

Grade 8				
Ch. 5 Lesson 4				
The Human Body				
Page #	Question	Answer(s)	Links/Sources	Student Resources
189	Would you consent to donate cells for medical research? Why or why not?	*Sample answer: Yes. It could help me and other people in the future.		
189	How has technology impacted your life?	*Sample answer: I can always be in touch with my family and friends no matter where I am.		
189		*Sample answer: Technology helps them cure more diseases more quickly.		
189	In what ways do you think technology will help us improve our health in the future?	*Sample answer: Maybe one day we will be able to do a simple scan on a monthly basis and know if any cancer cells are developing in our bodies.		
189	Do you think scientists will ever develop the "magic pill" that can cure all our ailments? Why or why not?	Sample answer: No. Because new diseases are always emerging.		
189	Why do you think this is so?	Because a person should be the only one allowed to determine how their cells are to be used.		
189	If the cells were used in research to find treatment for a type of cancer, is it acceptable that the donor did not consent to their use in medical research?	No.		
189	What are other ways that scientists have developed technologies to keep people healthy?	Sample answer: They have developed new screenings that help diagnose health issues early so they can be treated early, they have developed new pharmaceuticals and other treatments to treat disease more successfully. They have developed new vaccines to prevent disease.		
190	Why might a person ignore a lump they discover on their body?	*Sample answer: The person may be afraid it is a serious disease that cannot be cured; the person does not have health insurance to pay for a doctor or tests; the person is busy taking care of family members and does not think he or she has time to take care of himself or herself.		
190	What tests are described in Matthew 12:34-35 and John 13:35?	*In Matthew 12:34-35 it says that our words reflect what is in our hearts. John 13:35 says love is a characteristic that demonstrates whether we are disciples of Jesus or not.		
190	Why do doctors test babies' blood when they are so little?	*Doctors are looking for health problems that need immediate treatment. The sooner the treatment begins the better.		

190	Why is early detection important.	Sample answer: So that if there is a health problem it can be treated early to cure the problem or at least prevent it from getting worse.		
190	At what age do you think these tests are performed?	Sample answer: The tests are performed generally as a person reaches adulthood, unless it is indicated that the test be performed earlier.		
190	How often are these tests performed?	Sample answer: Generally on a yearly basis as long as the person has normal healthy with no health problems.		
190	Does every hospital have access to this equipment? Why or why not?	Sample answer: No. Hospitals that are underfunded, hospitals that are in poor communities, or hospitals that are in rural areas, often lack this specialized equipment.		
191	How else might doctors use ultrasound to examine the body?	*Sample answer: Many pregnant women have ultrasounds to help monitor growth and possible complications during pregnancy. Ultrasounds have also been used to help diagnose pelvic abnormalities, thyroid tumors, and many other internal body issues.		
191	If this tumor is cancerous, what might happen if it is not removed?	*The cancer might spread to other organs.		
191	What might be some reasons for this?	Sample answer: If there is a history of breast cancer in the woman's family; or if there has been other issues that might increase her risk of developing breast cancer?		
191	Does the availability of a mammogram make the daily Breast exam obsolete? Why or why not?	No. Because the daily breast exam can find possible tumors much earlier than waiting until a certain age is reached, or a year or two between mammograms.		
191	How else might doctors use ultrasound to examine the body?	Sample answer: They may use it check the circulation in the body, to diagnose the causes of pain or swelling, and to diagnose infection in the body's organs.		
192	What factors affect the quality of sound produced by a stethoscope?	The width and length of the tube the sound is traveling through.		
192	Which of the stethoscopes will produce the best results?	The stethoscope with the garden hose and the two funnels.		
192	How does heart rate compare amongst the class?	If all the students are resting at their desks, most will have about the same heart rate.		

193	How would a technician prep a patient to perform a CAT scan to look for a brain tumor?	*Sample answer: The technician may ask the patient to wear comfortable loose-fitting clothing to the exam. Because the machine works with magnets, metal objects such as jewelry, eyeglasses, dentures, and hairpins should be removed. Patients should provide the technician with a list of medications or medical conditions, including pregnancy.		
193	Why might a doctor order an MRI to be performed?	*Doctors may order an MRI to check for a variety of ailments. A head scan may be ordered to check for tumors, aneurysms or nerve injury. A chest scan may reveal problems with the heart, such as blockage or damage to the valves or blood vessels. An abdominal scan reveals problems with the liver, gallbladder, pancreas, kidneys, bladder, prostate, or ovaries. A doctor may also order an MRI to look for problems with bones, joints, or the spine.		
194	How do the image slices help the doctor?	*Doctors get a detailed image of the area of concern and can tell how large a tumor is and the shape of a tumor.		
194	How do MRIs, CAT scans, and PET scans compare to one another?	* All these tests use technology to help doctors diagnose illness or health abnormalities. Images are created by all of these tests, but the images are all slightly different. CAT scan images are similar to X-ray images although they are clearer. MRI images create images of internal tissues and organs. PET scans images are three-dimensional and can show how a patient's body is functioning, not just how it looks.		
194	How much money did the company save in insurance costs by funding these screening tests?	*The company saved \$120,000.		
194	What are health-screening tests important?	*Sample answer: They can catch diseases early, when they are most curable.		
194	What would you tell a grandparent who has to undergo a bone scan?	*Sample answer: It is a painless procedure that will help doctors understand bone strength so they can prescribe appropriate treatment to prevent fractures.		
194	How might new technologies with smartphones help third world countries?	*Sample answer: Smartphones can be used by people around the world. These new technologies provide inexpensive, rapid and accurate test results for people in even the most rural locations.		
* Means the answer is found in the TE.				