

A Voluntary Academy

"Journeying together with Jesus Christ, we learn to love and love to learn."

Medium Term Planning Creative Learning Journey

Subject: Science Topic: Everyday Materials - Autumn 1 Differentiation

NC Links:

Year 1 Everyday Materials

- Distinguish between an object and the material from which it is made.
- Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.
- Describe the simple physical properties of a variety of everyday materials.
- Compare and group together a variety of everyday materials on the basis of their simple physical properties.

Lesson 1:

I can identify everyday materials and explain where they come from.

Working Scientifically objectives:
Compare materials using scientific language; identify and classify materials.

TTYP - What is a material? Explain that a material is what an object is made of. Have pictures of materials for children to discuss; metal, wood, plastic, glass, rock, paper, water, fabric and cardboard. Can they name them?

Display pictures of 6 key materials: rock, water, plastic, metal, wood and glass. How are these materials made? If they're not made in a factory, where do they come from?

Ensure children can discuss the following points:

Rock, wood and water are natural materials, which means they're not made by humans. Water is all around us and can be used for many different things. Different types of rock can be dug out of the ground. Wood comes from trees.

Most types of metal are natural materials. Metal can be found inside rocks and can be mined (dug out) e.g. copper, iron, gold.

Plastic and glass are man-made materials, which means they're created by humans. Plastic is made from oil and glass is made out of sand.

<u>Y1 LA:</u> scavenger hunt to find objects made from each material (tick sheet) make pic collage

Y1MA/HA Y2 LA: Children label each material.

<u>MA/HA:</u> Children write a sentence which identifies each material and explains where it comes from.

<u>Year 2 challenge</u>: Write a sentence explaining how we know if a material is natural or man-made. Sort the materials we have already discussed into natural or man-made categories.



"Journeying together with Jesus Christ, we learn to love and love to learn."

	Creative Learning Journey	
	Emphasise that water is also a material, but we have to turn it into a solid before we can use it to make anything. Show the children a video of people making ice sculptures: https://www.bbc.co.uk/bitesize/clips/zdqd7ty	
Lesson 2: I can tell the difference between an object and the material it is made from.	We have already identified materials and discussed where they come from. Today we're going to look at the objects which can be made from each material.	Y1 LA - reduce number of images to cut and stick if needed. SEN/LA: Children stick pictures of objects under each material.
	Watch this video and complete the activity below:	
Working Scientifically objectives:	https://www.bbc.co.uk/bitesize/clips/zm2jmp3	MA/HA: Children write three items which can be made from each material
Ask questions about materials, make careful	Task 1: Name one thing in the video made from each of these materials: water, wood, metal, plastic, glass, rock/stone.	e.g. wood = spoon, table, pencil
observations of an object and		Year 2 challenge: Children are given
the material it is made from.	Task 2: On their whiteboards, children write down one object in their classroom made from each material: fabric, wood, metal, plastic, glass and paper.	two materials and they must find an object made from both e.g. find an object made of metal and plastic, find an object made of glass and plastic.



A Voluntary Academy

"Journeying together with Jesus Christ, we learn to love and love to learn."

Medium Term Planning Creative Learning Journey

Lesson 3:

I can explore the properties of recyclable materials (glass, metal, paper and cardboard)

Working Scientifically objectives:
Make predictions; investigate using a comparative test; record results; make

Explain that over the next three lessons, we will be testing a variety of materials to find out their properties. Prior to the lesson, provide the children with a predictions sheet. For each material, children put a tick under the correct heading (hard/soft, shiny/dull, strong/weak, rough/smooth, flexible/rigid, waterproof/absorbent, transparent/opaque). Do not provide children with pictures or samples of the materials at his point so that they can activate prior knowledge.

Today we will be comparing recyclable materials. TTYP - Which materials do you recycle at home?

How will we test if a material is hard/soft, strong/weak, rough/smooth, flexible/rigid?

How can we find out if a material is transparent/opaque? How are we going to find out if a material is waterproof or absorbent?

Remind children that they need to test how waterproof/absorbent the material is at the end in case it affects some of their earlier answers!

Whole class: Children work in groups of 5 or 6 to test each of the four materials and their properties. They work in mixed ability pairs to record their answers.

<u>Year 2 challenge</u>: Children write a short conclusion explaining what they have found out.

<u>Lesson 4:</u>

conclusions

I can explore the properties of other materials (fabric, paper, wood, rock and water in the

Yesterday we explored the properties of materials we can recycle at home. Today we will continue to investigate other materials. Which materials do we still need to test?

Materials still not tested: paper, fabric, wood, rock and water (in the form

Whole class: Children work in groups of 5 or 6 to test each of the five materials and their properties.

Take pictures and make pic collage for books.



"Journeying together with Jesus Christ, we learn to love and love to learn."

form of ice).	of ice). Explain that we will be testing plastic in the next lesson as there are lots of different types of plastic which are used to make different things.	Year 2 challenge: Children write a short conclusion explaining what they
Working Scientifically objectives: Make predictions; investigate using a comparative test; record results; make conclusions	Using the same format as yesterday, allow the children time to work in mixed ability groups and complete the same tick sheet as yesterday for the rest of the materials.	have found out.
Lesson 5: I can explore the properties of different types of plastic.	Today we will be testing our final material which is plastic. TTYP - Name some things that are made of plastic. What is plastic made of? Is it natural or man-made?	Whole class: Children work in groups of 5 or 6 to test each of the five materials and their properties. They work in mixed ability pairs to record
Working Scientifically	Watch the video about plastic production: https://www.bbc.co.uk/bitesize/clips/zsys34j	their answers.
objectives: Identify and classify materials; ask questions about materials.	Display pictures of objects made from different types of plastic (cling film, plastic bag, plastic straw, plastic cup, plastic pen lid, plastic container).	Year 2 challenge: Children write a short conclusion using the following sentence starters: Plastic is always
	Why are we doing a test just for one material? Ensure children can explain that plastics have different properties depending on what the object is used for.	Sometimes it can be and sometimes it can be It is never



"Journeying together with Jesus Christ, we learn to love and love to learn."

	Children work in the same groups as previous lessons to test the different	
	plastic objects listed above. They record their results using the same	
	format as they did for the other experiments.	
Lesson 6:	We have been looking at lots of different materials and how they can be	SEN/LA: Writing a simple set of
I can write an instruction	used to make different things. TTYP - What do we do with each material	instructions, including a title and 4
text about recycling.	when we don't need it any more? Discuss the following materials: glass, cardboard, paper, metal, plastic and fabric.	main points.
		MA : Writing a set of instructions,
	Introduce the children to the word 'recycling.' Explain that it means reusing something so that factories don't need to make new materials all the time. This means they release less harmful gases into our atmosphere and it's	including a title, sub-headings, 4 main points and conjunctions.
	better for the environment.	<u>HA</u> : Writing a set of instructions, including all the features discussed at
	Watch the video called 'What should I do with my rubbish?' and discuss any extra information: https://www.bbc.co.uk/bitesize/clips/z9p9j6f	the beginning of the lesson.
		Year 2 challenge: Children add simple
	Children to discuss what recycling and talk about how they recycle at home. Which materials go in each bin and what colour are they? Also refer to what recycling we do at school. Discuss additional methods of recycling such as clothes banks for fabrics, composting for food waste etc.	explanations for how to distinguish between the materials when recycling e.g. Next, put the glass and metal objects in the brown bin. Glass is hard and transparent, but metal is opaque
	Now we're going to write a set of instructions for Reception children which explains how to recycle materials at home.	and shiny. After that, only put hard plastic containers in the brown bin. Soft plastics like cups and straws can't be



A Voluntary Academy

"Journeying together with Jesus Christ, we learn to love and love to learn."

