Cheadle Catholic Infant School Science Overview 2024-25

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|  | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
| NURSERY | The Colour Monster | The Gruffalo | Nursery Rhymes | Traditional Tales | Jasper’s Beanstalk | What the ladybird heard |
| Knowledge and Understanding of the World. | Knowing our similarities and differences.  | Looking at changes over time. | Growing –looking after plants & animals. |
| HOOK | Discussion of what we need to stay healthy and safe, through our daily routines, hand washing and healthy snacks. Weekly P.E lessons - notice changes that happen in the body.Explore the differences between some animals and us. Look at pictures of themselves as babies and talk about how their needs have changed, discussing families.Use of senses; feeling dough or listening to sounds in the environment, such as sirens or farm animals.Dentist visit- we use this to talk about and show interest in different occupations.Autumn walk- collect materials and explore their similarities and differences. | Winter Walk.Observation and manipulation of objects and materials to identify differences and similarities. Play opportunities in our mud kitchen - access to a range of natural and manmade resources  Questions about why things happen and how things work.Use Incy Wincy spider to open up conversations about rain and different geographical water features.Play in our construction area: activities such as increasing the incline of a slope to observe how fast a vehicle travels or opening a mechanical toy to see how it works. We talk about different forces.Questioning and observation during continuous provision in areas like the sand or water tray- looking at floating and sinking.Spring walk- looking at the weather and also investigate shadows. | Growing - Living eggs- Watching chicks develop and the life cycle of a chick.Observations of animals and plants, explain why some things occur and talk about changes. Exploring life cycles by observing butterfly houses and watching chicks hatch. A trip to the farm to explore animals at close quarters.Explore creatures, people, plants and objects in their natural environments. We grow plants and vegetables, exploring what they need to grow. Take photos of seeds that they grow and leave them available for the children to order and revisit independently. Look at the life cycle of a plant.Mini-beast hunt. Look for bugs over the course of a week. Look at life cycle of a butterfly and use words to describe the stages e.g. first it was an egg, then it was a caterpillar, now it is a butterfly. Look at the habitat of minibeasts, how they are different for animals and how our behaviour can change the environment.Melting Experiment.Summer walk- looking at the weather and temperature. |
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| RECEPTION | All about Me | Seasons/Celebrations | Superheroes | Space | Minibeasts/Growing | Big Wide World  |
| HOOK | Similarities and differences in relation to family and friends.My body and its body parts.Changes since birth (baby photos).Visit from Ann Jepson- Dental Nurse.Introduction discussion of plants, animals and natural objects.The natural world – explore the world around them.Observe the effects of exercise on their bodies.Learn about healthy diets.Healthy foods – not healthy foods.Talk about some of the things which they have observed in this topic. | Seasons and seasonal change.Describe the world around us.Caring for the environment.Walk to Bruntwood Park – looking at the Season Autumn.The natural world – observation of changes that occur.Explore the natural world around them.Make observations and drawing pictures of plants and animals.Memory boxes- recap on what they have learnt in this topic. | Pushing and pulling forces.Talk about why things happen and how they work.Investigate magnets.Exploring technology.Which materials arebest for making a boat.Float/sink test.Exploring ways of travel using different parts of the body.Investigate the changes and in the natural world.Winter walk. | Investigate Space- discovering and naming the planets.Look at, learn the names and describe planets.Visit of the Wonder dome- being in Space experience.Children use technology to gain information.Making space rockets and planets.Our planet Earth and the sun.Can we travel into space?Comparison- could we live on the moon? Describethe moon. Look closely at the similarities, differences, patterns and change. | Research Mini beast facts.Mini beast Hunt in the wildlife area and Bruntwood Park.Identifying mini beasts and classifying them in groups.Looking at habitats.Life cycle of a frog.Growing Broad beansand learning how to plant a seed.Identifying what a plant needs to grow.The natural world – careful observation and understanding changes.Spring walk- BruntwoodPark. | The natural world – investigate contrasting environments.To know some similarities and differences in contrasting environments, e.g. weather.Questions and finding answers about the world in which we live.Safety when tackling new challenges and managing risks.Re-cap on the importance of exercise, eating, sleeping, hygiene and good health. Seaside- habitats Who lives in the Ocean? Summer sun safety.Summer walk – Bruntwood Park. |
