Science Knowledge and Skills Coverage. (EYFS)

Content/ Knowledge	<u>Colour</u> -I can explore the world around me, making observations of colour. -I can participate in discussions and offer my own ideas using scientific words -I can understand some important processes and changes in the world, including colour and how they change by mixing.	<u>All About Me</u> -Explore the world around them, making observations and drawing pictures of themselves and others. -Know similarities and differences between the natural world around them. -Work and play cooperatively and take turns with others.	<u>Celebrations</u> I can explore the world around me, making observations of colour. I can participate in discussions and offer my own ideas using scientific words. I understand some important processes and changes in the world, including colour and how they change by mixing.	<u>Traditional Tales</u> Speaking - Offer explanations for why things might happen, making use of recently introduced vocabulary from stories. Natural World -Understand some important processes and changes in the natural world around them, drawing on their experiences of what has been read in class. Speaking – offer explanations for why things might happen, making use of recently introduced vocabulary from stories when appropriate.		
Book/ Science Capital	THE COLOR BOST D SCRUD	DOGGER SUPER Stirtley Higher	Bittais Pat	therman and the		
Scientific Enquiry	Look for patterns when colour mixing Observation over time colour change. Colour absorbency over time.	Identify parts of the body Look for patterns Identify Senses.	Identify shapes and features of a spider. Observe over time Look for simple patterns. Image: Comparative test Patterns Image: Comparative test	Identify different liquids and materials Simple test Simple test		
Working Scientifically	Ask how and why questionsAsk how and why questionsShow curiosity and question why things happen.Observe and describe what they see using everyday language.	Observe parts of the body Image: Construction of the body	Observe features of a spider. Predict what will happen. Explain ideas Evaluate snow Planning simple test Plance test	Make careful observations Ask and answer simple questions. Plan simple tests.		
Ideas/WOW moments.	 Read Colour monster book. Explore and experiment with colour paddles, equipment and torches. Make colour spinner (Newton) Look at colour images, look through rainbow glasses. Bicarb and paint experiment of changing colour. Skittles activity, feely bag, Dark den, paint mixing. Colour mixing using diffusion, colour in nature walk, colour mixing in bags. 	 Point to parts of the body. Draw parts of the body in a mirror. Through a box lid Make own face- where do features go? Label body Find body parts in gloop Order stages of growth Role play corner Set out areas with the above stations) Identify body parts Identify senses Play keeper of the keys Food tasting Feely bags Instruments 	 Zoom in image of spider- curiosity Spider making web Spider search outdoors Make spider web to stick flies to. Label spider and make own spider. jelly worms in lemonade activity Creepy crawly hunt Potion station Bug classification and obs drawings. Witches cauldron an potions. Ice hands and melting 	 Read gingerbread man Test what happens if gingerbread man gets wet? Make a raft using junk materials Make umbrella or roof Playdough gingerbread men. Retell story using small play. Make bridges out of bricks. Read Three Little Pigs Materials test Make houses out of different materials. 		

			 4. Candy canes in bicarb experiment Label reindeer Ice sensory play Santas workshop play corner Snow scene. 5. Make own snow 6. Which chocolate is the stretchiest? 	Make a maze with Lego. Make an outside maze. 3. Read Billy Goat Gruff Make a raft Make a bridge- junk Outside bridges
Outcomes	To name different colours To explore mixing colours To explore rainbows To explore shadows.	To name basic body parts To know that we look different as we get older. To describe people who are familiar to them To know how to take care of themselves. To understand some of their senses.	Can name and describe animals that live in different habitats Can talk about what the see and give basic reasons. Can look carefully and draw basic body parts of animals and mini-beasts. Can make basic predictions.	Can name the materials they are using and why. Can talk about the basic properties of materials and why it is suited for a purpose. Can observe changes in their natural world and say why it is different now or will change in the future Can compare and describe how materials change over time.