Medium Term Planning Creative Learning Journey

Introduce features of an instruction text:

Title

Question and answer

Subheadings

Numbered steps

Time adverbials

Adverbs

Model a set of instructions for how to recycle (print out example to refer to) and ask the children to help you tick off each feature as you include it.

recycled, so make sure they go in the normal rubbish bin.

<u>Applied Write opportunities:</u> Children to apply knowledge learnt in previous lessons to write an instruction text about recycling. This links to L&L Unit 4 where the children write a set of instructions to make a thaumatrope.

Key Vocabulary:

Tier 2 - group, identify, classify, discuss, change, reuse, reduce

Tier 3 - materials, metal, wood, plastic, glass, brick, rock, paper, water, fabric, cardboard, hard, soft, rough, dark, smooth, opaque, transparent, absorbent, stiff, dull, rigid, elastic, waterproof, absorbent, dull, shiny, recycling, recycle



A Voluntary Academy

"Journeying together with Jesus Christ, we learn to love and love to learn."

Medium Term Planning Creative Learning Journey

Subject: Science Topic: Everyday Materials - Autumn 2 Differentiation

NC Links:

Year 1 Everyday Materials

- Distinguish between an object and the material from which it is made.
- Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.
- Describe the simple physical properties of a variety of everyday materials.
- Compare and group together a variety of everyday materials on the basis of their simple physical properties.

Lesson 1:

I can describe the simple properties of everyday materials.

Working Scientifically objectives:
Compare materials using scientific language; make careful observations

https://www.youtube.com/watch?v=XnkQcP-RHCw

Starter activity: Find objects in the classroom which are made out of more than one material and identify what they are (e.g. pencil sharpener - plastic and metal)

TTYP - What does the word 'properties' mean? Display these key words and discuss what they mean: hard, soft, light, heavy, shiny, dull, rough, smooth, flexible, stretchy, stiff, waterproof, absorbent, transparent, translucent, opaque

Can children think of any other properties of materials?

Remind children that a property of a material tells us something about it.

Have a range of objects made from different materials and ask children to

<u>SEN/LA:</u> Children create a poster, naming the materials and their properties.

<u>MA/HA:</u> Children write three properties for each material e.g. wood is hard, rigid and rough.

Year 2 challenge: Children talk about how they can tell the difference between two materials based on their properties e.g. My material is transparent and smooth. How can I tell if it is glass or plastic?



"Journeying together with Jesus Christ, we learn to love and love to learn."

	describe what they look/feel like. What words would they use to describe each object/material?	
Lesson 2: I can compare the materials using a Venn diagram.	Starter activity: Children match a material to each of these properties: hard, soft, light, heavy, shiny, dull, rough, smooth, flexible, stretchy, stiff, waterproof, absorbent, transparent, translucent, opaque They choose from the following materials: water, rock, paper, metal, glass,	SEN/LA: Children stick materials into the correct place on a Venn diagram with simple titles e.g. light and heavy, hard and soft
Working Scientifically objectives: Identify and classify materials; ask questions about materials.	plastic, wood, cardboard and fabric. Now we are going to sort the materials using a Venn diagram. Show the children examples of Venn diagrams and explain that if an object could go in either category, it is placed in the middle where the two circles overlap.	MA/HA: Children write the materials in the correct place on two different Venn diagrams with more complicated properties (transparent and opaque/flexible and rigid)
	Task 1: As a class, complete a simple Venn diagram to sort materials based on their properties using the properties 'smooth' and 'rough.' Discuss how some materials could go in the middle of the Venn diagram e.g. wood is rough at first, but can be smoothed out to make furniture. Rocks are usually rough, but you can find smooth rocks on the beach that have been shaped by the sea.	Year 2 challenge: Create their own Venn diagrams for objects around the classroom, stating the material they are made from (e.g. opaque = metal table, plastic chairs transparent = glass windows, plastic container



A Voluntary Academy

"Journeying together with Jesus Christ, we learn to love and love to learn."



Medium Term Planning Creative Learning Journey

Lesson 3:

I can use a classification key to show the properties of materials. Tell the children over the last few lessons, we have been looking at the properties of materials. Today we are going to use a classification key to group materials.

Explain that a classification key is a series of questions that help you work out the characteristics of something. When you answer one question, it either branches off to another question or identifies the material.

Show images of classification keys and emphasise how all of the questions asked need to be answered with 'yes' or 'no.'

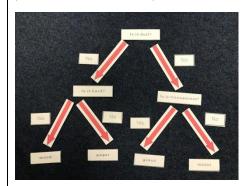
Task 1 - Display a blank classification key with different types of food at the bottom and yes/no question stems. Children work in mixed ability pairs to place each item of food in the correct place.

Model how to put pictures of each material in the correct place on a pre-built classification key.

<u>SEN/LA:</u> Children add materials to a classification key practically, create pic collage. Question stems are provided and only two branch offs.



MA: Children fill in the missing materials on the classification key provided (two level key)





"Journeying together with Jesus Christ, we learn to love and love to learn."

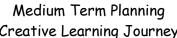
Medium Term Planning

	Creative Learning Journey	
	Creative Learning Journey	HA: Children fill in the missing materials on the classification key provided (three level key)
		create a create a questions stems.
Lesson 4: I can compare materials with similar characteristics.	Tell the children that when we looked at classification keys, we noticed some materials had similar properties. For example, if we asked 'is it hard?' which materials could we choose?	SEN/LA: Children discuss similarities between materials provided, using simple answers e.g. for plastic and wood: similar = hard, smooth, rigid
	Show the children images of two materials and ask the children to say one thing that is similar and one thing that is different e.g. for the image of	



SS John Fisher & Thomas More Catholic Primary School A Voluntary Academy

"Journeying together with Jesus Christ, we learn to love and love to learn."



	mealum Term Planning	
	Creative Learning Journey	
	glass and plastic, similar = both are hard and transparent, different = glass is rigid, most plastic is flexible.	MA/HA: Children create a 'lift the flap' information sheet. They discuss both similarities and differences
	Task 1 - Display images of materials and a list of properties below (there must be two of each word). Children drag and drop each word to the correct	between materials.
	material. Discuss which materials were similar e.g. which materials are soft? Which ones are opaque?	<u>Year 2 challenge</u> : Display images of objects made from three different materials e.g. three spoons: one
	This will help children to decide which materials have similarities and are easier to compare or group together.	wood/one metal/one plastic. Children explain why all three materials can be used to make the same object.
Lesson 5: I can explain why objects	Starter activity: Match the object to the material it is made from.	SEN/LA: Children have a list of objects and they decide which
are made from some materials and not others.	Today we're going to talk about materials which are good for some things, but not for others.	material would be best to make them E.g. Pencil - Use wood because it is light and smooth.
Working Scientifically objectives:	Display pictures of materials on the board and discuss what they are good for and why. Then discuss why they can't be used for certain things.	MA/HA: Children create their own
Ask and answer questions, explain and give reasons	E.g. Metal is good for making cars because it is hard and strong. It can't be used to make windows because it is opaque.	'What would happen if?' questions for each picture displayed and explain what would happen. E.g. What if a shoe
	Continue this process for the other materials: wood, glass, plastic, fabric and paper	was made of metal? It would be too heavy and it would be dangerous if it

had sharp edges.



