

Grade 8				
Ch. 2 Lesson 1				
Life Science				
Page #	Question	Answer(s)	Links/Sources	Student Resources
28	With so many different ideas about origins of life on Earth, how is it possible to know whether any of them are correct?	Sample answer: You should look at the evidence that scientists find and determine how reliable the evidence is, how the evidence fits with each of the ideas about origins of life on Earth, and whether the interpretation of the evidence fits with you worldview.		
28	If origins falls into the category of historical science, what kind of data is available upon which to base conclusions?	Sample answer: The development of embryos, vestigial structures, genetic similarities, homology and analogy, fossils, and design in nature all provide data that is used to support different ideas about origins.		
28	What similarities do you see in the embryos?	Sample answer: The all have an eye, head, tail.		
28	What differences are evident?	Sample answer: The size of the eye, the shape of the face and the limbs.		
29	What is an organ or structure that you think might be vestigial. Explain why you think it could be classified as vestigial.	*Students may list any organ or structure that they think they do not think has a purpose in the organism. Discuss with students the purpose of any organ that they name that is not vestigial.		
29	What impact to you think technology has had on our understanding of vestigial structures and organs?	*Sample answer: Technology has increased our understanding of the workings of the human body, so we have a better understanding of the functions of different organs and structures. Therefore, technology may have helped decrease the number of vestigial organs and structures.		
30	How similar are the books?	*They both use paper for the words to be written on, they use the same letter, they use the same words, they follow the same rules of grammar.		
30	What are some physical differences between you and a chimpanzee?	*Sample answer: Focusing on the head, the shape and size of the chimpanzee's brow, nose, ears, mouth, and chin are different from mine. The hands look much larger, and the hair is denser and covers most of the body of the chimpanzee.		
30	Has anyone ever told you that the human and chimpanzee genomes are 98 percent identical?	Sample answer: Yes.		

30	Can you think of other examples that illustrate this concept?	Sample answer: Two cars from different manufactures, two skateboards made different manufactures, two airplanes made by different manufactures.		
31	What types of wings are mentioned in these verses: Exodus 19:4, Ps 55:6, and Matthew 23:37?	*Exodus 19:4 - eagle's wings; Psalm 55:6 - dove's wings; Matthew 23:37 - hen's wings.		
31	Which bones are homologous in these three animals?	*Each has a humerus, a radius, an ulna, and a group of smaller bones (the carpals, metacarpals, and phalanges).		
31	What difference can you identify relating to the structure and function of wings?	*Sample answer: Size, shape, and function.		
31	Are those three bones homologous?	*Yes. Repeat pointing out and questioning for the radius and ulna.		
31	Why are the lizard leg, whale flipper, and bird wing considered homologous and not analogous?	*The bones in the leg, flipper, and wings have a similar shape and arrangement.		
31	How might two unrelated animals be designed to have a similar appearance. Give an example.	*Sample answer: Parts of the body were designed to have a similar function. Dolphins and sharks are not even in the same class, but they have similar appearances. These appearance help them swim.		
31	What other homologous and analogous structures can you describe in nature?	Sample answer: Homologous structures - the hand of a bat and the hand of a human; the flipper of a whale and the leg of a dog Analogous structures- flippers of penguins and dolphins; eyes of octopus and mammals.		
32	Which word on page 32 refers to this idea?	*Homology.		
32	How closely related do you think evolutionists would say these animals are because of their forelimbs?	*Evolutionists realize that one similar characteristic is not enough to assume the animal got that trait from a common ancestor.		
32	If animals did not inherit a trait from a common ancestor, where would evolutionists say it came from?	*Evolutionists believe a trait evolved twice. this is called <i>convergent evolution</i> . Point out that more times similar traits are explained by convergent evolution, the more the original argument for homology is negated.		
32	Using the chart, in what way does the function of the human arm/hand differ from the function of a whale flipper, the bat wing, and the dog leg?	Sample answer: The human hand/arm does not help with mobility in humans. The whale's flipper, the bat's wing and the dog's leg all help these animals to be mobile.		
33	Does similar design mean common ancestry?	Not necessarily.		
33	How have cars changed in design through the years?	They have changed in size, shape, the materials that are used, and their efficiency.		
34	If you were walking in the woods and found a watch on the ground, where would you assume it came from?	Some hiker dropped it as they were hiking.		

35	How doe the antiglare qualities of a moth's eye show evidence of Design and Creation by God?	*The eyes were made specifically and with purpose to keep the moth from being easily seen by predators. These antiglare eyes show that God purposefully created complex structures on a moth.		
	* Means the answer is found in the TE.			