B3 Topic 2 Revision tracker

BIOLOGY

Learning objectives I can:	I can do this very well	I can do this quite well	I need to do more work on this
2.1 Describe that sexual reproduction requires the finding and selection of a suitable mate, and can involve courtship behaviours that advertise an individual's quality			
2.2 Describe how animals have different mating techniques, including: **a** mate for life			
b several mates over a lifetime			
c a mate for a breeding season			
d several mates over one breeding season			
2.3 Describe that some animals, in particular birds and mammals, have developed special behaviours for rearing their young			
2.4 Demonstrate an understanding of why parental care can be a successful evolutionary strategy, including: **a** increased chance of survival of offspring			
b increased chance of parental genes being passed on by the offspring			
2.5 Explain how, within the animal kingdom, parental care may involve risks to the parents			
HSW 5 Plan to test a scientific idea, answer a scientific question, or solve a scientific problem by choosing appropriate resources			
2.6 Describe the different behaviours exhibited by animals, including: **a** innate behaviour			
b imprinting			
c habituation			
d classical conditioning			
e operant conditioning			
2.12 Demonstrate an understanding of the work of ethologists, including: **a** Tinbergen, innate behaviour in gulls			
b Lorenz, imprinting in geese			
HSW 11 Present information, develop an argument and draw a conclusion, using scientific, technical and mathematical language, and ICT tools			
2.8 Investigate animal behaviour using choice chambers.			
2.7 Explain that humans can make use of conditioning when training captive animals for specific purposes, including: **a** sniffer dogs			
b police horses			
c dolphins			
HSW 3 Describe how phenomena are explained using scientific theories and ideas			
2.9 Describe how some animal behaviour requires communication			
2.10 Explain how animals use a variety of types of signals to communicate, including: **a** sound signals			
b chemical signals (pheromones)			
c visual signals (gestures, body language, facial expression)			
2.12 Demonstrate an understanding of the work of ethologists, including: **a** Fossey, social behaviour in gorillas			
b Goodall, social behaviour in chimpanzees			
HSW 1 Explain how scientific data is collected and analysed			
2.11 Describe how plants can communicate using			

chemicals, including, **a** with animals (particularly insects)			
b with other plants			
H 2.13 Demonstrate an understanding of how plants and animals have co-evolved, including: **a** flower structure and insect behaviour in pollination			
b plant defence and animal metabolism			
HSW 2 Describe the importance of creative thought in the development of hypotheses and theories			
2.14 Describe the evidence for human evolution, based on fossils, including: **a** Ardi from 4.4 million years ago			
b Lucy from 3.2 million years ago			
c Leakey's discovery of fossils from 1.6 million years ago			
2.15 Describe the evidence for human evolution based on stone tools, including: **a** the development of stone tools over time			
b how these can be dated from their environment			
HSW 4 Identify questions that science cannot currently answer, and explain why these questions cannot be answered			
H 2.16 Describe why mitochondrial DNA provides evidence for the African Eve theory for non-Africans, including: **a** its inheritance down the family line			
b its high mutation rate			
H 2.17 Demonstrate an understanding of why mitochondrial DNA may be more useful than nuclear DNA for tracking human migration and evolution, including: **a** mitochondrial DNA is less likely to have degraded over time			
b mitochondrial DNA is more abundant			
2.18 Demonstrate an understanding of the impact of climate change on human behaviour, including: **a** the effect of Ice Ages			
b human migration			
HSW 12 Describe the benefits, drawbacks and risks of using new scientific and technological developments			