"Journeying together with Jesus Christ, we learn to love and love to learn."

	Creative Learning Journey		
	Task 1 - Show children images of objects made from unsuitable materials. Ask the question 'What would happen if?' and allow children time to discuss what would happen if the objects were made of the suggested materials. Take some suggestions before revealing the answer. Task 2 - Children list unsuitable materials for some of the objects they use in the classroom (e.g. an eraser made from metal or a pencil made from fabric). They generate their own "What would happen if?" questions.	Year 2 challenge: Using sub-headings, write two sentences for each material, explaining why it is used to make one object, but not another. E.g. We use metal to makebecause We can't use it to make because	
Lesson 6:	Today we will be writing an information text about materials. Discuss	SEN/LA: Write simple sentences	
I can write an information	features of an information text:	about materials with three	
text about everyday		sub-headings provided (properties of	
materials.	Main title	materials, uses of materials and	
	Question sub-headings	recycling)	
	Photos/diagrams		
	Interesting facts	MA/HA: Write an information text	
	Third person	using four subheadings already	
		provided (types of materials,	
	Explain that we will be splitting our ideas into four sections:	properties of materials, use of	
	Types of materials (explain what everyday materials are, list some examples and say what they are used to make)	materials and recycling)	
	Properties of materials (use experiments from previous lessons to discuss	Year 2 challenge: Children change	
	what materials are like)	four subheadings into questions e.g.	
	Use of materials (explain why some materials are better for certain things	properties of materials = what are the	
	than others)	properties of materials?	



A Voluntary Academy

"Journeying together with Jesus Christ, we learn to love and love to learn."

Medium Term Planning Creative Learning Journey

Recycling (talk about how and why we recycle)

For LA/SEN children, model how to write a simple sentence for each section using a capital letter, full stop and 'and' to make sentences longer. Then keep MA/HA children on the carpet and show them how to structure longer paragraphs with question sub-headings. <u>Encourage children to refer to previous lessons in their books to help them.</u>

<u>Applied Write opportunities:</u> Children to apply knowledge learnt in previous lessons to write an information text about materials. This links to L&L Unit 1 when the children will learn how to structure an information text.

Key Vocabulary:

Tier 2 - group, identify, classify, discuss, change, reuse, reduce

Tier 3 - materials, metal, wood, plastic, glass, brick, rock, paper, water, fabric, cardboard, hard, soft, rough, dark, smooth, opaque, transparent, absorbent, stiff, dull, rigid, elastic, waterproof, absorbent, dull, shiny, recycling, recycle



A Voluntary Academy

"Journeying together with Jesus Christ, we learn to love and love to learn."

Medium Term Planning Creative Learning Journey

Year Group: KS1 Topic: Animals including humans Term: Spring 1

National Curriculum Links (Ref: NC 2014)

- Identify, name, draw and label basic parts of the human body and say which part of the body is associated with each sense.
- Identify and name a variety of common animals, including fish, amphibians, reptiles, birds and mammals.
- Identify and name a variety of common animals that are carnivores, herbivores and omnivores.
- Describe and compare the structure of a variety of common animals.

Knowledge and	Activity	Differentiation
Skills Objectives		
Lesson 1:	As a whole class, mind map what is already known about animals and humans.	In mixed ability groups, children draw
I can identify and label the basic parts of	Encourage children to think of any questions they are curious about.	around a body and label the different
the human body.		body parts. (Pic collage)
	Intro: Play 'Simon Says/Heads Shoulders Knees and Toes' naming and pointing to the	
Working scientifically:	corresponding body part, including some interesting ones e.g. waist, hips, ankles,	LA/SEND:
	wrists, knees. Use as assessment.	Label the body parts using word bank
I can make some observations about the		provided
different parts of a human body.	Show children the 'main parts of a Human Body' video	
I can identify and classify different body	https://www.bbc.co.uk/bitesize/clips/zsjsbk7	MA:
parts.	TTYP –Discuss the different parts of the human body.	Label the body parts in the given
	Explain that each part of our body has its own special job to do.	diagram.
	TTYP - What do you think the job of each of these body parts is?	
		<u>HA:</u>
	On a large piece of paper, model drawing an outline of the body using a child as a	Draw and label the different parts of a
	template. Working in mixed ability groups, children are to then use post-it notes to	human body on the outline provided.
	identify and classify the body parts by labelling them.	
		<u>Challenge:</u>



"Journeying together with Jesus Christ, we learn to love and love to learn."

		Explain what we use the body parts for (e.g. Our feet keep us balanced and stop us from falling over)
Lesson 2:	Recap on previous lesson on body parts.	LA/SEND:
I can identify the five senses and how we use them.	Can children name all the body parts before the two minute timer runs out?	Draw and label which sense is associated with which body part.
	Explain to children that we have 5 senses that we use to learn about the world	
Working scientifically:	around us. TTYP – what are the 5 senses?	МА/НА:
I can identify and classify which senses	https://www.bbc.co.uk/bitesize/topics/z9yycdm/articles/zxy987h	Record the five senses and describe
are associated with which body part.	Our senses help us to understand the world and to keep us safe.	how we use them on the template provided.
	Discuss - Why are the senses important to us? Can we live without one of senses? If so how can we survive?	Challenge:
	Tell children that if we don't have one of our senses, our other ones have to work	Go on a field walk and use their five
	harder. For example, if we can't see, we might use touch to help us move around.	senses to record what they can hear, see, smell, touch and taste.
	Play the five senses game to check children's understanding	
	https://www.abcya.com/games/five_senses	
Lesson 3:	Recap on previous lesson on senses.	All children in mixed ability pairs
I can perform a simple test using the five senses.	TTYP – Name all the five senses and what we use them for.	complete the experiment.
	Introduce the experiment:	LA/SEND:
Working scientifically:	The sugar and salt labels have fallen off the jar in the staff room. The teachers are	Use their senses to complete the table
I can perform a simple test.	putting salt in their cups of tea and are not very happy! We need to use the 5 senses	to gather evidence of their experiment
I can gather and record data to help	to find out which one is salt and which one is sugar.	– jot down adjectives in boxes e.g. Sight
answer questions.		Pot 1 – white
	Explain to children that we are going to perform a simple test using our five senses to work out which jar has sugar inside and which jar has salt.	Pot 2 – white



"Journeying together with Jesus Christ, we learn to love and love to learn."

