

Medium Term Plan: Seasons Cycle B Y1/2			
Enquiry Type:	Working Scientifically Concepts:	Previous Scientific Vocabulary	New Scientific vocabulary
<ul style="list-style-type: none"> Observing over time Pattern seeking 	<ul style="list-style-type: none"> Making observations and measuring them Engaging in practical enquiry Recording and presenting evidence Answering questions and concluding Communicating findings. 	<ul style="list-style-type: none"> Autumn Spring Summer Winter Trees Plants <ul style="list-style-type: none"> Weather Sun Snow Rain Wind 	<ul style="list-style-type: none"> Deciduous Evergreen Temperature Rainfall Months of the year Pattern Graphs
Previous Learning End Point Assessment in this concept:	Previous Learning End Point Assessment in working scientifically concepts:	End Point Assessment Statements:	
Seasonal Change 1. I know some similarities and differences between the natural world around me and contrasting environments, drawings on my experiences and what has been read in class. 2. I understand some important processes and changes in the natural world around me including the seasons	I make observations of plants. I record my observations in drawings, writing and photographs. I use my senses to explore my environment	Seasonal Change 1. I can observe changes across the four seasons 2. I can observe and describe weather associated with the seasons	

	Revisit of knowledge short Afl lesson	Autumn 1 Lesson 1	Autumn 1 Lesson 2	Autumn 2 Lesson 1	Autumn 2 Lesson 2	Spring 2 Lesson 1	Spring 2 Lesson 2	Summer 2 Lesson 1	Summer 2 Lesson 2
Learning Question	What can I remember about seasons?	What is the weather like in Autumn?	What happens to plants and trees in Autumn?	What is the weather like in Winter?	What happens to plants and trees in Winter?	What is the weather like in Spring?	What happens to plants and trees in Spring?	What is the weather like in Summer?	What happens to plants and trees in Summer?
Enquiry Type		<ul style="list-style-type: none"> Observing over time Pattern seeking 	<ul style="list-style-type: none"> Observing over time Pattern seeking 	<ul style="list-style-type: none"> Observing over time Pattern seeking 	<ul style="list-style-type: none"> Observing over time Pattern seeking 	<ul style="list-style-type: none"> Observing over time Pattern seeking 	<ul style="list-style-type: none"> Observing over time Pattern seeking 	<ul style="list-style-type: none"> Observing over time Pattern seeking 	<ul style="list-style-type: none"> Observing over time Pattern seeking
Conceptual Knowledge	Prior unit end point assessment	I can observe and describe weather associated with the seasons	I can observe changes across the four seasons	I can observe and describe weather associated with the seasons	I can observe changes across the four seasons	I can observe and describe weather associated with the seasons	I can observe changes across the four seasons	I can observe and describe weather associated with the seasons	I can observe changes across the four seasons
Working Scientifically		I can record my measurements e.g. using prepared tables and block graphs.	I can record my observations e.g. using photographs and labelled diagrams	I can carry out: pattern seeking enquiries; and make observations over time.	I can record my observations e.g. using photographs and labelled diagrams	I can record my measurements e.g. using prepared tables and block graphs.	I can record my observations e.g. using photographs and labelled diagrams	I can carry out: pattern seeking enquiries; and make observations over time.	I can record my observations e.g. using photographs and labelled diagrams
Review/ Revisit	Class discussion: Name the seasons Match events	What words can we use to describe weather? Why is it important to know what the weather will be like each day?	Look back on work from previous learning. What happened in Autumn?	Re watch a couple of the Autumnal weather reports made by the children. Is the weather the same now?	Revisit the photo journeys made by the children what had happened to the plants and trees in Autumn?	Re watch a weather report from winter made by the children. Is the weather the same now?	Revisit the photo journeys made by the children what had happened to the plants and trees in Autumn and Winter?	Re watch a weather report from winter made by the children. Is the weather the same now?	Revisit the photo journeys made by the children what had happened to the plants and trees in Autumn, Winter & Spring?
Read	to seasons: Christmas, Easter, Diwali, Chinese New Year, Halloween, long school holiday, their birthdays.	https://www.twinkl.co.uk/resource/t-t-291954-all-about-autumn-differentiated-comprehension-activity-sheets		https://www.twinkl.co.uk/resource/t-l-53343-60-second-reads-weather-and-the-seasons-activity-cards		https://www.twinkl.co.uk/resource/t-l-53969-little-acorns-the-seasons-differentiated-reading-comprehension-activity		https://www.twinkl.co.uk/resource/wl-summer-comprehension-differentiated-activity-sheets	
Teach	Talk about different sorts of weather.	Share an Autumnal weather report. Discuss the symbols used and the words used by the presenter. What clothes would the children choose to wear? What activities could they do?	What do the children think happens to the trees and plants in Autumn? Revisit how to take a photograph using the ipads.	Share a winter weather report. Discuss the symbols used and the words used by the presenter. What clothes would the children choose to wear? What activities could they do?	Will the plants and trees look the same on our walk today? Why? Revisit how to take a photograph using the ipads.	Share a Spring weather report. Discuss the symbols used and the words used by the presenter. What clothes would the children choose to wear? What activities could they do?	Will the plants and trees look the same on our walk today? Why? Revisit how to take a photograph using the ipads.	Share a Summer weather report. Discuss the symbols used and the words used by the presenter. What clothes would the children choose to wear? What activities could they do? What should they do to keep safe in the sun?	Will the plants and trees look the same on our walk today? Why? Revisit how to take a photograph using the ipads.

