaders: Site check and dangerous litter pick. Health & Safety talks when appropriate.