Creative Learning Journey		
	Observe the 2 objects through the use of the senses – comparative e.g. how does it look? How does it feel? How does it smell? How does it taste? Discuss which is the best senses to use and why.	MA/HA: Use their senses to complete the table and record what they found out using adjectives to describe each pot. E.g. Taste Pot 1 – Sweet Pot 2- Salty The sense that helped me the most was taste because I know that sugar is sweet and salt is salty. Challenge: Research about the senses of common animals.
Lesson 4: I can identify and name some common birds and mammals. Working scientifically: I can ask questions about birds and mammals. I can identify and classify birds and mammals into the correct classification.	What is an animal? TTYP - What animals can you have as a pet? Children to popcorn as many as possible. Children to compare 2 pets e.g. cat and dog and in pairs discuss what they look like, are there any similarities and differences. Then compare 2 more, this time rabbit and fish. TTYP - Which is the odd one out monkey, dog or fish? Rabbit, mouse, lizard? Guinea Pig, hamster, parrot? Discuss why. Have a picture of a bird and a mammal on the whiteboard with the wrong label underneath.	LA/SEND: Sort the pictures into groups – birds and mammals. Children to then label the animals. MA/HA: Create a poster to name some common birds and mammals and the criteria for that group. (e.g. Birds have wings and feathers)
	Children have to convince you it is wrong, by describing its features, and give the animal the correct label. TTYP - What are the different types of animals?	Challenge: Compare mammals and birds – identifying their key features. Look for similarities and differences between



"Journeying together with Jesus Christ, we learn to love and love to learn."

	or carrie zear ning your ney	
	In groups, children to compare and sort toy animals/ images of birds and mammals based on their similarities and differences. Can they group them? How? Why? Do you know what this group of animals is called?	them.
	Then teach them the group names & explain the differences between them. https://www.bbc.co.uk/bitesize/topics/z6882hv/articles/zp92xnb https://www.bbc.co.uk/bitesize/topics/z6882hv/articles/zyd6hyc	
Lesson 5:	Recap on birds and mammals	LA/SEND:
I can identify and sort some common	TTYP - name some mammals and some birds	Sort pictures into groups – reptiles, fish
reptiles, fish and amphibians.	Show a picture of a parrot is this a mammal? Why not?	and amphibians. Pic collage.
Working scientifically:	Show images of: amphibians, fish and reptiles.	MA:
I can identify and classify reptiles, fish	TTYP about where they might see them?	Classify the animals into the correct
and amphibians into the correct	Watch the video, explaining the differences:	animal groups.
classification.	https://www.bbc.co.uk/bitesize/topics/z6882hv/articles/zc6br82	
I can explain the difference between the	https://www.bbc.co.uk/bitesize/topics/z6882hv/articles/zp9pfg8	HA:
animal groups.	https://www.bbc.co.uk/bitesize/topics/z6882hv/articles/zxgq2hv	As above, including a description of
	Discuss - Can the children name some reptiles?	each animal group (A frog is an
	What about a clownfish? Where does that belong? What do we know about fish? What about a frog? Does it fit any of the above criteria?	amphibian because)
	, ,	Challenge:
	Give children images of: amphibians, fish and reptiles. Children to identify, classify	Create a poster about the animal
	and sort into appropriate groups. Describe why they have grouped how they have.	groups.
	TTYP - What are the different types of animals?	
	Can we make up a song to remember the animal groups?	
Lesson 6:	Ask the children what they already know about birds and their bodies.	LA/SEND:
I can describe the structure of different		Label the body parts of a bird, e.g. eyes,
birds	I think all birds have feathers, 2 legs, 2 wings and can fly.	2 legs, beak, feathers, wings etc.



A Voluntary Academy

"Journeying together with Jesus Christ, we learn to love and love to learn."

Medium Term Planning Creative Learning Journey

Working scientifically:

I can use my observations and ideas to suggest answers about the characteristics of different birds.

TTYP - What do you think? Do you think I am right?

We are going to look at different birds and find things that are the same and things that are different about them.

Watch the video on birds and their structure:

https://www.bbc.co.uk/bitesize/topics/z6882hv/articles/zyd6hyc

In small groups, children to look at pictures of different birds and identify their features and characteristics – thinking about the shape, colour and sizes.

Teach the children that not all birds look the same – show pictures of 2 different birds on the whiteboard – robin and penguin

TTYP - what is the difference between a robin and a penguin?
A robin can fly but a penguin can't. Penguins have webbed feet and flippers.

MA:

Label the body parts of 2 different birds.

Robin – wings, legs, claws etc. Penguin – webbed feet, flipper, beak etc.

HA:

As above and explain what makes both of these animals birds e.g. Both birds have a beak, eyes, legs and wings. Robins can fly but penguins can't, they have webbed feet and flippers.

Challenge:

Write a 'did you know...?' fact about one of the birds.

Lesson 7:

I can describe the structure of different fish and mammals

Working scientifically:

I can use my observations and ideas to suggest answers about the characteristics of different fish and mammals

Ask the children what a fish is and what they already know about fish.

TTYP about how they survive underwater and why they would not survive on land. Teach the children about fish eyes, the mouth, head, tail, scales and fin. Explain that they use gills to breathe. They suck in water through their mouth and breathe out through their gills.

https://www.bbc.co.uk/bitesize/topics/z6882hv/articles/zxgq2hv

TTYP about what they already know about mammals and their bodies. Tell the children that humans are animals and debate this.

LA/SEND:

Label the different parts of a fish and a rabbit e.g. fin, gill, eyes, mouth, tail, scales.

MA/HA:

Label the body parts of 2 chosen animals within the fish and mammal group. Describe the characteristics for each one, e.g. mammal - warm-



A Voluntary Academy

"Journeying together with Jesus Christ, we learn to love and love to learn."

Medium Term Planning Creative Learning Journey

Have a picture of a human and a dog and ask, do they both belong to the same animal classification group? Why? Why not?

Discuss what makes both of these animals fish and mammals

Mammals – warm-blooded, live on land and in water, have fur or hair, have skeletons inside their bodies, breathe through lungs, give birth to live babies who drink their mother's milk etc.

Fish – cold-blooded, live in water, gills to breathe, fins, tail, scales,

blooded, have fur or hair, give birth to live babies. Fish – live in water, cold-blooded, has scales, fins and gills to breathe underwater.

Challenge:

Ask questions about animals e.g. do all mammals live on land?

Applied Write Opportunities:

Children to apply knowledge learnt in lessons to write a non-chronological report on animals. They will have had the opportunity to sort and compare different animals in previous lessons.

Key Vocabulary

Tier 2: record, compare, research, conclude, observe, see, hear, smell, touch, taste, body, eyes, nose, hands, fingers, mouth, tongue, ears.

Tier 3: animals, paws, wings, legs, feet, toes, tail, amphibians, birds, mammals, fish, reptiles, herbivores, carnivores, omnivores, humans, living, senses, survive, habitat, fins, gills, scales, fur, feathers, elbows, shoulders, wrist, waist.



A Voluntary Academy

"Journeying together with Jesus Christ, we learn to love and love to learn."

Medium Term Planning Creative Learning Journey

Year Group: KS1 Topic: Animals including humans Term: Spring 2

National Curriculum Links (Ref: NC 2014)

- Identify, name, draw and label basic parts of the human body and say which part of the body is associated with each sense.
- Identify and name a variety of common animals, including fish, amphibians, reptiles, birds and mammals.
- Identify and name a variety of common animals that are carnivores, herbivores and omnivores.
- Describe and compare the structure of a variety of common animals.

