

# Gene Concept

Session 1 Gene structure

mcq

- 1.) What is the relationship among DNA, a gene, and a chromosome?
  - A) A chromosome contains hundreds of genes, which are composed of DNA.
  - B) A chromosome contains hundreds of genes, which are composed of protein.
  - C) A gene contains hundreds of chromosomes, which are composed of protein.
  - D) A gene is composed of DNA, but there is no relationship to a chromosome.

- 2.) The “one gene – one polypeptide” theory states that
  - A) the synthesis of each gene is catalyzed by one specific enzyme.
  - B) the synthesis of each enzyme is catalyzed by one specific gene.
  - C) the function of an individual gene is to dictate the production of a specific polypeptide.
  - D) each polypeptide catalyzes a specific reaction.

- 3. In DNA adenine pairs with \_\_\_\_\_
- A) g
- B) T
- C) C
- D) U

- 4)A chromosome
- A.carries genetic information
- B.controls cell respiration
- C.is the site of photosynthesis
- D.speeds up chemical reactions

