Year 6 Biological Science: Animals Including Humans (Human Life Cycle) Unit 4

Scientific Model (KS2):

Big Picture Model

- Ensure children understand the purpose of a life cycle and why many organisms need to change or develop in order to facilitate it before you get teach the detail of the life cycle.

Scientific investigations:

- Observing Changes over Time
- Looking for Naturally- Occurring Patterns and Relationships

Scientists:

- Patrick Steptoe and Robert Edwards introduced IVF.
- Midwife - supports pregnant women and their babies before, during and after, childbirth.
- School nurse - works with schools and families to improve the health and wellbeing of children and young people (link to school nurse visit).

Scientific Skills Applied:

ASK
- To ask different kinds of questions
- To identify appropriate secondary sources to research ideas and ask questions

BREAKDOWN
- To plan different enquiries to answer questions

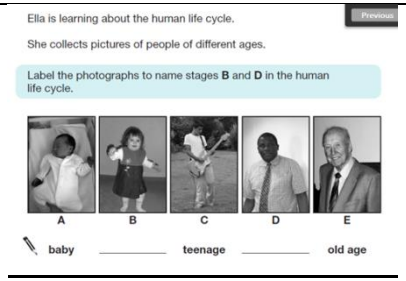
CAPTURE
- To decide how to record data

DESCRIBE
- To use varied ways to present data
- To explain how scientific ideas develop over time
- To identify and comment, using appropriate language, on patterns they notice
- To use relevant scientific language and illustrations in reports and when drawing conclusions

Prior Learning:

- notice that animals, including humans, have offspring which grow into adults. (Y2 - Animals, including humans)
- human body is supported, and organs protected by the skeletal system (Y3)
- humans have two sets of teeth throughout their lifetime (Y4)

Curriculum	Learning Intention	Knowledge and Key Vocabulary
Making links to learning and discuss the model (if needed) Big Picture Model first introduced in Year 3: Ensure children understand the purpose of a life cycle and why many organisms need to change or develop in order to facilitate it before you get teach the detail of the life cycle. Notes and guidance (non-statutory): pupils draw a timeline to indicate stages in the growth and development of humans	How do you humans develop from birth to old age? • Recap skeleton (year 3) link to human from baby to adult and teeth and the digestive system (year 4) linking to 2 sets of adult teeth in human lifetime and development of feeding from milk to solids. • Describe the 6 stages of human development. • Describe stages of growth. • Identify the changes that take place in old age. • Distinguish between facts and myths about old age. • Order the stages of human development. How do babies change?	**Knowledge:** - Name the 6 stages of human development. **Vocabulary:** - lifecycle baby, toddler, child, teenager, adult, old age, development, growth, human, infancy, childhood, - adulthood, adolescence, data, tables, bar graphs, line graphs, present, findings, information, baby, growth, height, mass

	• Explain how babies grow and develop in their first years. • Demonstrate understanding of how babies grow in height. • Demonstrate understanding of how babies grow in height and weight. • Compare graph types and select which is most appropriate for the data. • Compare graph types to present complex data and explain which is most appropriate.	
Knowledge and skills through investigations Pupils should be taught to: - describe the life process of reproduction in humans Notes and guidance (non-statutory): - learn about the changes experienced in puberty - research the gestation periods of other animals and comparing them with humans; by finding out and recording the length and mass of a baby as it grows - describe the changes as humans develop to old age. - how babies are made (sexual intercourse; conception and pregnancy; assisted fertility; multiple births; giving consent; decisions to be made before deciding to have a baby) - how babies are born (gestation; three trimesters of pregnancy; childbirth)	How does my body change when I become an adult? • Describe and explain the main changes that occur during puberty. • Give reasons why changes occur during puberty. • Compare the changes that take place to boys and girls during puberty. How are babies conceived? • Name human reproductive parts. • Know the process of conception. • Explain decisions to be made before having a baby. How are babies born? • Explain how babies are born.	**Knowledge:** - Name 4 changes for boys and girls during puberty. - Know and recall scientific vocabulary for human reproductive parts. - Explain conception - Know the gestation of a human baby **Vocabulary:** - viviparous; fertilisation; egg cell; sperm cell; zygote; foetus; baby; infant; toddler; child; adolescent; teenager; young adult; mature adult; old age; elderly; gestation; life cycle; species; puberty; hormones; pituitary gland; testosterone; oestrogen; facial hair; body hair; broad shoulders; narrow waist; breasts; vagina; womb; placenta; uterus; ovary; fallopian tube; period; penis; testicles
Application and Assessment Activity		

Thinking Deeper: **Gestation Periods:** Report findings from enquiries, including oral and written explanations of results in the context of the gestation period for animals.
Links to other subjects:
• Subject Specific links – - PSHE- relationships and beginning a family - Maths- display data in a line graph
• Personal Development – to keep clean and healthy through puberty and body changes.
• SMSC – understand the consequences of intercourse and that it can result in a pregnancy.
• Cultural Capital – visit from school nurse to deliver puberty talk.
• Careers – nurse, midwife, dietitian.
• British Values – rules of the law for consensual intercourse.
• Equality – respect the differences between people who are classified as families and their equal right to have children.