Knowledge and	Activity	Differentiation
Skills Objectives		
Lesson 1:	Can children remember the name of each animal group?	LA/SEND:
I can describe the structure of	Ask them what a fish is and what they already know about fish.	Label the different parts of a fish
different fish and mammals	TTYP about how they survive underwater and why they would not survive on	and a rabbit e.g. fin, gill, eyes,
	land.	mouth, tail, scales.
Working scientifically:	Teach the children about fish eyes, the mouth, head, tail, scales and fin.	
I can use my observations and ideas	Explain that they use gills to breathe. They suck in water through their	MA/HA:
to suggest answers about the	mouth and breathe out through their gills.	Label the body parts of 2 chosen
characteristics of different fish and	https://www.bbc.co.uk/bitesize/topics/z6882hv/articles/zxgq2hv	animals within the fish and mammal
mammals		group. Describe the characteristics
	TTYP about what they already know about mammals and their bodies.	for each one, e.g. mammal - warm-
	Tell the children that humans are animals and debate this.	blooded, have fur or hair, give birth
		to live babies. Fish – live in water,
	Have a picture of a human and a dog and ask, do they both belong to the	cold-blooded, has scales, fins and
	same animal classification group? Why? Why not?	gills to breathe underwater.
	Discuss what makes both of these animals fish and mammals	



A Voluntary Academy

"Journeying together with Jesus Christ, we learn to love and love to learn."

Mammals – warm-blooded, live on land and in water, have fur or hair, have skeletons inside their bodies, breathe through lungs, give birth to live babies who drink their mother's milk etc.	Challenge: Ask questions about animals e.g. do all mammals live on land?
Children to popcorn animals from each classification group as you call them. How many reptiles and amphibians do they know about?	LA/SEND: Sort reptiles and amphibians pictures and label each one.
Compare reptiles and amphibians - Have a picture of a reptile and an amphibian on the board and ask the children if they can tell which is the amphibian and which is the reptile. TTYP - What's the same and what's different about each animal? Do all animals have the same body parts as us?	MA: Draw a reptile and an amphibian and label their body parts. Jot down what's the same and what's
Task 1 Have pictures of reptiles and amphibians and explore the structure of their body parts. Children to label the body parts in small groups. Look for similarities and differences between them	different. E.g. Frogs have eyes, legs, back, throat and webbed feet. Tortoises have eyes, head, tail, legs and shell.
Discuss reptiles - Do they have ears? Explain to children that reptiles have ear holes instead of ears, they have scales, not fur and dry skin. They can have 4 legs like tortoises or no legs like snakes. Next discuss amphibians – What type of skin do they have?	HA: Draw and label a reptile and an amphibian and compare their characteristics e.g. Crocodiles are reptiles. They have dry, scaly skin, short legs and a long tail whereas frogs are amphibians. They have
	skeletons inside their bodies, breathe through lungs, give birth to live babies who drink their mother's milk etc. Fish — cold-blooded, live in water, gills to breathe, fins, tail, scales, Children to popcorn animals from each classification group as you call them. How many reptiles and amphibians do they know about? Compare reptiles and amphibians - Have a picture of a reptile and an amphibian on the board and ask the children if they can tell which is the amphibian and which is the reptile. TTYP - What's the same and what's different about each animal? Do all animals have the same body parts as us? Task 1 Have pictures of reptiles and amphibians and explore the structure of their body parts. Children to label the body parts in small groups. Look for similarities and differences between them Discuss reptiles - Do they have ears? Explain to children that reptiles have ear holes instead of ears, they have scales, not fur and dry skin. They can have 4 legs like tortoises or no legs like snakes.



A Voluntary Academy

"Journeying together with Jesus Christ, we learn to love and love to learn."

	creative Learning Journey	
	means that their body temperature is affected by how hot or cold their	moist skin, webbed feet and no tail.
	surroundings are. They have smooth, moist skin but no scales.	
		Challenge:
	Watch the video, explaining the differences:	Ask questions about reptiles and
	https://www.bbc.co.uk/bitesize/topics/z6882hv/articles/zc6br82	amphibians e.g. Do all amphibians
	https://www.bbc.co.uk/bitesize/topics/z6882hv/articles/zp9pfg8	have webbed feet?
Lesson 3:	All living things need to eat. We call what animals eat their diet.	LA/SEND:
I can identify, name and sort	Show children pictures of different animals and suggest what they might eat.	Sort animals into their diet groups
animals that are herbivores,	TTYP -What do you think this animal eats?	using a venn diagram
carnivores and omnivores.	,	
	Introduce children to the terms 'carnivore', herbivore' and 'omnivore'.	MA:
Working scientifically:	Animals can be put into groups based on the types of food they eat.	Sort animals into their diet groups
I can identify what different animals	Some animals called 'carnivores' only eat meat.	using a venn diagram. Write a
eat.	Others are called 'herbivores'. They only eat plants.	sentence about each diet group. E.g.
I can sort animals into the diet groups	Animals that eat meat and plants are called 'omnivores'.	Herbivores eat plants. Carnivores
they belong to.	·	eat meat. Omnivores eat both meat
	Watch the video to learn more about animal groups and what they eat.	and plants.
	https://www.bbc.co.uk/bitesize/topics/z6882hv/articles/z96vb9q	·
		HA:
	In small groups, children to have a go at sorting animals according to what	As above, then explain further the
	they eat. Talk about what kind of food we eat and which diet they think we	difference between the diet groups.
	have. Are we a carnivore, omnivore or herbivore?	E.g. Omnivores are animals that eat
	Song: https://vimeo.com/295318262	both meat and plants. Monkeys are
	331.5. <u>110031/ 11110310011/ 233310202</u>	omnivores because they eat fruits
		and small lizards.
		and Small lizards.
i.		



A Voluntary Academy

"Journeying together with Jesus Christ, we learn to love and love to learn."

	creative Learning Journey	
		Challenge: Children to record what a pet eats and report if it is a carnivore, herbivore or omnivore.
Lesson 4: I can use a classification key to sort	Tell the children that in Science, we have been looking at the five different animal groups. Can they remember what they are?	LA/SEND: Complete a simple classification key
animals. Working Scientifically:	Today we are going to use a classification key to group the animals.	by answering the questions and sticking each animal in the correct box.
I can sort animals using a classification key. I can ask questions about animals	Explain that a classification key is a series of questions that help you work out the characteristics of something. When you answer one question, it either branches off to another question or identifies the animal.	Can the colonal Rg?
	Show images of classification keys and emphasise how all of the questions asked need to be answered with 'yes' or 'no.'	Direction of part of p
	Task 1 - Display a blank classification key with different types of animals at the bottom and yes/no question stems. Children work in mixed ability pairs to place each animal in the correct place.	MA: Complete the classification key by writing their own questions.



"Journeying together with Jesus Christ, we learn to love and love to learn."

