

Name

Date

Biology



# Aging: It Is in Our Cells

## Multiple Choice

For each question, select the best answer from the four alternatives.

1. Telomeres
  - a) in older cells do not line up.
  - b) stand guard over the orientation of centromeres.
  - c) protect chromosomes from damage during cell division.
  - d) are like shoelaces.
2. Daughter cells with defective copies of the gene *COX-2* can lead to
  - a) old age.
  - b) Alzheimer's disease and osteoporosis.
  - c) heart and kidney failure.
  - d) faulty cell divisions.
3. The topic sentence of paragraph 3 is
  - a) the first sentence of the paragraph.
  - b) the second sentence of the paragraph.
  - c) the fourth sentence of the paragraph.
  - d) the last sentence of the paragraph.
4. *COX-2* is
  - a) a mutant gene.
  - b) an example of an "aging gene".
  - c) a defective gene.
  - d) a protein produced by a gene.

## Short Answer

Summarize this selection. Include the main idea and one relevant point that supports it.

5. \_\_\_\_\_

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  - old age.
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  - the first sentence of the paragraph.
  - the second sentence of the paragraph.
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  - the last sentence of the paragraph.
- COX-2* is
  - a mutant gene.
  - an example of an "aging gene".
  - a defective gene.
  - a protein produced by a gene.
- As we get older, the number of faulty cell divisions in our bodies*

### Short Answer

Summarize this selection. Include the main idea and one relevant point that supports it.

*increases. This can lead to such ailments as Alzheimer's disease,*  
*osteoporosis, or heart and kidney failure. Aging is related to*  
*cancer, so a cure for one may also be a cure for the other.*