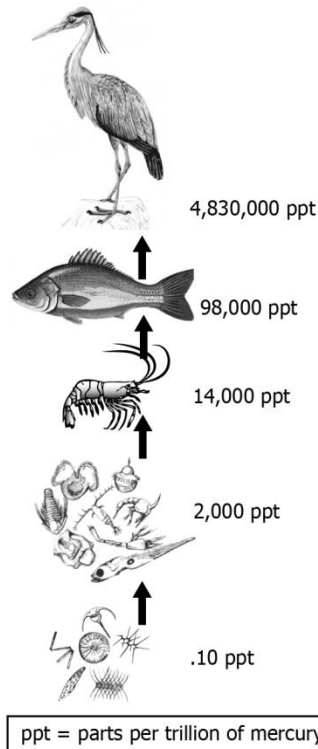




1. Examine the diagram.



What is the *primary* significance of the process illustrated?

- A** The number of organisms decreases at each higher level in a food chain.
- B** Chemical concentrations increase at each higher level in a food chain.
- C** As energy is used, heat is lost from one level to the next in a food chain.
- D** Biomass decreases as the trophic level increases in a food chain.

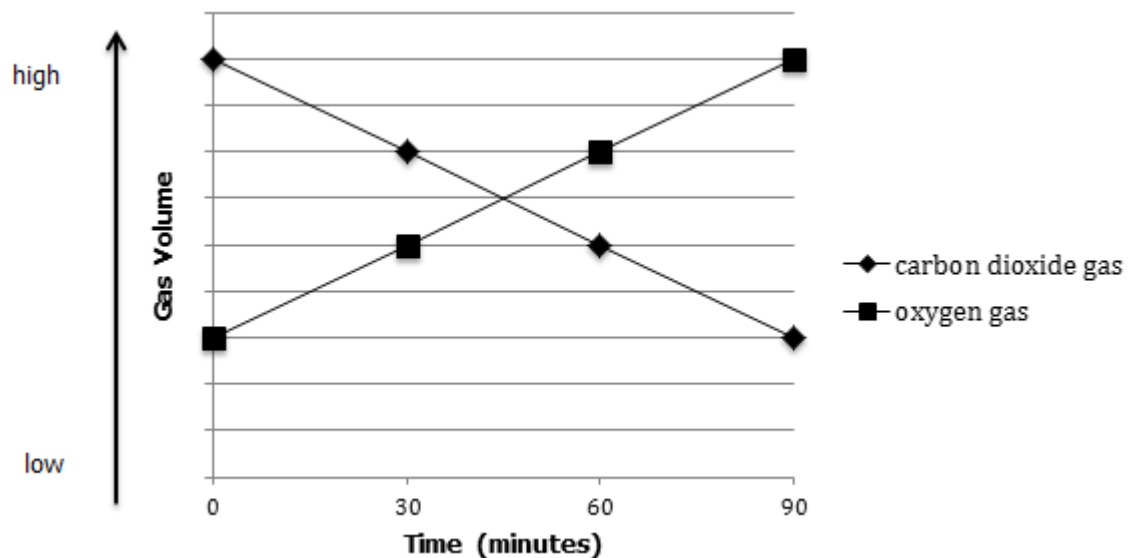
2. The sequence of nitrogen bases in a strand of DNA is AGTCCG. What sequence would the complementary strand have?

- A** TGACCG
- B** GACTTA
- C** CTGAAT
- D** TCAGGC

3. A homozygous tall pea plant (TT) is crossed with a heterozygous tall pea plant (Tt). Which statement about the offspring of this cross is true?

- A All the offspring will have the same phenotype (short) but two different genotypes (Tt, tt).
- B All the offspring will have the same phenotype (short) and the same genotype (tt).
- C All the offspring will have the same phenotype (tall) but two different genotypes (TT, Tt).
- D All the offspring will have the same phenotype (tall) and the same genotype (Tt).

4. The graph shows data collected by a student during an experiment with a plant.



What process is represented by this data?

- A The data represents cellular respiration because the reactant gas, CO_2 , is decreasing, and the product gas, O_2 , is increasing.
- B The data represents cellular respiration because the product gas, CO_2 , is decreasing, and the reactant gas, O_2 , is increasing.
- C The data represents photosynthesis because the reactant gas, CO_2 , is decreasing, and the product gas, O_2 , is increasing.
- D The data represents photosynthesis because the product gas, CO_2 , is decreasing, and the reactant gas, O_2 , is increasing.