	Creative Learning Journey	
		HA: Create their own classification key by asking questions about different animals. E.g. Does the animal lay eggs?
WC 14 th March 2022	BRITISH SCIENCE WEEK	Outdoor activity
Lesson 5: I can research some facts about animals. Working Scientifically:	Tomorrow, we are going to write a non-chronological text about our favourite animal. Before we do that, we have to research some facts about them. TTYP — about which animal you will be researching about? What do you want to find out about your favourite animal? Guide children to research about their favourite animal's diet, the animal group they belong to, what they look like and where they live.	LA/SEND: Research their favourite animal — what they eat, what they look like and where they live. MA/HA: Research facts about one of their favourite animals in the animal group - finding out about their diet, their characteristics and structure (body parts) and the animal group



"Journeying together with Jesus Christ, we learn to love and love to learn."

	ci earive Learning Journey	
		they belong to.
		Challenge:
		Add a 'did you know?' fact about
		your favourite animal.
Lesson 6:	Animals quiz to consolidate knowledge from previous lessons. Discuss as a	LA/SEN:
I can write a non-chronological report	whole class which is the odd one out and why.	Report template. Write simple
on animals.		sentence(s) about each sub-heading
	Tell the children today they are going to write a report about their favourite	- What they look like, what they eat,
	animal.	where they live.
	In the previous lesson, the children did some research about their favourite	MA:
	animals and made some notes using a mind map to help them write their	Report template. Use their research
	report today.	notes to write about each sub-
		heading – Appearance, Diet and
	Go through the Non-chronological report success criteria with the children.	Habitat. E.g. My animal has a beak,
	Remind Year 2s about the key features of a non-chronological text.	wings and feathers.
	Explain to the Year 1s what non-chronological texts are and look at some	
	examples - discuss what is included e.g. heading, sub-headings, facts,	<u>HA:</u>
	interesting information and pictures.	Write a non-chronological report
	Take feedback and model writing the first section of their non-chronological	about their favourite animal
	report.	including a main heading and sub-
		headings – using their research
		notes to help them.
	•	•



Medium Term Planning Creative Learning Journey

Applied Write Opportunities:

Children to apply knowledge learnt in lessons to write a non-chronological report on animals. They will have had the opportunity to sort and compare different animals in previous lessons.

Key Vocabulary:

Tier 2: record, compare, research, conclude, observe, see, hear, smell, touch, taste, body, eyes, nose, hands, fingers, mouth, tongue, ears.

Tier 3: animals, paws, wings, legs, feet, toes, tail, amphibians, birds, mammals, fish, reptiles, herbivores, carnivores, omnivores, humans, living, senses, survive, habitat, fins, gills, scales, fur, feathers, elbows, shoulders, wrist, waist.



A Voluntary Academy

"Journeying together with Jesus Christ, we learn to love and love to learn."

Year Group: Year 1&2 Term: Summer 1 (Cycle A) Topic: Plants

National Curriculum Links (Ref: NC 2014)

Pupils in KS1 should be taught to:

- 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, including trees.

Working scientifically (KS1 objectives)

- ask simple questions and recognise that they can be answered in different ways
- ②observe closely, using simple equipment
- ②perform simple tests
- 2identify and classify
- ②use observations and ideas to suggest answers to questions
- • gather and record data to help in answering questions

Knowledge and skills objectives	Activity	Differentiation
Lesson 1	Display an image of a flowering plant and a tree on the whiteboard. Activate	SEN/LA: Label the parts of a flowering plant and
I can identify and describe the	children's prior knowledge of plants by asking the following questions:	a tree, using a word bank for support
basic structure of common		
flowering plants, including trees.	Name the parts of a flowering plant.	MA: Label the parts of a flowering plant and a
	Name the parts of a tree.	tree with no word bank.
Working Scientifically	What do you know about plants already?	
I can ask simple questions and	What do all plants need to survive?	HA: Label the parts of a flowering plant and a
recognise that they can be		tree and explain what each part of the flowering
answered in different ways.	Introduction:	plant is for.
	Discuss with the children that all plants need light, water, air and warmth to survive.	
I can use observations and ideas to	Plants are important for our environment because they release oxygen for us to	
suggest answers to questions.	breathe. Plants grow from seeds or bulbs. Some plants can be eaten, such as lettuce,	



A Voluntary Academy

"Journeying together with Jesus Christ, we learn to love and love to learn."



I can observe closely, using simple equipment.

Resources

Variety of flowering plants Magnifying glasses Label the parts of a flower and a tree activity sheet tomatoes and cucumber. All fruit and vegetables grow on plants and farmers grow many of the plants we eat. However, some plants can be harmful to people, so we must be careful when picking fruit and berries. Always ask an adult before eating parts of a plant.

Task 1:

Today we will be looking at parts of a flowering plant and a tree. Different parts of a flowering plant have a function (job) which helps the plant to stay alive. Explain that the main parts of a flowering plant are the roots, stem, leaves, petals and flower. Display an image which shows where each part of the plant can be found.

Split children into mixed ability pairs. Give each pair an image of a flowering plant and a tree. Children have two minutes to label the parts, using a word bank to help them. As a class, check their answers and address misconceptions.

Task 2:

Next ask the children what they think each part of the flowering plant is for e.g. why do plants need roots? Children discuss with their partner and feedback answers. Ensure children can explain the following for each part of a flowering plant:

Roots hold the plant in the soil and absorb (soak up) water and nutrients (food). The stem carries water and nutrients from the roots to the rest of the plant. The leaves absorb sunlight which the plant turns into energy to help it grow. The brightly coloured petals attract insects such as bees and butterflies. They survive by drinking the nectar and carry the pollen to other flowers so that more plants can grow.

The flower contains seeds which will be dispersed (spread) by animals and the wind. The seeds land on the ground and a new plant starts to grow.

Ensure the children can discuss the following functions for the parts of a tree: Roots and leaves (see above)

Challenge:

Draw a sketch of one of the flowering plants on your table and label each part. Can you use a magnifying glass to observe more closely and make your observational drawing as realistic as possible?

Plenary

Consolidate the parts of a flowering plant and a tree. Watch the following video and then discuss what we have learnt today:

https://www.bbc.co.uk/teach/class-clipsvideo/science-ks1-ks2-ivys-plant-workshopparts-of-a-plant/zvdkpg8



suggest answers to questions.

SS John Fisher & Thomas More Catholic Primary School

A Voluntary Academy

"Journeying together with Jesus Christ, we learn to love and love to learn."

CATHOLIC	
ZZ CZ	,
HSZ	T 1/1 T
THE ISOTY	

in their books:

	The trunk supports the tree and functions like the stem of a flower (it carries water and nutrients). Branches are smaller stems of the trunk where the leaves grow. They also carry water and nutrients. After some trees have blossomed, fruit will grow which contains seeds for new trees. Some trees have cones which contain seeds. Children quiz their partner by asking questions e.g. why does a plant need roots? What are the petals for? Why are insects attracted to the flower? Task 3: Provide children with a flowering plant on each table. Give out magnifying glasses so they can look at them more closely. Can they identify and name the parts of a plant we have talked about today? Discuss how the shape of the leaves and colour of the petals are all different and unique. Why do you think that is? (some plants have grown flatter, larger leaves to absorb more sunlight, the petals are all different colours to attract as many different insects as possible. Some insects prefer nectar from certain flowers).	
Lesson 2	Starter questions:	SEN/LA: Sort the deciduous and evergreen trees
I can identify and name a variety	Name the parts of a flowering plant. What is their function (job)?	and label them.
of deciduous and evergreen trees.	What are the parts of a tree?	
	What do all plants need to survive?	MA: Sort the deciduous and evergreen trees and
	Discuss with talk partners before discussing as a whole class.	label them. They write a sentence to explain the
Working Scientifically:	Introduction:	difference between deciduous and evergreen
	Explain that today we will be looking at different types of trees. Watch the video	trees.
I can identify and classify.	about deciduous and evergreen trees:	
	https://www.bbc.co.uk/teach/class-clips-video/science-ks1-ks2-ivys-plant-workshop-	HA: Sort the deciduous and evergreen trees and
I can use observations and ideas to	<u>are-plants-the-same-all-year-round/zdvct39</u>	label them, then answer the following questions



A Voluntary Academy

"Journeying together with Jesus Christ, we learn to love and love to learn."