| Text/Person | Growth, My body, Teeth.Dental nurse. | Bruntwood Park, All the different seasons books. | Super Tato series. | Wonder dome Experience. Space books.Scientists- Mae Jemison, Katherine Johnson | Books about plants. Mad about Mini beasts and other non-fiction texts. | Information texts about the world. |
| Vocab | Healthy/ unhealthy foods. Oral hygiene/teeth. Body/body parts.Baby, toddler, child, adult | Seasons, autumn, winter, spring, summer, weather. | Push pull, materials, magnet, magneticFloat, sink, waterproof, not waterproof. | Moon, stars, orbit, space, sun, planets, Earth. | Grow, stem, leaf, root, soil, sunlight, mini beast, lifecycle, change. | Environment, sea, sun, seasons, weather, animals. |
| YEAR 1 | **AUTUMN 1**MY BODY AND ITS SENSESTERRIFIC TREESSeasonal changes: Autumn | **AUTUMN 2**MATERIALSSeasonal changes: Winter | **SPRING 1**POLAR PLACESSeasonal changes: Winter to Autumn | **SPRING 2**ON SAFARI (ANIMALS)Seasonal changes:Spring | **SUMMER 1**PLANTS WHERE WE LIVESeasonal changes:Spring to Winter | **SUMMER 2**SEASIDE AND SUMMERSeasonal changes: SummerThe four seasons |
| HOOK | A recap to our body parts Labelling body partsWhat are the 5 senses?How we use our senses?Senses experiment- fruitsParts of a treeLearning the names of common British treesKnowing what deciduous and evergreen means- sortingExplore world around us- observation and notice changes.Seasons overview lesson,How has the season changed from Summer?Seasons – looking at AutumnSenses walk/Autumn Walk to Bruntwood ParkScientist: Linda Brown Buck | Name a selection of materialsMaterials and matching them to objectsDescribe simple physical properties of materialsTesting materials- absorbent and not absorbentMaterial experiment – Prediction. What are the best materials for a dog bed?Classify materials bytheir properties- grouping and sortingChange of seasons – winter – discuss changes in clothes, daylight, trees and weather.Scientist: Chester Greenwood | Research the Polar regionsVisit from a polar explorer-expedition talkSnow gloves investigation- Whichglove is the warmest and waterproof?Explore mammals-Polar animalsIdentify & name Polar animals that are carnivore, herbivore & omnivoreCategorise animals into groups: carnivore, herbivore and omnivoreWhat is Camouflage?Re-cap on TreesSeasons- WinterWinter walk – Bruntwood ParkObservation and compare to AutumnScientists/ Explorers: Robert Scott/ Roald Amundsen | Identify & name a variety of animals including amphibians, reptiles, mammals, birds and their featuresDescribe & compare the structure of a variety of animalsWhich Birds live in our local area?Conduct a bird watchHow are birds different to us?Compare ourselves to minibeasts who are invertebratesSeason- SpringScientist: David Attenborough | Grow sunflowers from seedsWhat equipment do we need to grow a seed?Sequence of plantingStructure of plantsRecap what does aplant need to grow healthy?How to plant a seedPlant hunt – Whichplants grow in our local area?Identify and name common garden andwild plantsIdentify and name leaves on treesSpring walk –Bruntwood ParkObservation and compare to WinterScientist: Waangari Maathai | Children become marine biologists Hands on looking at the structure of fishWhat would you find in a rockpool?Identify seashore animalsReduce, re-use, recycle- looking after our planetObservation- lifecycle of a butterfly – growing a caterpillarInto a butterflyScience week- scientists:Rachel CarsonPerform a skittles colourchange investigation toobserve over time(end of year experiment)Seasons- SummerSummer walk- SeasonsObservation and compare to SpringScientist: Rachel Carson |
| Text/ Person/Place | Non-fiction texts- Bodies and sensesSeasons books, treesBruntwood Park Linda Brown Buck | Materials- objects and non-fiction booksSchool groundsChester Greenwood | Polar explorer visitor Explorers(above)Polar animals and Arctic/Antarctic non-fiction textsBruntwood Park | Bird watchingSchool groundsDifferent categories of animals booksDavid Attenborough | Grow sunflowers from seeds, Plants and flower books,Bruntwood ParkWaangari Maathai | Seaside animals and fishSummer non fiction textsSchool groundsRachel Carson |
| Vocab | Body Parts - Head, body, mouth, teeth, leg, neck, shoulder, hand, leg, foot, thumb, knee, toes, elbow. Skeleton, bones, muscle and skin.Senses – touch, see, smell, taste, hear, eyes, sight, nose, ear, tongue, hand, fingers.Trees - Roots, trunk, branches, leaves, bark, deciduous and evergreen. Seasons- Autumn | Object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, card/cardboard, rubber, wool, clay, hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, not see-through, opaque, transparent. Seasons- Winter | Herbivore, omnivore, carnivore, mammal, adventurer, Antarctic, Arctic, clothes, cold, explorer, freeze, frozen, herbivore, ice, icebergs, North Pole, South Pole, penguin, polar bear, whale, arctic fox, sea lion, seal, snow, fur, waterproof, warm, weather.Seasons- Autumn to Winter comparison | Head, body, eyes, ears, mouth, teeth, legs, tail,Names of animals experienced first-hand from visit, vertebrates, invertebrates,Structure of animal body parts, Amphibians, birds, fish, mammals, reptiles, carnivores, herbivore, omnivore, camouflage.Seasons- Spring | Plants, root, seed, bulb, flower, stem, leaves, wild, plants, garden plants, sunflower, grow, sunlight, water, garden and wild.Leaves, trunk, branches, bark, deciduous and evergreen trees.Seasons- Spring to Winter comparison | Seaside animals, fish, fin, scales, gills, rock pool, crab, habitat, limpet, mussel, periwinkle, sea snail, pollution, recycle, rubbish, beach, sand, sea, shell.  