Practice		Children keep a weather chart for the next week using symbols. Measure temperature and rainfall.	Autumnal walk in the local area. Children work in small groups to take photographs. Choose a class (deciduous) tree to observe during the year. Also observe an evergreen tree. Choose an area to observe plants over the year.	Share a winter weekly weather chart. Ask questions: Which was the coldest day? What was the weather like on Tuesday? Which day could you have made a snowman? etc	Winter walk in the local area following the same route as the Autumnal walk. Take photographs in the same locations.	Children keep a weather chart for the next week using symbols. Measure temperature and rainfall.	Spring walk in the local area following the same route as the previous walks. Take photographs in the same locations.	Share a Summer weekly weather chart. Ask questions: Which was the warmest day? What was the weather like on Tuesday? Which day would you go to the seaside? etc	Summer walk in the local area following the same route as the previous walks. Take photographs in the same locations.
Apply		Use the information from the weekly weather chart to create a weather forecast (include advice on what to wear and what activities the audience could do) in small groups using imovie on the ipads	Children use the photographs taken during the walk to recount the walk and add captions to the photographs.	Use the information from the weekly weather chart to create a weather forecast (include advice on what to wear and what activities the audience could do) in small groups using imovie on the ipads	Children use the photographs taken during the walk to recount the walk and add captions to the photographs.	Use the information from the weekly weather chart to create a weather forecast (include advice on what to wear and what activities the audience could do) in small groups using imovie on the ipads	Children use the photographs taken during the walk to recount the walk and add captions to the photographs.	Use the information from the weekly weather chart to create a weather forecast (include advice on what to wear and what activities the audience could do) in small groups using imovie on the ipads	Children use the photographs taken during the walk to recount the walk and add captions to the photographs.
Reflect		Watch each other's weather reports. Do they match the weather recorded?	In pairs look at their photo journeys. Did they see what they expected?	Watch each other's weather reports. Do they match the weather recorded?	In pairs compare their photo journey with the Autumn one. What has changed?	Watch each other's weather reports. Do they match the weather recorded?	In pairs compare their photo journey with the Autumn and Winter ones. What has changed?	Watch each other's weather reports. Do they match the weather recorded?	In pairs compare their photo journey with the Autumn, Winter & Spring ones. What has changed?
End of Unit Assessment: Order the seasons on a season wheel. Add words to describe the weather and draw a deciduous tree in each season									

Medium Term Plan: Living Things Cycle B Y1/2				
Enquiry Type:		Working Scientifically Concepts:	Previous Scientific Vocabulary	New Scientific vocabulary
<ul style="list-style-type: none">Identifying, grouping and classifyingResearching		<ul style="list-style-type: none">Making observations and measuring themEngaging in practical enquiryAnswering questions and concludingCommunicating findings.	Nature, animals, insects, minibeasts	Living things, plants, habitats, conditions, living, dead, alive, dark, light, water, damp, dry, micro-habitats, food chain, sources, human, adult, parent, young, offspring, water, food, air, exercise, hygiene, environment, skeleton, body organs, healthy diet, height, growth, weight
Previous Learning End Point Assessment in this concept:		Previous Learning End Point Assessment in working scientifically concepts:	End Point Assessment Statements:	
1. I explore the natural world around me 2. I can describe some similarities and differences between the natural world around me and contrasting environments, drawing on my experiences and what has been read in class.		I make observations of animals. I make observations of plants. I record my observations in drawings, writing and photographs.	1. I can identify and name a variety of plants and animals in their habitats, including microhabitats 2. I can identify and name a variety of common animals that are carnivores, herbivores and omnivores. 3. I can explore and compare differences between things that are living, dead and things that have never been alive 4. I can identify that most living things live in habitats to which they are suited 5. I can describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other 6. I can describe how animals obtain their food using the idea of a simple food chain 7. I can identify and name different sources of food	