Resources

Variety of deciduous and evergreen leaves.
Tree finder sheet
Tree sorting activity

Ask the children these questions:

What is a deciduous tree? What time of year deciduous trees start to lose their leaves? Why do deciduous trees lose their leaves? What is an evergreen tree? Why don't evergreen trees lose their leaves in Winter?

Describe the annual cycle of a deciduous tree, linking it to what the children know about the seasons:

Spring – new buds form and blossom appears, leaves start to grow Summer – fruit grows on some trees and cones grow on others. The fruit and cones contain seeds from which new plants can grow.

Autumn – the leaves turn brown, orange, red and yellow, then the tree loses its leaves Winter – the tree lies dormant (it's sleeping) to save energy over Winter before the whole growing cycle starts again

Deciduous trees lose their leaves in Autumn. This is because they protect the more delicate parts of themselves such as the trunk and the branches. The leaves get blown off or damaged in the bitter (cold) conditions.

Evergreen trees don't lose their leaves and are green all year round. This is because they have a waxy coat on their trunks and branches. Their leaves can handle the cold and their thinner shape prevents (stops) water loss.

Task 1

Children go for a tree hunt on the school grounds. In pairs, children identify the leaves they have collected by matching them to the photos on the tree hunt activity sheet. Discuss which was the most common. Invite the children to share any leaves they collected that were not on the tree hunt activity sheet.

Task 2

Children sort the leaves into two groups: deciduous or evergreen. They should be able to discuss the characteristics of the leaves e.g. evergreen leaves are usually thin and pointy, deciduous leaves are broader (flatter) and rounder.

What is a deciduous tree? Why do they change in Winter? What is an evergreen tree? How are they prepared for Winter? How can you tell the difference between a deciduous and evergreen tree?

Challenge:

Complete the deciduous and evergreen tree quiz.

Plenary

Ask the children the following questions: What is a deciduous tree? What is an evergreen tree? How can we tell the difference between them? Name some common trees.



A Voluntary Academy

"Journeying together with Jesus Christ, we learn to love and love to learn."



Lesson 3

I can identify and name a variety of wild plants and garden plants.

Working Scientifically:

I can identify and classify.

I can use observations and ideas to suggest answers to questions.

I can observe closely, using simple equipment.

I can ask simple questions and recognise that they can be answered in different ways.

Variety of garden and wild plants for the children to look at Magnifying glasses Wild and garden plant worksheets <u>Starter activity</u>: Recap learning from previous lessons using the retrieval challenge grid.

Explain that today we will be identifying and naming wild plants and garden plants. Discuss what makes plants 'wild'. Point out that if a wild plant grows in a garden it can be called a weed. Ask the children to name any weeds they are familiar with e.g. dandelions, nettles, brambles. Weeds are 'pests' (annoying things which attack other plants). They grow very quickly and smother other plants to get the most light, nutrients and water. They often have defence systems that protect them from being eaten by animals or picked by people e.g. thorns or leaves that sting.

Show images of wild plants and garden plants. Discuss the shape, size and distinguishing features of these plants. Is there a way to tell if a plant is wild or if it comes from a garden?

Task 1

Provide children with a variety of plants and allow them time to observe more closely using a magnifying glass. Can they identify and name the parts of a flowering plant that we looked at in lesson 1?

Task 2 Childre

Children look at the wild and garden plants images. Partner A chooses a plant and partner B has to guess which plant it is by asking yes/no questions e.g. is it a garden plant? Does it have pointy leaves? Does it have purple flowers?

<u>SEN/LA:</u> Sort the garden plants and wild plants and label them.

MA/HA: Sort the images of the garden plants and wild plants by drawing them in the correct box and labelling them (links to observational drawing techniques practised in art lessons).

Challenge:

Children generate their own questions about plants e.g. why do some wild flowers have thorns? When do flowering plants start to grow in the garden? Why do some plants grow from bulbs?

Plenary

Children complete the 'speak like a scientist' activity to review all vocabulary learnt in this unit.



A Voluntary Academy

"Journeying together with Jesus Christ, we learn to love and love to learn."



Resources

Applied Write Opportunities:

N/A – Not enough time to complete applied write (only three science lessons due to May bank holiday and 4 week term for Summer 1).

Enrichment Opportunities:

Visit Quarry Bank Mill to look at trees and plants in the local area.

Key Vocabulary

Tier 2: seed, bulb, cone, fruit, roots, stem, flower, petals, leaves, bud, trunk, branches, blossom grow, wild, garden, deciduous, evergreen, water, sunlight, nutrients, pest, weed, survive

Tier 3: identify, classify, record, compare, explain, discuss, observations, questions



A Voluntary Academy

"Journeying together with Jesus Christ, we learn to love and love to learn."

Medium Term Planning Creative Learning Journey

Year Group: KS1	Topic:	Living things and their habitats	Term: Summer 2

National Curriculum Links (Ref: NC 2014)

Living things and their habitats

Pupils should be taught to:

- explore and compare the differences between things that are living, dead, and things that have never been alive
- identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other
- identify and name a variety of plants and animals in their habitats, including microhabitats
- describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food

Knowledge and Skills Objectives	Activity	Differentiation
Lesson 1:	Show image of a cardbard box, a baby and a tree. Which is the odd one out?	LA/SEND:
I can identify the life processes that	How do you know? TTYP (Assessment)	Chn use word bank and images to
are common to all living things.		write the life processes
Working scientifically:	The box is the odd one out because it is not alive. But how do we know if something is alive? Plants and humans are alive. What do we do that lets us	MA/HA:
	know we are alive? TTYP	Chn write Mnemonic 'Mrs Gren'
I can explore and compare the differences between things that are living, dead, and things that have	Explain to the chn all living things do certain things to stay alive (life processes). Animals, including humans, do these things. Plants do too,	Template for chn who need it.



A Voluntary Academy

"Journeying together with Jesus Christ, we learn to love and love to learn."

Medium Term Planning Creative Learning Journey

never been alive by thinking about
life processes.

although they do them in different ways. We remember these things by thinking about Mrs Gren. Create whole class Mnemonic.

Explain all living things can move. Show examples of animals and plants moving - A sun flower moves to turn its face towards the sun. A hare runs to escape from danger.

All living things can respire (breathe) e.g. mammals breathe through their nose and mouths. Plants take in and give out gases through leaves.

All living things can use their senses. Animals use their senses to see, hear, taste, touch and smell the world around them. Plants can also detect changes in the environment (show image of mimosa plant that curls up when you touch it).

All living livings grow. Show images of ocean mola starting life as an egg. It grows to 1000kg – the same size as a bull. Bamboo can grow up to 3cm every hour.

All living things reproduce (have young) Show image of a wolf spider carrying babies on her back. Show image of seeds. Each seed contains a tiny miniature plant ready to grow.

All living things excrete(get rid of waste). Ask chn how do you get rid of waste products from your body? Explain that plants also need to excrete. Left over gases and water leave plants through their leaves.

