YEAR 2 LIVING THINGS AND THEIR HABITATS PLANNING

Class: Term: Subject: Science Unit: Living things and their Habitats

Differentiation and support (Detailed differentiation in weekly plans.)

SEN: give writing frames to work on. Support from more able partners in mixed ability work. Additional adult support.

GT: work in books, rather than on writing frames. Encourage accurate use of scientific vocabulary. Provide extension activities to apply their own knowledge and to research information independently

English: listening for information in video clips, new vocabulary,

Maths: sorting and sequencing, tally charts, results tables and bar charts

ICT: videos on IWB, activities on computers

PSHCE & PE: learning how to treat animals respectfully

At the start of the unit, create an insect woodpile, a bee hotel or a bird feeder (or more than one of these).

W	Learning objective	Teaching activities	Resources	Assessment: Success Criteria
1	To know the common characteristics shared by all living things (45 mins)	Intro: Ask children to think, pair, share what characteristics all living things share Watch videos at: https://www.youtube.com/watch?v=RpZUCo_rKLc (on MRS GREN – explain that not all organisms use oxygen for respiration e.g. green plants use carbon dioxide) – stop at 1 min 37 secs https://www.youtube.com/watch?v=ipO52VTHecQ (on the 7 life processes) http://www.youtube.com/watch?v=jpO52VTHecQ (on how plants move, grow and reproduce) http://www.youtube.com/watch?v=Joaqv7fKyUg (on how plants are like us and have some of the MRS GREN characteristics) Explain how plants: Respire (breath) by taking in carbon dioxide and giving out oxygen (the opposite to us) Sense e.g. flowers opening and closing when it gets light / dark and turning to follow the suns Nutrition – plants get nutrients from the soil and make their own food from sunlight Excretion – waste products may be stored in leaves that fall off, and oxygen and water are waste products from photosynthesis Revise MRS GREN: Moves, Respires, Senses, Grows, Reproduces, Excretes and Needs nutrition (do actions to go with each one) Main: Children given a Venn diagram with headings of 'Plants' and 'Animals' Children given characteristics of plants and animals to sort in the Venn diagram, including MRS GREN characteristics which will go in the middle Plenary: Children to compare their work with a partner, discussing any differences Revise what MRS GREN stands for and how all living things have these features	Check videos open and play OK and skip / close ads Venn diagrams Characteristics displayed on IWB during independent work	MUST: know some of the characteristics of living things SHOULD: know all of the characteristics of living things COULD: be able to explain how plants and animals do each of the MRS GREN terms

	Explore and	Intro:	Worksheets	MUST: understand
	compare the	Ask children to think, pair, share what we learnt in the previous lesson about what		that things can be
	differences	characteristics all living things share	Items to stick	classified as being
	between things	Revise MRS GREN: Moves, Respires, Senses, Grows, Reproduces, Excretes and		alive, dead or never
	that are living,	Needs nutrition	Scissors	alive
	dead, and things	Explain to children that we can group / sort / classify all things into groups of 'Living',		
	that have never	'Dead' and 'Never Alive'	Glue	SHOULD: correctly
	been alive	Ask children to think, pair, share how we might be able to tell if something is dead or was	0.00	classify things as
	boom anvo	never alive		above
	(40 mins)	Explain that this can be quite easy, because the thing that is dead can look similar to		above
	(40 1111113)	how it looked when it was alive, e.g. fossils and skeletons		COULD: add some of
		Explain that this can however be tricky, giving examples such as furniture made from		their own examples to
		wood and sea shells		each of these 3 groups
		Ask children to think, pair, share if fire is alive or not, and to give a reason for their		cach of these s groups
		answer		
		Explain how virtually all of our food comes from things that were once alive		
		Explain now virtually all of our food comes from things that were once alive		
		Main:		
		Children given a table with headings of 'Living', 'Dead' and 'Never Alive'		
		Children need to cut and stick the following items into it: dinosaur, fire, fossil, cow, milk,		
		tree, snake, fish and chips, kettle, tables, mountains and mushrooms		
		Lower ability to stick items on a worksheet; higher ability to stick headings and items in		
2		their books		
		Extension: add some items of their own to their table		
		Extension, and some items of their own to their table		
		Plenary:		
		Children compare their independent work with a partner, discussing any differences and		
		explaining their choices		
		Explain any things that the children found tricky to classify		
		Ask children who got on to the extension to share some of their own examples and ask		
		children listening to say where they would classify each of these examples		
		Discuss seeds and eggs being 'dormant' i.e. having the potential for life, bit not actually		
		being alive yet		
		boing alive yet		
		- com		

To describe how Intro: PCs / laptops MUST: know what a Ask children to think, pair, share the differences between things that are living, dead, and animals obtain food chain is things that have never been alive from the previous lesson their food from Worksheets Watch the video on food chains at plants and other SHOULD: find out https://www.bbc.co.uk/bitesize/topics/zbnnb9q/articles/zwbtxsq (if the link does not work, Hyperlinks saved some examples of animals, using Google 'BBC Bitesize what is a food chain') the idea of a on network as a food chains Come up with another example of a food chain with the children simple food template .dotx so Explain the following, using the food chain we created: chain that children can COULD: as above. producers – plants are called producers because they 'produce' (make) their own all open them at find more possible food (40 mins) the same time combinations for food consumers – animals that eat plants or other animals are called consumers because chains they 'consume' (eat) plants or other animals predators - eat other animals prey - get eaten by predators Ask children to think, pair, share some examples of food chains, including people too Explain that there are also decomposers, which are organisms that break down dead animal and plant material, which returns their nutrients to the soil Explain independent work, including how to complete the activities using the example of https://www.bbc.co.uk/bitesize/topics/zbnnb9g/articles/z93vdxs (if the link does not work, Google 'BBC Bitesize Food chain challenge - Savannah'): go through the levels rather than choosing 'Free play' click on a plant either click on the Producer slot or drag and drop the plant to the Producer slot 3 click on an animal to see what it eats - if no animals that eat plants, need to use the arrows to move the screen to find one repeat for the rest of the food chain, then click 'Check it' Main: Children to complete the food chain activities at: https://www.sheppardsoftware.com/science/animals/games/food-chain/ (if the link does not work, Google 'Sheppard software food chains game') Tundra - https://www.bbc.co.uk/bitesize/topics/zbnnb9g/articles/zcgbity (if the link does not work, Google 'BBC Bitesize Food chain challenge – Tundra) Woodland - https://www.bbc.co.uk/bitesize/topics/zbnnb9q/articles/zsphrwx (if the link does not work, Google 'BBC Bitesize Food chain challenge – Woodland) Lower ability to draw each food chain on a worksheet; higher ability to draw each food chain in their books Extension: Children to try to find all of the possible food chains Plenary: Revise the terminology from the intro and what it means (food chain, producer, consumer, predator, prey) Revise how plants make their own food from sunlight and how animals need to get their food by eating plants and / or other animals Explain how if an animal or plant further down the food chain disappears, this is a problem for

the animals further up the food chain, because they will have less to eat

To access the complete <u>Year 2 Living things and their Habitats planning</u>, and all of the resources needed to teach it, visit:

http://www.saveteacherssundays.com/science/year-2/402/