Content/		Animals		Under the Sea		Minibeasts and growing		Keeping Healthy
Knowledge	I can understand the similarities and differences of animals in this country and in other countries. I can recognise some environments that are different to the one in which they live. I can understand the effect of changing seasons on the natural world. I can engage in non-fiction books. I can revise and refine my fundamental movement skills.		I can understand the similarities and differences of animals in this country and in other countries.Explore the natural world around them, making observations and drawing pictures of animals and plants.I can recognise some environments that are different to the one in which they live. I can understand the effect of changing seasons on the natural world.I can engage in non-fiction books. I can revise and refine my fundamentalLaplore the natural world around them, making observations and drawing pictures of animals and plants. I can identify animal habitats. I can group fish based on my observations I can make observations of the natural world. Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. I understand why things float or sink				persona to the t importa	anage my own basic hygiene and al needs, including dressing, going oilet and understanding the ance of healthy food choices. ow sensitivity to their own and to
Book/ Science Capital	WOODS?.	Orer Under Bear Shores On	THE	OW FISH		THEVERY CATEPULAR Is San Gran	Dentist	
Scientific Enquiry		Identify where animals may live in the world. I can look for patterns between the animal and its environment. I can observe what happens to the temperature over time with and without insulation. I can research facts about a chosen animal. I can identify different animals and use observations to move like different animals.		I can identify animal habitats I can identify the parts of a fish. I carry out a comparative test. I can identify patterns. I can find out about what a deep sea- ecologist does.		I can identify the stages of a caterpillar I can observe my plant growing over time. I can use research to identify insects. I can identify parts of a minibeast. I can notice changes I can observe my habitat over time.		I can identify different ways to keep myself healthy I can observe how germs spread over time. I can identify simple patterns. I can identify different emotions.
Working Scientifically	 <	Notice similarities and differences within the seasons. I can make sensible predictions about where animals may live. I can explain in simple terms how animals adapt to their habitat. I can ask questions to help research facts about an animal. I can apply my knowledge of animals through movement.		I can ask simple questions I can group using my observation skills. I can make simple predictions. I can draw pictures using my observation skills. I can make careful observations.		I can make careful observations. I can test out my ideas. I can record my findings. I can interpret my findings using a model. I can record using my chosen method.		I can record ways to keep myself healthy. I notice how germs are spread. I can predict what will happen to my body if I exercise. I can describe and draw different emotions.

			I can talk about my learning when creating my habitat.	
Ideas/WOW moments.	 look at different animals in different habitats. What types of animals live in Madagascar? Children to match the animal to where they can be found in the UK or around the world. Explore different animal habitats. Children to explore different habitats in their environment. Children to match the animals and make their own dioramas. Introduce the seasons, children to think about how weather may effect animals. Introduce term hibernation. Children to create a den to hibernate in, children explore animal insulation with ice cube experiment. Children to find out basic facts about animals. S. 	 Children's pre knowledge about what lives under the sea. Share Rainbow fish. Explore different habitats in the ocean. Children identify where different animals in the sea may live. Children to daw their fish and name parts of the fish. Children can try and classify fish drawn using basic features. Children to use a basic key to identify fish. Children explore floating and sinking, children carry out a simple test making predictions based on the different materials. Children to name different animals in the sea. Children to make observational drawings of animals who live in the sea. 	 Children to identify a caterpillar from photographs. Share the story of the hungry caterpillar. Look through the lifecycle of a caterpillar. Children to make their own lifecycles using models to explain the process. Reread the story and recap on key parts and the lifecycle. Focus on the foods that the caterpillar ate- can they recall them from the pictures? Do children know which of the foods/parts of the foods grow on plants? Taste testing of some of the foods. Look at how some foods are grown. Children to plant some of their own seeds. explore some science vocabulary around invertebrates, insects, minibeasts, arthropod, exoskeleton, segment. Children identify different minibeasts which belong to each group and see which ones they can find on a minibeast hunt. Children to identify shapes and patterns and sizes in minibeasts. Children to create their own minibeasts using their observations. Recap on lifecycles, recap on how animals change, look at adults and their young. Children to match the adult with its young. Children to make a minibeast home. 	 Children will explore what might keep them healthy. Children to explore pictures and discuss. Introduce three pillars of healthy living. Children to draw a poster outlining what keeps them healthy. Introduce germs and how some can be helpful and others can be harmful. Children conduct a germ experiment to show how quickly germs can spread, talk to children about a balanced diet and the different groups that we get food from. Some foods are healthy and others we must eat in moderation. Children to make their own balanced lunch and understand how exercise keeps them healthy. Children complete exercises in the playground to show how it effects the body. Children will learn about the importance of sleep and importance of our mental health and emotions. Children to explore emotions and how people may be feeling at different stages. It is important to look after their emotions and also each other.
Outcomes	Children can identify why habitats are important to animals Children can identify some animals from specific habitats Children understand hibernation and its purposes Children can discuss why some animals are suited for different habitats	Children will be able to identify animal habitats under the sea. -Group fish based on observations. -Children understand why things float or sink. -Children can make observations of plants and animals. -Children will be able to label basic fish anatomy	Can children identify the various stages of the life cycle of a caterpillar/butterfly? Can children identify foods that are grown and come from plants? Can children identify any of the things a plant needs to grow? Can children identify parts of an insect? Can children use relevant scientific language? Can children identify minibeast habitats and why they live there?	Children can identify ways to keep healthy. Children will understand why we need to stay clean Children will know how some germs can make them ill. Children will understand what a dentists role is. Children will understand why it is important to have a clean environment. Children will understand that they need to eat different foods. Children will understand why it is important to exercise. Children will understand the importance of sleep and can identify different emotions.

