**St. Edward’s Catholic Junior School Science Curriculum 2023/24**

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| Year groups | Advent 1 | Advent 2 | Lent 1 | Lent 2 | Pentecost 1 | Pentecost 2 |
| 3 | Rocks/ Fossils | Forces/magnets | Light | PlantsPlants Working Scientifically | AnimalsIncluding humans | Working Scientifically |
| 4 | Sound | Electricity | States of matter | States of matter | All Living things  | Animals including humans |
| 5 | Properties and Changes of Materials | Properties and Changes of Materials | Earth and Space | Forces and mechanisms | All Living things | Animals including humans |
| 6 | All Living things | Light | Electricity | Animals including humans | Evolution and inheritance | Animals(keeping healthy) Working Scientifically |

**Vocabulary**



Vocabulary

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| Year groups | Advent 1 | Advent 2 | Lent 1 | Lent 2 | Pentecost 1 | Pentecost 2 |
| 3 | **Rocks/ Fossils**RockFossilsfossilisation appearance physical properties mineral elements permeable impermeable igneous sedimentary metamorphic | **Forces/magnets**force contact force non-contact force magnet/magnetic attract repel magnetic poles magnetic field North South push pull motion friction surface | **Light**light source see dark reflect/reflective bounce natural/artificial Sun shadow blocked solid torch lamp sunlight dangerous opaque translucent transparent | **Plants**Plants Working Scientificallyflower, seed, leaf, stem/ trunk roots, petal, pollen life cycle dispersal pollination germination nutrients absorb air, light, water, soil oxygen carbon dioxide seed formation seed dispersal seed-bearing flowering non-flowering MRS GREN (movement, respiration, sensitivity, growth, reproduction, excretion, nutrition.) | **Animals**Including humansskeleton muscles tendons contract relax bones skull spine joints endoskeleton exoskeleton hydrostatic skeleton vertebrate invertebrate fish amphibians reptiles birds mammals human impact | **Working Scientifically**experiment variables prediction observation accuracy/ accurate results diagram conclusion relevant questions scientific enquiry comparative and fair test systematic measurements gather record classify present differences similarities changes evidence improve secondary sources guides keys construct interpret keys bar charts tablesscatter gram/scatter graphsurface areaproportions |
| 4 | **Sound**sound wave vibrate vibration vibrating frequency air particles inner ear loud/louder insulate insulation reflect reflected sound (echo) outer ear ear drum hear hearing sound volume (amplitude) pitch faint/fainter | **Electricity**electricity energy appliances electrical circuit circuit symbol cell battery wire bulb switch buzzer plug danger electrical safety sign conductors insulators open/closed circuit | **States of matter**solid solidify melt freeze liquid evaporate evaporation condense condensation gas heat/heated cool/cooled water vapour water cycle changing state melting point boiling point matter particle shape volume | **States of matter – The Water Cycle**processesevaporationcondensationPrecipitationRun offCollectionInfiltration | **All Living things**HabitatWoodlandSavannahMarine/OceanRainforestDesertEnvironmental pollutionFood chainCarnivoreHerbivoreOmnivorePrey PredatorConsumerProducerEnergy transferClassificationVertebratesInvertebratesBird, mammal. Reptile, amphibian, fish | **Animals including humans**digestion mouth teeth incisors canines molars tongue saliva oesophagus transports stomach acid enzymes vitamins small intestine large intestine floss brush sun producers prey predators carnivore herbivore omnivore |
| 5 | **Properties of Materials**properties hardness solubility transparency electrical conductor thermal conductor response to magnetsabsorbencyflexibilitydurabilitystrength | **Changes of Materials**dissolve solution separate/separating solids/liquids/gases evaporating reversible changes dissolving mixing filtering sieving melting irreversible burning rusting magnetism insoluble | **Earth and Space**Earth Sun Moon/moons planet celestial body solar system rotate day/ night orbit axis spherical heliocentric geocentric hemisphere season tilt gravity air resistance water resistance friction force surface accelerate decelerate brake mechanism pulley gear mass weight | **Forces and mechanisms**gravity air resistancethrust water resistance friction force surface accelerates decelerate brake mechanism pulley lever gear mass weightpush pull | **All Living things**ClassificationVertebrates/InvertebratesLife cyclesSexual reproductionAsexual reproductionGerminationGrowthPollinationFertilisationSeed dispersalpropagation | **Animals including humans**puberty life cycle gestation growth reproduces foetus baby fertilisation toddler child teenager adult old age life expectancy adolescence adulthood early adulthood middle adulthood late adulthood childhood sexual/asexualline graphscattergram |
| 6 | **All Living things**Vertebrates, fish, amphibian, reptiles, birds, mammals, invertebrates, insects, spiders, snails, worms, flowering and non-flowering, micro-organisms, microbe, germ, antibiotics, vaccine, decay/rot, fungi, mould, hygiene, yeast, pasteurized, bacteria | **Light**light rays light source absorb travels straight reflect reflection object shadows mirrors periscope rainbow filters opaque translucent transparent bounce retina cornea optic nerve iris lens | **Electricity**voltage brightness volume switches series circuit electrical safety circuit diagram switch bulb buzzer motor terminal current resistance electrons particles | **Animals including humans**internal organs heart blood red/white blood cell capillaries veins arteries valve oxygen carbon dioxide lungs brain liver stomach circulatory system classify/compare classification microorganisms organism domain kingdom phylum class order family genus species characteristics | **Evolution and inheritance**evolution adaption characteristics inherited traits adaptive traits natural selection inheritance DNA/genes variation species parent offspring fossil habitat fossilisation appearance physical properties mineral elements permeable impermeable igneous sedimentary metamorphic | **Animals****(keeping healthy) Working Scientifically**Pulse, BPMcircuitsHeart rate, circulationDrugs, smoking, alcohol, prescribed, illegalNutrients, carbohydrates, protein, vegetables, fruit, fibre, water, hydration, dehydration, diabetes, heart disease, heart attack, stroke, scattergram |