	Revisit of knowledge short Afl lesson	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Lesson 7
Learning Question	What do I know about living things?	Can I sort things into living, never lived or no longer alive?	Can I sort animals into herbivores, carnivores and omnivores?	Where does our food come from?	What is a food chain?	What is a habitat?	What lives in our school grounds?	Can plants and animals live in any habitat?
Enquiry Type		Identifying, grouping and classifying	Identifying, grouping and classifying	Identifying, grouping and classifying	Identifying, grouping and classifying	Researching	Identifying, grouping and classifying Observing	Researching
Conceptual Knowledge	Previous unit assessment end points.	I can explore and compare differences between things that are living, dead and things that have never been alive	I can identify and name a variety of common animals that are carnivores, herbivores and omnivores	I can identify and name different sources of food	I can describe how animals obtain their food using the idea of a simple food chain	I can identify that most living things live in habitats to which they are suited	I can identify and name a variety of plants and animals in their habitats, including microhabitats	I can describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other
Working Scientifically		I can describe the characteristics I used to identify a living thing.	I can use simple secondary sources to help me to classify animals	I can use simple secondary sources to help me to classify and sort	I can use my experiences of the world to suggest appropriate answers to questions.	I can use my experiences of the world to suggest appropriate answers to questions.	I can use simple secondary sources to help me to classify animals	I can use my experiences of the world to suggest appropriate answers to questions.
Review/ Revisit	Revisit learning from Reception	Revisit previous learning show photos of the children learning in Reception.	Revisit the 7 characteristics of a living thing p 3 Year 2 Study & Activity book	Revisit the new vocabulary Omnivore, herbivore and carnivore.. Match the definitions to the meanings	Complete the quiz on food sources https://www.educationquizzes.com/ks1/science/living-things-food-sources/	Match the key food chain words with their definition https://wordwall.net/resource/13415681/food-chain-key-words	Complete the quiz on each habitat https://school-learningzone.co.uk/key_stage_one/ks1_science/habitats_and_environment/habitats/habitats.html	True/false p 9 Year 2 Study & Activity book
Read		Year 2 Study & Activity book p2	Read the new vocabulary: Omnivore, herbivore and carnivore.	Key Stage 1 Study Book p8	Year 2 study book p 6 & 7	Year 2 Study & Activity book p4	Year 2 Study & Activity book p 8	Key Stage 1 Study Book p18

Teach	https://www.youtube.com/watch?v=X5_3BFJFbRE List the 7 characteristics of all living things. Share a simple flow diagram with the children and how to use it. Demonstrate with three things that are alive, never lived and no longer alive.	https://www.youtube.com/watch?v=6Xvi6ejc_9g Add the new vocabulary: omnivore, herbivore and carnivore to the learning wall. Write a definition of each and add it. Show the children a Venn diagram and explain why omnivore is in the middle.	Where does food come from? https://www.youtube.com/watch?v=7vH2yxjQ-uk Show the cards ‘Where does food come from?’ https://www.foodafactoflife.org.uk/5-7-years/where-food-comes-from/plant-or-animal/ Match the food and its source.	https://www.bbc.co.uk/teach/class-clips-video/science-ks1-the-food-chain/zbr8d6f <i>What is a food chain?</i> <i>Where do humans fit into food chains?</i> <i>What is a producer?</i> <i>What is a consumer?</i> <i>What happens if you remove part of a food chain?</i>	Explain that there are lots of different habitats around the world. Show the children the website https://school-learningzone.co.uk/key_stage_one/ks1_science/habitats_and_environment/habitats/habitats.html and explain that they are going to be researchers today. Model how to create a simple fact file with the Polar habitat. Name of habitat: Describe it in three words: Name at least two animals that live here: Why are they suited to living here? Name at least one plant that lives here:	https://www.youtube.com/watch?v=ccqZrNvywAM Discuss what microhabitats we might have in our local area	Discuss how animals adapt to their habitats. Share the clip of the rockpool https://www.bbc.co.uk/bitesize/clips/z8fnvcw Discuss how the creatures living in a coastal rockpool must adapt to the water being heated by sunlight and diluted by rainwater, as well as to the water levels dropping. Anemones are animals which are found all along the shoreline. Their tentacles have hooks on the end for capturing animals which they eat. When the tide is in, limpets and periwinkles eat algae on the rocks. Periwinkles also eat seaweed.
Practice	Give children 3 more things to sort (make sure there is one of each).	Together sort 3 animals from the video into the 3 groups.	Share the plant and animals food picture worksheet. Can the children identify the source for each?	Share a simple muddled food chain. Can the children reorder it correctly? https://wordwall.net/resource/8672702/science/y1-food-chain	All children to complete on the ocean habitat. Come back as a class and feedback.	Investigate microhabitats in the local area. Eg a pile of leaves, a bush, a wall, a tree stump, under a rock. Record using photographs.	Revisit the habitats. Choose an animal in each habitat. What does it eat? Notice that the food source is also in the habitat. Model writing a food chain to show this.
Apply	Each group to sort 20 photographs into three sorting rings – alive, never alive, no longer alive. Use the iPads to record their sorting.	Children use the secondary source https://www.tes.com/teaching-resource/carnivores-omnivores-and-herbivores-venn-diagram-6355183 to find information on different animals and sort them into the Venn diagram.	Children identify the source of each item that they ate for breakfast.	Children order four given food chains	Children complete for the other 6 habitats.	Use a simple classification sheet to identify the animals and plants found in each microhabitat.	Children write a food chain for an animal in one of the habitats.
Reflect	One stray. Have we all sorted them in the same way?	Rally Robin naming omnivores, herbivores and carnivores.	How could we find more information about our food?	On stray. Have we all sorted them in the same way?	How could we find out more information about habitats?	Mix pair share. What did you find in each microhabitat?	Mix pair share. Do they agree?
End of Unit Assessment: Yorkshire Wildlife Park needs us to design a habitat for a							

