



Comprehension Worksheet: a Fresh View of Cancer Research

Check and increase your understanding of research English by watching a TED talk by Eva Vertes (http://www.ted.com/talks/eva_vertes_looks_to_the_future_of_medicine.html) and then completing this comprehension worksheet. (This is not a memory test. It's a good idea to listen again or read back over the appropriate section before answering each question, just as you would do on an academic testor if you were reading important research.)

Choose the best answer for each question.

1. What triggered Eva Vertes' interest in reading?

- A. her parents' encouragement
- B. childhood detective series
- C. a book about tracking the Ebola virus
- D. teen romances

2. When Vertes was 14, she wanted to do research. Put her experiences that year in order:

- a. She decided to look for ways to prevent damage to the nervous system.
- b. The fruit flies had spinal cord and neuron damage.
- c. She fed fruit flies heavy metals.
- d. Many scientists were reluctant to let her work in their labs because she was only 14.

The correct order is:

- A. abcd
- B. acbd
- C. bcad
- D. dcba

3. Vertes says she had heard of stem cells as “the panacea of the future.” If you are not sure of the meaning of ‘panacea’, you can find good clues in the context-- the rest of what she says about stem cells. Based on the context, ‘**panacea**’ probably means most nearly:

- A. a treatment that will help many different diseases
- B. a therapy for cancer
- C. a type of cancer
- D. a bread derivative that treats stem cells

4. What does Vertes say seems to trigger or induce cancer?

- A. unhealthy habits like smoking, drinking, and other abuse
- B. angiogenesis
- C. injury to an organ or part of the body
- D. no one knows

5. She mentions that stem cells have the ability to differentiate and become different types of tissue. It changed her way of looking at cancer when she realized

- A. stem cell cancers may be the body’s unsuccessful attempt to heal damaged tissue.
- B. good stem cells can become cancerous, so they should be isolated and destroyed.
- C. sometimes cancer occurs in more than one type of tissue.
- D. cell proliferation can happen in lungs.

6. What does she mean by “Shouldn’t we think about manipulation, rather than elimination?”

- A. We need to manipulate normal body cells to inhibit the cancer so it will cause minimal damage.
- B. Instead of trying to destroy cancer completely, maybe we could learn to control it and make it work for our bodies instead of against them.
- C. We should manipulate anti-cancer therapies to more effectively overlap each other until the cancer is completely gone.
- D. It’s not enough to manipulate treatments; we need to eliminate the cancer completely.

7. Which of these statements is NOT true of skeletal muscle tissue?

- A. It has a large number of blood vessels.
- B. It divides more often than most tissues.
- C. It makes up at least 50% of our body.
- D. It rarely develops cancer even from metastases.

8. What is metastasis?

- A. an integral (basic) part of lung cancer.
- B. an especially deadly form of breast cancer.
- C. a rare form of muscle cancer, found only in isolated cases.
- D. the cancer phase when cancer cells spread from the original tumor to other parts of the body.

9. Which of these statements about angiogenesis are true? Choose all that are correct.

- A. In angiogenesis a tumor grows extra blood vessels to supply it with the nutrition it needs to get larger.
- B. Angiogenesis assures the tumor of a rich blood supply.
- C. When angiogenesis ceases, tumors can't grow enough to cause harm.
- D. Because of angiogenesis, a tumor corresponding in size to a pinpoint is not harmful.
- E. Vertes hypothesized that muscles can control or inhibit angiogenesis-- possibly to protect their own blood supply.
- F. Angiogenesis is not important or only marginally important to cancer growth.

10. Vertes proposes the possibility that in the future instead of fighting cancer we might use it to grow new cells in diseases that destroy cells. True or false?

- A. True
- B. False.

Answers

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- a. She decided to look for ways to prevent damage to the nervous system.
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The correct order is:

- D. dcba

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