

NAME: _____ Living Environment 1, PD. ____, DATE: _____

WORKSHEET

What life processes are common to all living things?

Do Now: Study the definitions given below. In the section that follows choose the LIFE FUNCTION that best explains the statement, or answers the question.

- 1) NUTRITION - activities which involve the acquisition of raw materials from the environment (animals ingest food substances, plants take in substances needed for photosynthesis), & also activities which involve changing these materials into a form that can be used by the organism, e.g. animals must digest food). Any materials that cannot be absorbed by the organism must be eliminated (egestion).
- 2) TRANSPORT - the absorption (intake) through cell membranes and the circulation (distribution) of usable materials throughout the organism.
- 3) RESPIRATION - process through which an organism obtains energy from food. In higher organisms this involves combining food substances with oxygen (oxidation). Animals take in O₂ from the air by breathing.
- 4) EXCRETION- getting rid of wastes formed by metabolism (the total of chemical activities that occur in a living organism).
- 5) SYNTHESIS - forming complex substances from simpler ones. Method by which more living matter is created.
- 6) GROWTH - use of the products of synthesis to increase cell size and/or the number of cells in an organism.
- 7) REGULATION - control and coordination of the various activities of an organism so that it can respond to changes in the environment (stimuli). Locomotion - moving from one location to another might be an example of such a response. This keeps the organism stable in a changing environment. Important in this is the ability to maintain a stable internal environment (temperature, O₂, CO₂ concentrations, fluid balance, etc.). This maintenance is known as homeostasis.
- 8) REPRODUCTION - producing more individuals of the same kind.

-
- Colored water moves up a celery stalk placed in a beaker of water containing food coloring. LIFE FUNCTION: _____
 - A plant is able to form large molecules of starch by combining smaller sugar molecules. _____
 - Which is the only life process that is not necessary for survival of an individual organism? _____
 - An aquarium with fish needs to be cleaned periodically. _____
 - A rabbit runs away from a fox. _____
 - Lawns need to be mowed, or bushes trimmed. _____
 - 30 Tons of hay has been delivered to the local zoo. _____
 - The gypsy moth spread across the U.S. from the accidental release of a few moths in the northeast. _____
 - The warning not to use plastic bags as toys around young children. _____

DECIDE WHETHER OR NOT EACH SENTENCE THAT FOLLOWS IS AN EXAMPLE OF HOMEOSTASIS. WRITE YES OR NO IN THE SPACES PROVIDED:

- 1) _____ A person perspires in warm weather.
- 2) _____ You turn up the room thermostat when you are cold.
- 3) _____ You shiver when cold.
- 4) _____ A bicyclist swerves to avoid being hit by a car.