KS3 Biology – Reproduction – Learning Objectives

	Beginning	Developing	Secure	Embedding	Extending	Excelling
Reproduction In Plants	-	Identify the main organs of a flowering plant.	Explain the differences between sexual and asexual reproduction. Explain the fertilisation process in plants, and the steps that take place after fertilisation. Compare and contrast the different types of pollination. Explain what happens during dispersal.			-
Reproductive Organs	Describe the roles of the male and female reproductive systems (as a whole). Name the male and female sex cells (gametes).	Identify and locate some parts of the male and female reproductive systems.	Explain how gametes are adapted to their functions. Identify and locate all major parts of the male and female reproductive systems, and describe their roles in the reproduction process; this includes the production of gametes.		-	-
Fertilisation	Recall where fertilisation occurs, and where the foetus develops.	Describe the stages that take place from intercourse to fertilisation.	Explain what happens when an ovum is fertilised by a sperm, and how this develops into an embryo. Explain, in terms of genes, why babies inherit features from both parents, and how the sex of a baby is determined.		Explain what happens when identical and non-identical twins are made.	-
Pregnancy and Birth	-	Describe the different stages in the development of the foetus. Name the substances that pass between the mother and foetus, and how this is done; explain the roles of the placenta, umbilical cord and amniotic sac/fluid. Recall the different stages of childbirth, and describe how the contraction of muscles is important to allow the baby to leave the mother. Discuss and compare the gestation periods of other animals.			Describe what happens when there are difficulties with childbirth (eg. Caesarean, breach)	-
Puberty	Explain the differences between puberty and adolescence. Identify some of the changes that take place during puberty.		Explain the changes that take place in boys and girls during puberty, in terms of hormones. Explain what happens during the menstrual cycle, and explain why this happens. Link the menstrual cycle to fertility, identifying when fertilisation is most likely to occur.		-	-
Hormones and Fertility	-	Discuss infertility, and the possible reasons for this.	Describe the in-vitro fertilisation process, and discuss the circumstances under which it may be used. Discuss the advantages, disadvantages and ethical issues of external / artificial fertilisation and 'designer babies'.			-

** Objectives covering more than one grade are assessed based on the level of scientific detail and language used by the learner.*