

## AP Bio Chapter 16-20 Practice test

### Multiple Choice

Identify the choice that best completes the statement or answers the question.

- \_\_\_\_\_ 1. In his transformation experiments, what did Griffith observe?
- Mutant mice were resistant to bacterial infections.
  - Mixing a heat-killed pathogenic strain of bacteria with a living nonpathogenic strain can convert some of the living cells into the pathogenic form.
  - Mixing a heat-killed nonpathogenic strain of bacteria with a living pathogenic strain makes the pathogenic strain nonpathogenic.
  - Infecting mice with nonpathogenic strains of bacteria makes them resistant to pathogenic strains.
  - Mice infected with a pathogenic strain of bacteria can spread the infection to other mice.
- \_\_\_\_\_ 2. What does transformation involve in bacteria?
- the creation of a strand of DNA from an RNA molecule
  - the creation of a strand of RNA from a DNA molecule
  - the infection of cells by a phage DNA molecule
  - the type of semiconservative replication shown by DNA
  - assimilation of external DNA into a cell
- \_\_\_\_\_ 3. The following scientists made significant contributions to our understanding of the structure and function of DNA. Place the scientists' names in the correct chronological order, starting with the first scientist(s) to make a contribution.
- I. Avery, McCarty, and MacLeod  
II. Griffith  
III. Hershey and Chase  
IV. Meselson and Stahl  
V. Watson and Crick
- V, IV, II, I, III
  - II, I, III, V, IV
  - I, II, III, V, IV
  - I, II, V, IV, III
  - II, III, IV, V, I
- \_\_\_\_\_ 4. Cytosine makes up 38% of the nucleotides in a sample of DNA from an organism. Approximately what percentage of the nucleotides in this sample will be thymine?
- 12
  - 24
  - 31
  - 38
  - It cannot be determined from the information provided.
- \_\_\_\_\_ 5. Chargaff's analysis of the relative base composition of DNA was significant because he was able to show that

# Ap Bio Chapter 1 Test

**Rosina Ehmman**



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web  $m \times c \times \Delta t$  equation 1 where  $m$  is the total mass of the solution solute plus solvent  $c$  is the specific heat of the solution and  $\Delta t$  is the observed temperature change the specific heat of the solution is generally assumed to be the same as that of guided inquiry designing the ideal hand warmer - Dec 27 2022

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