Medium Term Plan: Plants Cycle B Y1/2

Enquiry Type:	Working Scientifically Concepts:	Previous Scientific Vocabulary	New Scientific vocabulary
<ul style="list-style-type: none"> Comparative testing Research using secondary sources Identifying, classifying and grouping Observing over time 	<ul style="list-style-type: none"> Asking questions Making observations and measuring them Engaging in practical enquiry Recording and presenting evidence Answering questions and concluding Evaluating and predicting Communicating findings. 	<ul style="list-style-type: none"> Tree Flower Plant Petal Leaves Seeds Water Soil Stem Trunk 	<ul style="list-style-type: none"> Root Germination Seedling Sun Energy Deciduous Evergreen Identify Temperature Bulb Habitat
Previous Learning End Point Assessment in this concept:	Previous Learning End Point Assessment in working scientifically concepts:	End Point Assessment Statements:	
1. I plant seeds and care for growing plants. 2. I can describe the key features of the life cycle of a plant 3. I know what some parts of a flower are called 4. I can identify the difference between a plant and a tree	I make observations of plants. I record my observations in drawings, writing and photographs.	1. I can identify and name a variety of common wild and garden plants and deciduous and evergreen trees 2. I can identify and describe the basic structure of a variety of common flowering plants, including trees. 3. I can identify and name a variety of plants in their habitats, including microhabitat 4. I can observe and describe how seeds and bulbs grow into mature plants. 5. I can find out and describe how plants need water, light and a suitable temperature to grow and stay healthy	