Content/	People who help us			Materials		<u>Seasons.</u>	
Knowledge	personal n	ge their own basic hygiene and eeds, including dressing, going et and understanding the	Use all their senses in hands-on exploration of natural materials.		observat	lore the world around me, making ions of colour. ticipate in discussions and offer my own ideas	
	importance of healthy food choices. ELG: Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.			e collections of materials with similar different properties. yout the differences between als and changes they notice. hew vocabulary	using sci I unders	entific words. tand some important processes and changes orld, including colour and how they change by	
		bout the lives of the people and their roles in society.					
Book/ Science Capital	Dentist	Firefighter Police		Pinocchio	TRI		
Scientific Enquiry		I can make observations over time I know why we must brush our teeth.		I can identify and sort different materials. I can identify and sort different materials.		I can identify each season. I can observe a tree over time through the seasons.	
		I understand the roles of people who help us.		I can compare how different materials react in water. I can compare how different materials		I can use ID charts to find out about seasons.	
		materials. I can look for similarities and differences in people's appearance when describing.	22	react in water.		I can identify each season and classify things in the correct season.	
		I can identify patterns and prints.				I can use the pictures from stories to help me learn about seasons.	
					0	I can identify and classify between different seasons	
Working Scientifically	U	I can test out ideas to find out new things		I can draw pictures or spot different materials in my environment.		I can draw pictures to explain what happens in each season.	
		I can explain why it is important to clean our teeth.		I can draw pictures or spot different materials in my environment.		I can make careful observations about the changes in the seasons.	
	(???)	I can ask questions about why firefighters need to stay fit and		I notice similarities and differences within the materials. I notice similarities and differences		I can explain what happens in each season	
		healthy.		within the materials.		I can make simple predictions about which seasons things belong in.	
					???	I can ask questions to help my understanding	

	٩	I can give detailed descriptions and record my results using pictures. I can use my observation skills to solve problems.			٢	I can evaluate my learning and demonstrate my knowledge of seasons.		
Ideas/WOW moments.	going to the we need to will conduct importance 2. Recap ex Children will brushing the 3. Children f what they d Why do fire healthy? Ch active and t their muscle assault cour 4. This lesso officer does oxygen and Children will observing cl 5. This lesso do in an em and what to should know around their locate them 6. Children f of their fing used to ider look closely and try to ide	on will focus on what a police b. Children will think about how oxygen keeps fires alive. Il be burning materials and losely. In focuses on what they should hergency in terms of who to call o say to the operator, children w their address and what is m in their environment to help	differer hunt to materia 2. Child differer based c 3. This l propert differer 4. Child	ren have the opportunity to identify nt materials. Children go on a material see if they can find the different als in their environment. ren will focus on the properties of nt materials. Children will sort materials on different properties. lesson will focus on how materials ties can change. Children to experience nt changes in materials. ren will be choosing appropriate als to make a boat for Pinocchio.	seasons. seasons season a 2. Recap on a tree this. Chi season d 3. Childr the ID sh you are each sea 4. This le weather 5. Childr enjoy th own stic Children	sson will focus on weather and typical for each season. Children to match the with the season. en will be looking closely at leaves and will e story stick man. Children will create their k man and decorate to fit the season. will guess what season is their favourite. sment of all learning and environmental		
Outcomes	help them? - Can childro they need to - Can childro cause a fire one?	en identify the people that can en identify ways to and why o keep their teeth clean? en identify what is needed to and what to do in the event of en discuss the role of the fire	- Can c differe - Can c differe - Can c experin	ildren identify different materials? hildren identify the properties of nt materials? hildren identify the purposes of nt materials? children begin to conduct simple ments? hildren use materials for a purpose?	-Children -Children describe they are -Children	n will be able to draw their own ideas about n environment and things that they like to do		

- Can children identify the skills/role of the police?	-Children will be able to describe the changes between each season and describe why some things	
- Can children use observational skills for a	belong in certain seasons.	
purpose?		