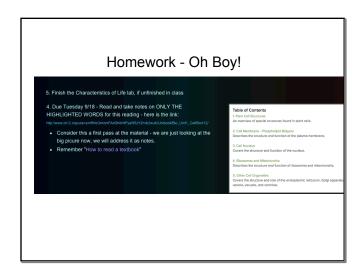
# <u>Agenda</u>

- 1. Assign HW
- 2. Warm-Up
- 3. Characteristics of Life Lab (TOC#3)
- 4. Characteristics of Life Notes (TOC#4)



Update TOC



# Warm-Up

Warm Up 9/17/2012¶

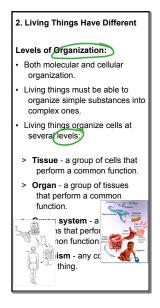
What Does a Scientist Look Like?

### Overview

The 7 Characteristics of Life:

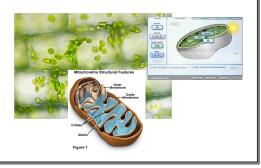
- 1. Living Things are Composed of Cells:
- 2. Living Things Have Different Levels of Organization:
- 3. Living Things Use Energy:
- 4. Living Things Respond To Their Environment:
- 5. Living Things Grow:
- 6. Living Things Reproduce:
- 7. Living Things Adapt To Their Environment:

# The 7 Characteristics of Life: 1. Living Things are Composed of Cells: • Single-cell organisms have everything they need to be self-sufficient. • In multicellular organisms, specialization increases until some cells do only certain things.



# 3. Living Things Use Energy:

 Living things take in energy and use it for maintenance and growth.



# 4. Living Things Respond To Their Environment:

- Living things will make changes in response to a stimulus in their environment.
- A behavior is a complex set of responses.

# 5. Living Things Grow:

- Cell division the orderly formation of new cells.
- Cell enlargement the increase in size of a cell. Cells grow to a certain size and then divide
- An organism gets larger as the number of its cells increases





6. Living Things Reproduce:

- Reproduction is not essential for the survival of individual organisms, but must occur for a species to survive.
- · All living things reproduce in one of the following ways:
  - > Asexual repoduction Producing offspring without the use of gametes
  - > Sexual reproduction Producing offspring by the joining of sex cells.

joining of sex cells.

Combine genetic
muterial

# 7. Living Things Adapt To Their Environment:

- Adaptations are traits giving an organism an advantage in a certain environment.
- Variation of individuals is important for a healthy species.

### Questions:

- Do all living things have all of the characteristics of life? If your answer is no, give an example.
- 2. Name some non-living thing that uses energy.
- 3. Name some non-living thing that grows