

Grade 6			
Ch. 3 Lesson 2			
Life Science			
Page #	Question	Answer(s)	Links/Sources
92	How can you get these amino acids for your body	*Students may say that you get these amino acids from the food that is eaten. Share that foods, such as meat fish, poultry, eggs, milk, soy, oats, beans, nuts, and leafy greens provide the essential proteins	
92	How are proteins important for your body?	*They are needed to keep the body functioning properly. Proteins build, maintain, and repair cells in the body.	
92	Why do you think it is important to get your protein from a variety of foods?	*It is important to get protein from a variety of foods because different foods have different types of amino acids.	
92	What are their jobs?	Sample answer: Principal, secretary, treasurer, teachers, aids, maintenance, janitor, nurse.	
92	How do they keep the school running properly and efficiently?	Sample answer: Establishing school policies, paying bills, dealing with parents and the public, teaching students, keeping the school buildings in running condition.	
92	How are the people who help run your school similar to the structures inside your body's cells?	Sample answer: They all have a specific job to do and work together to keep the school running.	
92	What are some ways proteins are important to life?	Sample answer: Proteins are a component of almost all parts of cells and the body.	
92	What are some protein rich foods?	Sample answer: meat, fish, dairy, legumes, nuts, grains	
92	How much of these foods do you think you must eat each day for proper protein formation?	Sample answer: Student probably think they get enough because they eat balanced meals at home. Note: While most students take in enough protein, there may be some that they may be deficient in protein intake which is a critical issue at this growing time of their life. Stress the importance of getting the recommended amount of protein in their diet. The RDA for protein is 46 grams for teenage girls and 52 grams for teenage boys per day.	

92	How do you think the proteins you get in your food are made into the proteins that make up your cells?	See answer above.	
93	What will the protein look like?	Sample answer: It will be a long chain-like molecule	
93	How does the model compare with the average size of proteins?	*The model is less complex but the same process applies	
93	How can you change the shape of your protein model?	Sample answer: By twisting it, by adding more amino acids to it, by forming it into a circle or rectangle.	
94	How does Colossians 1:17 say things are held together?	*In the NIV, NLT, and NASB, Colossians 1:17 says that "in Him (Christ) all things are held together."	
94	Why must the DNA be protected?	Sample answer: Without protection the DNA molecule can be damaged or degraded. If this happens mistakes can be made in the instructions that are delivered to the RNA to be carried out to the cell organelles.	
94	What are the odds that the right combinations are made by chance?	Sample answer: The whole process proceeds with amazing accuracy which points to purposeful design and plan.	
94	Why is it important that the structures of DNA and RNA are different?	Sample answer: So this is no mix up in the translation of the instructions.	
95	How do the nucleotides in RNA differ from those found in DNA?	*Instead of thymine, RNA contains a nitrogen base called uracil; it also has a slightly different kind of sugar called ribose.	
95	Why does only one section of the DNA unzip?	*Only the section of the gene that is needed unzips. It would be a waste of energy to unzip other parts that are not needed.	
95	What is the product of DNA transcription?	*An RNA molecule carrying a code for a protein.	
95	In Jeremiah 31:33, where does God want to write a copy of His Law?	*God wants to write a copy of His Law on our hearts.	
95	Have you ever transcribed classroom notes or sheets of music?	Sample answer: Yes.	
95	How would you describe the process?	Sample answer: Slow and meticulous if the resulting transcription is to be accurate.	

95	Where do you think it takes place in a prokaryote?	Sample answer: Inside the cytoplasm of the cell since there is no nucleus in which it can take place.	
95	How does the DNA code provide directions to the cell?	*The bases in the DNA form instructions for the creation of proteins. The DNA must be transcribed to an RNA molecule. Then, the RNA molecule is transcribed into an amino acid chain or protein to be used in the cell.	
95	Were you able to decode your partner's message?	Sample answer: Yes.	
95	What did you find difficult about translating the message?	Sample answer: Making sure I caught all the code and translated it correctly.	
95	Did you make any mistakes when translating?	Sample answer: Yes, a couple of minor mistakes.	
95	What would happen to an organism if its DNA was copied with mistakes?	Sample answer: The organism would not be able to function properly.	
	* Means the answer is found in the TE.		