

KNTV: PHILOSOPHY

CHARLES DARWIN

Programme-related questions (and answers)

1. Where did Darwin come from, and when was he alive?
(*Charles Darwin was born in Shrewsbury in the UK, and lived from 1809-1882.*)
2. What was the title of Darwin's famous book?
(*The Origin of Species, or more accurately, On the Origin of Species by Means of Natural Selection.*)
3. What theories did Darwin write about in this book?
(*'Evolution', which occurs through 'natural selection', which in turn depends on the 'survival of the fittest'.*)
4. What kinds of creatures are the most likely to survive down the generations?
(*The best hunters, strongest fighters and the most cunning are the least likely to starve.*)
5. How does the polar bear demonstrate the theory of evolution?
(*Polar bears were once brown, but gradually they adapted to their snowy surroundings by growing white coats. This made them less visible to predators, and meant they could take their own prey by surprise.*)
6. What was the name of the ship in which Darwin made his groundbreaking voyage of discovery, how long did the voyage last, and what was Darwin's role on board?
(*The ship was named the HMS Beagle, its voyage lasted for five years, and Darwin was taken on as scientific adviser.*)
7. Name one way in which poor young children were exploited in Darwin's time.
(*Sweeps as young as five were made to crawl through narrow chimneys to clean them.*)
8. What was it about Darwin's ideas that made so many people angry?
(*His theory of evolution contradicted the Bible stories of the Creation and Adam and Eve, which many people believed to be true.*)
9. How did Darwin feel about the way some people received his ideas?
(*He felt guilty, described himself as 'the Devil's chaplain' and said that revealing his theories felt like confessing to a murder.*)
10. What scientific discovery encouraged Darwin in his line of thinking about adaptation and evolution?
(*The discovery made by other scientists of the era, that dinosaurs had been alive on the Earth before mankind.*)
11. Name an extraordinary animal that Darwin saw on the *Beagle* expedition, which helped him to formulate his theories.
(*The giant tortoise in the Galapagos Islands.*)
12. List some modern-day scientific advances that have sprung out of Darwin's work.
(*The discovery of DNA; the development of forensic science to identify criminals from their DNA; the possibility of cloning, including human cloning; advances in artificial intelligence; a better understanding of animal behaviour.*)