

Webquest: Is it Alive?

NPD

Unit: Alive (1.3)

Overview: In this activity, you'll identify observable characteristics of life in videos of various organisms and describe those characteristics.

Review

What are six easily observable characteristics of living things?

http://www.exploratorium.edu/imaging_station/activities/classroom/characteristics/ca_characteristics.php

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Defining "life" is a very difficult task, and scientists don't all agree on a common list of the characteristics of life. Some of the other characteristics that you may discover, and which are often listed in textbooks, include those listed closer to the bottom of the page of the website from above. Compare this list with the "BASIC SIX" that you wrote down above. What is found on this list of 11 that isn't found on the list of 6?

7. _____
8. _____
9. _____
10. _____
11. _____

Instructions:

1. On the data table (see back), click on each category name in turn.
2. **Read the introduction**, then play the video.
3. Record one or more of the characteristics that you observe for each category and describe it on your data table.

Characteristics of Life Data Table

Category	Characteristics of Life	Description of Observed Characteristics
<u>C. elegans</u> (<i>Caenorhabditis elegans</i>) Video: Moving <i>C. elegans</i>		
<u>Sea Urchins</u> (<i>Lytechinus pictus</i>) Video: Sea urchin cell division		
<u>Sea Urchins</u> (<i>Lytechinus pictus</i>) Video: Sea urchin fertilization		
<u>Blood Cells</u> Video: Human white blood cells		
<u>Cellular Structure and Function</u> Video: <i>Elodea</i> leaf cells		
<u>Stem Cells</u> Videos: Compare Mouse embryonic stem cells – movie 1 with Heart cells grown from mouse embryonic stem cells – movie 1		
<u>Cell Motility</u> Video: Crawling <i>Amoeba</i>		
<u>Zebrafish</u> (<i>Danio rerio</i>) Video: Zebrafish development		