

BA SANGAM COLLEGE

YEAR 12

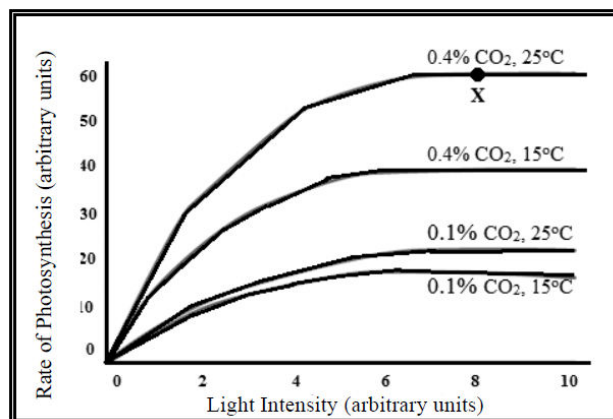
BIOLOGY

WORKSHEET 2

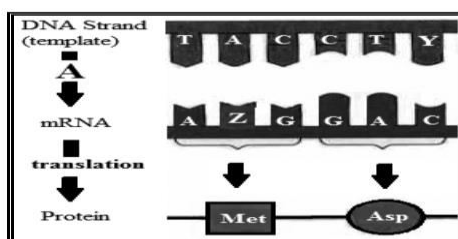
STRAND 1

STRUCTURE AND LIFE PROCESSES

1. The graph given below shows the effect of carbon dioxide concentration and temperature on the rate of photosynthesis. Study the diagram to answer the questions that follow.



- Name the organelle responsible for photosynthesis.
 - Make an inference about the effect of carbon dioxide concentration on the rate of photosynthesis. Give a reason for your inference.
 - At point X, the rate of photosynthesis is constant. Suggest how it may be increased further.
2. The diagram given below shows a summary of the protein synthesis process.



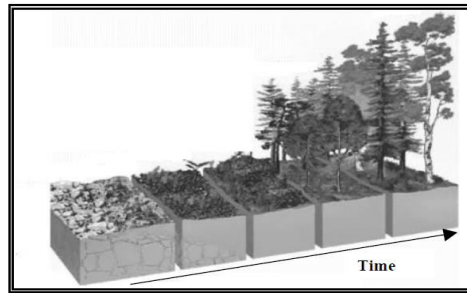
- Identify the correct bases (first letters only) for the parts labelled Y and Z.
- Describe process A which results in mRNA.

STRAND 2

LIVING TOGETHER

- The diagram given below shows a community pattern.

2.



The community pattern in the above diagram is known as

- A. tolerance.
- B. succession.
- C. stratification.
- D. community divisions.

2. The population size that an environment can sustain indefinitely is known as the

- A. carrying capacity.
- B. equilibrium phase.
- C. maximum population size.
- D. exponential population size.

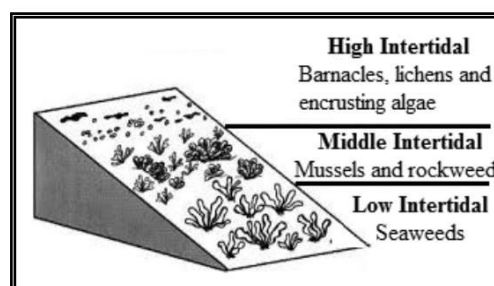
3. In biology, a graph showing a J-shaped curve indicates a population growth that is

- A. regulated.
- B. unregulated.
- C. exponential.
- D. independent.

4. A farm that is 200m in width and 300m in length has 10,000 coconut trees growing on it. Calculate the
(i) range of the coconut tree population;

(ii) population density of coconut trees on the farm.

5. The diagram given below shows the distribution of organisms in a community along the intertidal area.



- (i) Name the community pattern shown in the diagram.
- (ii) State one factor that influences the distribution of organisms in the above community.
- (iii) Describe one characteristic of the above community.

6. (i) Describe one difference between density dependent and density independent factors.

(ii) Explain how any one density dependent factor regulates a population.