1. **Complete the text then listen to the recording and check** (timing 1:04-1:55)

   The human body is made up of many _____ which are made of many types of _____ These _____ are made of individual units called _____. Each of these _____ contains 46 _____ 23 inherited from each of your parents. _____ contain segments that are called _____. Each _____ contains specific information that makes us unique. The _____ is made of _____ through a set of complex instructions. _____ directs the body to make _____ They are used to make and run our body _____.

   http://www4.utsouthwestern.edu/cellbio/shay-wright/intro/sw_intro.html

2. **Check the pronunciation**

telomere	/'tɛlə,mɪər, 'tilə-/	chromosome	/'kroʊmə,soʊm/
enzyme	/'ɛnzaɪm/	apoptosis	/āp'əp-tō'sĭs, āp'ə-tō'-/
telomerase	/tə'lɒməˌreɪs; -ˌreɪz/	senescent	/sɪ'nɛsənt/
protein	/'proʊtin; -tiɪn/	senescence	/sĭ-nĕs'əns/
chromosome	/'kroʊmə,soʊm/	template	/'tɛmplɪt/
inhibit	/ɪn'hɪbɪt/	arteriosclerosis	/ɑr,tɪərioʊsklə'roʊsɪs/
ulcer	/'ʌlsər/	plaque	/plæk/

3. **True or False?**

   a. Telomere is the segment of DNA that occurs at the ends of chromosomes.

   b. In reproductive cells the telomere shortens occasionally.

   c. Telomeres function by helping chromosomes to lose base pair sequences at their ends. Each time a cell divides, some of the telomere is lost.

   d. When the telomere becomes too long, the chromosome reaches a "critical length" and can no longer replicate.

   e. Telomerase is an enzyme that causes telomeres to lengthen, facilitates cell division and may account for the mortality of cancer cells.

   f. Telomerase activity is regulated during development and has a very low, almost undetectable activity in somatic (body) cells. Because these somatic cells do not regularly use telomerase, they age.

   g. If telomerase is activated in a cell, the cell will continue to grow and divide.

   h. Telomerase – enzyme works in harmony with the telomere clock in the cell.

4. **Watch the video and check your answers.** (timing 1:55–5:08, 6-6:54)
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