	Revisit of knowledge short Afl lesson	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6
Learning Question	What can I remember about plants?	Where do plants come from?	What do plants need to grow?	Can I identify plants?	Can I identify trees?	What grows in our school grounds?	What are the parts of a plant and tree called?
Enquiry Type		Observing over time	<ul style="list-style-type: none"> Comparative testing Observing over time 	<ul style="list-style-type: none"> Identifying, classifying and grouping Research using secondary sources 	<ul style="list-style-type: none"> Identifying, classifying and grouping Research using secondary sources 	<ul style="list-style-type: none"> Identifying, classifying and grouping Research using secondary sources 	Research using secondary sources
Conceptual Knowledge	Prior units end point assessment	I can observe and describe how seeds and bulbs grow into mature plants.	I can find out and describe how plants need water, light and a suitable temperature to grow and stay healthy	I can identify and name a variety of common wild and garden plants	I can identify and name a variety of deciduous and evergreen trees	I can identify and name a variety of plants in their habitats, including microhabitat	I can identify and describe the basic structure of a variety of common flowering plants, including trees.
Working Scientifically		I can record my observations using photographs	I can plan how to use the resources provided to answer the questions. I can record my observations using photographs I can record my measurements using prepared tables.	I can use simple secondary sources (such as identification sheets) to name living things I can describe the characteristics I used to identify a living thing.	I can use simple secondary sources (such as identification sheets) to name living things I can describe the characteristics I used to identify a living thing. I can classify using simple sorting rings.	I can use simple secondary sources (such as identification sheets) to name living things I can describe the characteristics I used to identify a living thing. I can classify using simple sorting rings.	I can record my observations e.g. using photographs and label diagrams
Review/ Revisit	Share the children's learning from Reception. Ask questions about how they looked after the plants and what they found out.	Revisit a simple life cycle of a plant from the previous lesson.	Revisit knowledge from Reception.	Take observations/measurements of the seedlings and the plants	Take observations/measurements of the seedlings and the plants. Revisit learning from the previous lesson.	Take observations/measurements of the seedlings and the plants Revisit learning from the previous two lessons	Take observations/measurements of the seedlings and the plants. Use the identification sheets to name plants and trees on photos from previous weeks
Read		Year 2 Science Study & Activity Book p 16 - 19.	Year 2 Science Study & Activity Book p 14	Year 1 Study & Activity Book p10	Year 1 Study & Activity Book p18 & 19	Year 1 Study & Activity Book p20	Year 1 Science Study & Activity Book P12 & 13 & p16 & 17
Teach	Children label a simple diagram of a flowering plant.	Show a short clip of a seed growing in to a plant. Introduce new vocabulary: germination and seedling.	How can we find out what plants need to grow? Talk about what they know about how much water, sun and warmth plants need to grow. Show the children the equipment.	Show the children a collection of plants and explain that you have muddled up the name tags. Discuss how you could solve this problem? Share an identification sheet. Model how to use it using some photographs of plants.	Could we use identification sheets to name trees? Share some photographs of trees. Introduce new vocabulary: Evergreen and deciduous and explain what they mean.	Can we use the identification sheets to find out what grows in the school grounds?	Share a diagram of a plant and a tree. What is similar/different? Introduce new vocabulary: root. Together label the parts of the plant and the parts of the tree.

Practice	Children label a simple life cycle of a plant.	In groups children decide how to care for their seeds (a mixture of cress and broad beans) over the next few weeks. Where will they put them? How often will they water them? How will they observe what happens? How will they record what happens?	In small groups children choose two different places to put their two plants (two in full sunlight, two in shade). Children decide how much water to give their plants (make sure there is a big difference). Children decide how to record results. (photographs & measuring height)	Practise identifying plants from photographs using the identification sheet. Encourage them to use good descriptions of characteristics - shape, size and colour.	Children use photographs of leaves to identify a small group of trees using the identification sheet. Encourage them to use good descriptions of characteristics - shape, size and colour.	Children use the identification sheets to identify a plant and a tree (and decide if it is deciduous or evergreen) on the IWB.	Children label a diagram of a plant and a tree.
Apply		In pairs children prepare their seeds for the investigation. Do bulbs grow in the same way? As a class place a forced indoor hyacinth bulb into a bulb vase. Over the next few weeks they will create a photo diary of what happens to their seeds and the bulb. Write a caption for each photograph.	Children set up their investigations and take their first observations (photograph) and measurement (height). Over the next few weeks children complete their observations and measurements every few days.	Children use the identification sheets to identify and name the muddled up plants.	Using photographs of trees and leaves children identify the trees and sort them into deciduous and evergreen.	In small groups investigate different parts of the school grounds eg Y1 gardens, trees near Beighton Rd, trees near Games yard, flower bed outside staffroom. Fill in the names of the plants and trees found in each area and take a photograph of each	Children choose a photograph of a plant and tree taken during the previous weeks and label
Reflect		Mix, pair, share. Do the photographs look the same? Did the seeds grow in the same way? Compare to the bulb photo diary identify similarities and differences.	What do we think will happen to each plant? ***	One stray: Have the other tables got the same answers? Why? Which ones where the most difficult to identify? Why?	One stray: Have the other tables got the same answers? Why? Which ones where the most difficult to identify? Why? Why do you need to know if a tree is deciduous or evergreen?	Mix, pair, share. Did the children all find the same plants and trees in each areas?	***After a few weeks. Look at the results. What did you find out? What advice would you give to someone who wanted to grow plants?
End of Unit Assessment: Birley Moor Garden Centre has been in touch to ask for help. They have had a delivery but none of the plants or trees are labelled. Can we help by identifying them and finding out which trees are deciduous and evergreen? Create a fact file to explain how to look after plants.							