All living things must eat. Some animals eat plants, and some eat other

Plenary

Write Mrs Gren on board. Can chn tell you each life process?



"Journeying together with Jesus Christ, we learn to love and love to learn."

Lesson 2:	Task 2: Show images of dead and never alive things. Ask the chn which of these non-living things are dead and which were never alive? TTYP Explain to chn things made of materials like metal, rock, plastic, glass and sand have never been part of a living thing. Dead things are things are non-living but used to part of a living thing. Recap — Popcorn the things all living things need to stay alive	LA/SEND
	Show images of dead and never alive things. Ask the chn which of these non-	
	Task 1: Show images of various living/non-living things. TTYP Which of these are living? Which are non-living? How can you tell? (Let's use Mrs Gren to help us)	
	https://www.youtube.com/watch?v=Us3WOzgSWLM Show video. Pause and ask chn to answer the questions.	
	animals. Green plants make their own food using the energy from the sun.	



A Voluntary Academy

"Journeying together with Jesus Christ, we learn to love and love to learn."

Medium Term Planning Creative Learning Journey

Working scientifically:

I can identify and classify animals and plants and sort them into the British habitat they live in. conditions that allow us to live. We need food and water, space to move, grow and have young, Air and oxygen to breathe and shelter for safety.

Show some images of familiar habitats and ask what the pictures show. Can they guess which animals might live there?

Explain to chn a habitat is a place where animals and plants live, where they can find everything they need to stay alive.

What is your habitat? TTYP

Ask: Where do you live? What living things live and grow there? How does your habitat keep you safe and sheltered? How does your habitat provide food and water? How does your habitat provide space for you to move and grow?

Explain to chn Humans are unique because we can make big changes to our habitats to make sure we have everything we need. How do humans change their habitats? (Build roads, pipes, houses, grow our own food)

Explain to chn plants and animals can't make big changes to their habitats like us. They rely on the environment around them to give them everything they need. This means they have to live somewhere that has the right conditions to help them to stay safe. Because different places have different conditions the plants and animals that live there are different too.

Today we are going to learn about different types of British habitats

<u>MA</u>

Chn draw and label the animals and plants found in the 4 different types of British habitat

HA

Chn read fact files. Chn draw and a label living thing from each habitat and write how they survive in the habitat

Challenge

Ask questions about animals and habitats e.g can the same fish live in a pond and in an ocean?

Plenary

Come back to the carpet. Chn to show their habitat chn to compare their habitats. What are the similarities? What are the differences?



A Voluntary Academy

"Journeying together with Jesus Christ, we learn to love and love to learn."

Medium Term Planning Creative Learning Journey

We (Humans) live in an urban habitat. Urban habitats are areas with lots of buildings for people to live and work in. Flowering plants like daisies, dandelions and buttercups grow. Insects, slugs and snails live among the plants. Some animal get their food from the trees and hedges that grow in cities (squirrels and birds). Some animals get their food from people who leave them behind (rats, foxes,pidgeons)

Show chn woodland habitat. Which plants/animals might live here? Where is the shelter and safety? (The fallen leaves give shelter for creatures like worms, slugs and snails.) Where is the food and water? (Fruit and seeds from trees provide food for small mammals like mice bats and squirrels).

Show images of Ponds – Which living things might live here? Where can the food/water be found? Where is the shelter and safety? Plants provide food and shelter for worms and slugs etc. Amphabians eats small creatures. Birds also live near water.

Show imges of Coastal habitats - The plants here have adapted to grow in salty, windy conditions (samphire). Creatures survive in rock pools (crabs and starfish).

Task 1

Give out factfiles. Ask chn to use them to sort the living things into their correct habitat.



"Journeying together with Jesus Christ, we learn to love and love to learn."

	Give chn images of a range of different animals. Ask them to sort them into the 4 British habitats. Discuss with chn how basic needs of the animal/plant are met in the habitat. Be aware some living things can survive in more than one habitat – discuss this with chn.	
Lesson 3:		LA/SEND:
I can investigate the preferred microhabitats of minibeasts		<u>MA:</u>
I can gather and record data to help in		1717.3.
answering questions by investigating the preferred habitat of minibeasts.		
the preserved number of minimetasis.		
Lesson 4:		LA/SEND:
Ecson 4.		<u>LA/SEND.</u>
Adaptation		<u>MA:</u>
Working Scientifically:		
Lesson 5:		
Lesson 5:		
Working Scientifically:		
Lesson 6:		<u>LA/SEN:</u>
T		
I can write a fact file about living		
things and their habitats		







·	



A Voluntary Academy

"Journeying together with Jesus Christ, we learn to love and love to learn."

Medium Term Planning Creative Learning Journey

Subject: Science Topic: Seasons Differentiation

NC Links:

- observe changes across the 4 seasons
- observe and describe weather associated with the seasons and how day length varies

Working scientifically:

- Pupils should observe and talk about changes in the weather and the seasons.
- Pupils should be warned that it is not safe to look directly at the sun, even when wearing dark glasses.
- Pupils might work scientifically by: making tables and charts about the weather; and making displays of what happens in the world around them, including day length, as the seasons change.

I can observe the changes across the 4 seasons.

I can observe and describe weather associated with the seasons and how day length varies. Seasonal changes is a topic that is spread across the year. Children will be given the opportunity to collect data across the year and make comparisons.

Daily actitivies:

- Days of the week, months of the years, how many days in each month
- Know what months make up the season
- Weather chart collect weather over a 3 week period in each season.
- Y1 collect the rainfall for a 3 week period and compare with other seasons over the year
- Y2 collect the temperature over the week and compare with data collected from other seasons.

Each season:

Resources:

Comparing seasons:

https://www.bbc.co.uk/bitesize/topics/zkv v4wx/articles/zcx3gk7

seasons song:

https://www.youtube.com/watch?v=8ZjpI 6fgYSY

Trees through the seasons:

https://www.youtube.com/watch?v=n_cXcOe6xk

Each class will have a floor book where



A Voluntary Academy

"Journeying together with Jesus Christ, we learn to love and love to learn."



Medium Term Planning Creative Learning Journey

- Observe the playground during each season and record observational drawings and findings
- Observe the trees what is happening, collect a sample of leaves.
- Decorate a tree for each season and make comparisons at the end of the year.
- Dress a person for the season make links to weather and temperature
- Use senses to explore what the children can see, hear, feel, smell and taste in each season.
- Recognise and celebrate the key events and celebrations in each season.
- Record the day length within each season children to keep a diary as part of their homework each season. Make comparisons between each season.
- Simple tally chart to collect favourite weather, child to choose 4 types of weather and ask children in their class which is their favourite – does this change at different points of the year?

they collect their findings over the year. They will record their findings and make comparisons through simple tables and pictograms.

Data collection:

- Weather chart
- Pictogram to compare weather over a 3 week period
- Observational drawings
- Tally chart of favourite weather
- Diary entry to collect the time it goes dark
 - Make observations of local wildlife

Key Vocabulary:

Tier 2 - nature, observe, record, collect, sunlight, foggy, storm, rain, cold, freezing, icy, wet, soggy, cloudy, warm, habitat, changes, celebrations.

Tier 3 –, weather vane, thermometer, temperature, day length, seasons, Autumn, Spring, Summer, Winter,