Science – Animals Including Humans – Year 5 and Year 6

Year 5 NC - pupils should be taught to:	How we do this in Year 5	Year 5 Vocabulary	Year 6 NC - pupils should be taught to:	How we do this in Year 6	Year 6 Vocabulary
Describe the changes as humans develop to old age. <u>How working scientifically can be met</u> • compare graph types • choose how best to and report my findings • compare two datasets • analyse findings • create bar and line graphs to record data (life expectancy v gestation period)	Explore types of reproduction and stages of human growth and development (timeline) – prenatal, adolescence, early adulthood, middle adulthood, late adulthood (old age) – and examine the changes that occur. Demonstrate understanding of how babies grow in height and weight. Describe the main changes that occur during puberty and give reasons why changes occur. Analyse the similarities and differences between how boys and girls experience puberty. Recap classification of animal types. Compare gestation period of different types of animals and spot any patterns in the gestation periods of different animals. Investigate whether animals with longer life expectancy have longer	Egg, sperm, fetus, baby, toddler, child, teenager, adult, old age, development, growth, human, infancy, childhood, adulthood, adolescence, prenatal. baby, growth, height, mass, puberty, changes, hips, facial hair, body hair, genitals, muscular development, menstruation, old age, human, development, growth rate, decrease, changes, compare. gestation, growth, fetus, animals, vertebrates, fish, amphibians, reptiles, birds, mammals, invertebrates, protozoa, coelenterates, flatworms, annelid worms, echinoderms, molluscs, arthropods, arachnids, crustaceans, insects, myriapods, life expectancy,	Identify and name the main parts of the human circulatory system, and explain the functions of the heart, blood vessels, blood. <u>How working scientifically can be met</u> • label parts on diagram	Recall of prior knowledge from Year 3 and 4 Animals Including Humans Units – systems in the body: skeletal, muscular and digestive – parts and functions. Compare circulatory systems of human, fish and bee. Why are these systems important? Label heart and lung on diagram, exploring key functions of the main parts. Explain the process by describe the functions of the heart, blood vessels and blood by investigating how the different parts of the circulatory system work.	Circulatory, circulation, heart, lungs, blood vessels, aorta, atrium, ventricle, artery, vein, pulmonary, superior vena cava, inferior, pulmonic, aortic valve, trachea, bronchus, bronchiole, diaphragms, air sacs, alveoli, capillary, intercostal muscles, ribs.

	gestation periods. Explore and explain what changes occur to human beings as they get older. Distinguish between facts and myths about old age. Revisit the human life cycle – discuss when it ends – link to cell regeneration and immune system.	gestation, animals, variable, association, causal relationship, correlation, positive, negative old age, human, development, growth rate, decrease, changes, compare.			
			Describe the ways in which nutrients and water are transported within animals, including humans. <u>How working scientifically can be met</u> • scientific diagrams	Explain the process of the human digestive system – gums to bums practical experiment. Look at the types of nutrients with the job that it does. Examine how nutriments are broken down – closely look at the small intestine, large intestine, rectum and the role of water. Explore the role of the kidney to expel waste from blood – veins and filtration.	Nutrients, nutrition, water, system, circulatory, digestive, skeletal, muscular, blood, blood vessels, heart, lungs, stomach, gall bladder, liver, small intestine, large intestine, pancreas, liver, kidneys, rectum, bladder.
			Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.	Explore what a healthy lifestyle is and the impact of a healthy diet on body/immune system. Explore two main types of exercise – muscle	Healthy, lifestyle, diet, exercise, nutrition, nutrients, food, water, cells, body, human, organs, vitamins, minerals, protein, fats,

			<u>How working scientifically can be met</u> • decide on the most appropriate type of investigation • explain which variables will be controlled • write a report about my findings that includes a conclusion • report the degree of trust I have in my results	strengthening and bone strengthening linking it to heart rate. Measure heart beat by measuring pulse. Carry out an exercise investigation – focus on impact of exercise on body.	carbohydrates, water, fibre.