

Unit 1 Handout 62

SDRO Lesson 11: Characteristics of Life Review

Purpose: To review the characteristics of life and identify different classifications of each characteristics.

Guiding Questions: How do organisms meet the characteristics of life?

Instructions: In lesson 1 of IBI we discussed the 5 characteristics of life. We've investigated numerous organisms and discussed how these organisms meet the characteristics of life. It is no surprise that all of our organisms met these characteristics. Yet, many of them vary in how they meet these characteristics. In this activity, we will review the five characteristics and discuss the different ways organisms have met those characteristics.

For your reference here is a list of organisms we studied in our biology units:

- California Blackworm Elodea Amoeba Volvox Euglena
- Paramecium Spirogyra Merismopedia Oscillatoria
- Spirulina Daphnia Wisconsin Fast Plant Cabbage White Butterfly

All living things have cells.

- Unicellular Multicellular
- Prokaryotic (e.g. Bacteria) Eukaryotic (e.g. Plants, animals, fungi, protists)

All living things need energy.

- Autotrophs (e.g. Photosynthesis)
- Heterotrophs (e.g. Consumers, decomposers)
- Both

All living things reproduce.

Asexual (e.g. Binary fission, cytokinesis, regeneration, self pollination)

Sexual (e.g. Conjugation, insemination, pollination)

Both

All living things respond to the environment.

Detection (e.g. Photoreceptors, cilia, eyespots, eyes, antennae, etc.)

Behaviors/responses (e.g. Forming cysts, eating certain foods, escape mechanisms, etc.)

All living things grow (get bigger) and develop (change).

Growth (e.g. Mitosis)

Development (e.g. Metamorphosis, germination, flowering, etc.)