St John the Evangelist Science Curriculum End Points

Year Group	Scientific Thread	Curriculum End Points
EYFS	Complex Systems	Observe animals and plants in the natural world. Notice similarities and differences between living things.
	Energy	Observe changes in the natural world (seasons, weather). Observe natural changes linked to energy (sunlight, warmth).
	The Earth	Notice differences between environments. Observe seasonal changes.
	Particle Theory	Explore simple changes of state (melting, freezing).
	Forces	Explore pushes, pulls and movement in play.
Year 1	Complex Systems	Identify and name common animals. Describe and compare animal body structures. Identify basic parts of the human body.
	Energy	Identify animals such as carnivores, herbivores and omnivores (energy sources). Recognise light sources and simple electrical appliances.
	The Earth	Recognise day and night.
	Particle Theory	Distinguish between objects and materials. Identify and describe everyday materials.
	Forces	Recognise simple forces (push/pull).
Year 2	Complex Systems	Describe the importance of exercise, hygiene and diet. Compare living things in habitats and simple food chains. Describe basic plant needs and growth.
	Energy	Understand that animals get energy from food. Describe simple food chains. Recognise that electricity and light help us in daily life.
	The Earth	Observe weather patterns and seasonal changes. Compare habitats.
	Particle Theory	Group materials by properties and suitability. Observe heating and cooling (water cycle links).
	Forces	Identify magnetic and non-magnetic materials.
Year 3	Complex Systems	Identify and describe functions of plant parts. Describe the human digestive system.

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		Recognise skeletons and muscles in animals and humans.
	Energy	Understand that plants make their own food and transport nutrients. Describe how the digestive system extracts energy. Explore light, reflection and shadows. Explore sound: pitch, volume and vibrations.
	The Earth	Compare and group rocks; describe fossil and soil formation.
	Particle Theory	Recognise solids, liquids and gases. Describe changes of state.
	Forces	Explore magnets and magnetic forces.
Year 4	Complex Systems	Classify living things in different environments. Describe the circulatory and respiratory systems. Understand nutrition and lifestyle impacts.
	Energy	Explain how the circulatory system transports oxygen and nutrients. Explore how sound travels and dissipates.
	The Earth	Understand how environments change and can pose dangers.
	Particle Theory	Understand evaporation and condensation in the water cycle.
	Forces	Investigate contact and non-contact forces. Explore air resistance, water resistance and friction. Use levers, pulleys and gears.
Year 5	Complex Systems	Describe life cycles of plants and animals. Explain reproduction (sexual and asexual). Describe human development from embryo to old age.
	Energy	Understand energy transfer in life cycles and reproduction. Explain how light travels and how we see. Investigate electrical circuits and components.
	The Earth	Describe the movement of Earth and planets relative to the Sun. Describe the movement of the Moon relative to Earth.
	Particle Theory	Investigate properties of materials (solubility, conductivity, transparency). Explore reversible and irreversible changes. Separate mixtures using scientific processes.
	Forces	Understand gravity as a force. Investigate resistance forces in more depth.

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Year 6	Complex Systems	Classify living things using standard systems. Explain the circulatory system in detail. Understand the impact of drugs, exercise and lifestyle. Explain evolution, inheritance, variation and adaptation.
	Energy	Explain how inherited traits and adaptations support survival (energy efficiency). Apply energy transfer ideas across light, sound, electricity and space.
	The Earth	Explain Earth's place in the solar system using scientific models. Understand gravity as a force acting within Earth's system.
	Particle Theory	Apply particle theory to explain chemical changes.
	Forces	Apply force concepts to explain planetary motion and physical phenomena.