Summer, sunglasses, cooling, frozen, protect. Seasons- SummerAll four seasons comparison |
| Year 2 | **AUTUMN 1** YOUNG GARDENERS(PLANTS) | **AUTUMN 2**HEALTHY ME  | **SPRING 1**SURVIVAL ADVENTURE | **SPRING 2** USES OF MATERIALS  | **SUMMER 1** HAPPY HABITATS | **SUMMER 2**FOOD CHAINS |
| HOOK | What is growing in our school grounds- identification and comparing of plants and treesLifecycle of a dandelionWhat do seeds need for germination – investigation of what seeds/beans need to grow healthy – changing variablesExplanation of the lifecycle ofa seed using key vocabularyWeekly measurement of seedlingsObservations and evaluationsof growing investigationGermination race- bulbs and seedsGreenhouses/AllotmentsBulb planting (In Forest School) | What do we need to do to stay healthy lesson? Bread hygiene experiment- germs and washing handsFitness in the playground – Why is exercise good for me?What exercise does to different body partsEggs in drinks experiment- fair test, predict, results, evaluateSnacking – record data of class favourite snacks.Gathering information and using it to answer questionsChildren create theirown healthy snack bowl using a selection of different fruits and vegetables. | Children find out about and describe the basic needs of animals, including humans, for survival (water, food and air)Where are basic needs found?Explore and compare the differences between things that are living, dead and things that have never lived.Pupils will notice that animals, including humans, have offspring which grow into adultsLife cycle of a birdGrowth in humansWildlife survey- collecting and recording data | Sorting by materials,linked to recycling.Material properties-Vocabulary and property definition.Comparing Suitability- silly uses of materials.Investigate materialsby squashing, bending,stretching and twisting. Design a Tent for a shelter that needs tobe waterproof and strong.Make, test and evaluateinvestigation. | What is a habitat?Learn about the rainforests. Habitats comparisons-Create a habitats information posterExtreme habitatsHabitats of the UK- names of local habitats e.g. pond, woodland etc.Exploring micro-habitat e.g. under logs, in bushes etc.Observe outside for living things- Why do animals live there?Match animals to the correct habitat. Woodlouse live investigation plan and experiment | Animal food chains including humansChildren will identify different types of animal depending on their dietSort animals into categories by what they eatChildren to explore how animals eat, e.g beakLearn what a food chain isChildren to explain what a food chain is giving examples of producer and consumerCreate their own food chain paper chains. Label the producers and the consumers.Classification investigation: Whose poo?  |
| Person/ Place | School groundsGeorge Washington Carver  | PlaygroundLouis Pasteur | School groundsCharles Darwin | Classroom Charles Macintosh  | Bruntwood Park Jane Goodall  | Bruntwood ParkScientists related to science week |
| Vocab | Seed, bulb, grow, flower, plant, fruit, vegetable, germinate,tree, sow, seedling, harvest, healthy, conditions, observe, describe, identify, investigate, life cycle. | Health, healthy diet, habits, basic needs, hygiene, germs, grow, growth, exercise, muscle, nutrition, survive, heart, fitness, measure, question, observe, predict, fair test, evaluate. | Alive, living, not alive, dead, never lived, offspring, life cycle, young, child, baby, adult, basic needs, survive, survival, reproduce, healthy, breathe, human, animal, Compare, explain, observe and classify, explore, identify, describe, similarities, differences.  | Names of materials – wood, metal, plastic, glass, brick, rock, paper, cardboard.Properties of materials – as for Year 1 plus opaque, transparent, translucent, reflective, non-reflective, flexible, rigid, waterproof, not waterproof.Shape, push/pushing,pull/push, twist/twisting, squash/squashing, bend/bending, stretch/stretching. | Habitat, micro habitat ocean, forest, desertRainforest, woodland. sun, grass, leaf, litter, stony path, under bushes, shelter, sea shore, basic needs, breathe, rainforest, conditions, Hot/warm/coldDry/damp/wetBright/shade/dark, local environment, aim, plan, method, results. | Food, food chain, plant, animal, prey, predator, carnivore, herbivore, omnivore, diets, producer, consumer, habitat, basic needs, living things, local environment, classify.  |