

**Ch.2 Diversity: Introduction to Multicellular Organisms:  
Multicellular organisms meet their needs in different ways.**

**Learning Goal: Compare & contrast how plants and animals  
get their energy.**

**Multicellular organisms have cells that are specialized – pg.43**

Different jobs are done by different cells. \_\_\_\_\_ cells have a specific function.

A blood cell carries \_\_\_\_\_. \_\_\_\_\_ cells send and receive a signal.

Cells are also \_\_\_\_\_ in ways to enable them to \_\_\_\_\_.

**Levels of organization – pg. 44**

Cells of the same type are organized into \_\_\_\_\_.

They are a group of \_\_\_\_\_ that work together to perform a single \_\_\_\_\_,

Ex: a muscle, such as the heart, job is to pump blood through the body.

Structures made up of \_\_\_\_\_ tissues and perform a particular \_\_\_\_\_ are called \_\_\_\_\_.

**Organ Systems and the Organism – pg. 45**

Why does a multicellular organism have several organ systems?

Name 3 organ systems.

**Multicellular organisms are adapted to live in different environments – pg. 46-47**

What is an adaptation?

How do adaptations arise?

Give an example of an adaptation an animal can have to cold climates

The \_\_\_\_\_ is a desert fox that has very large \_\_\_\_\_ for this adaptation.

The \_\_\_\_\_ fox has very small ears and thick fur.

The \_\_\_\_\_ fox ears are average in size and its fur blends well with its environment.

Foxes are hunters that feed on small animals. How might the coat color of each fox contribute to its survival?

**Sexual Reproduction leads to diversity – pg. 48-49**

Sexual reproduction occurs through the bonding of \_\_\_\_\_ from \_\_\_\_\_ parents.

The result, the offspring will have more \_\_\_\_\_.

Two different cellular \_\_\_\_\_ are involved in \_\_\_\_\_ reproduction.

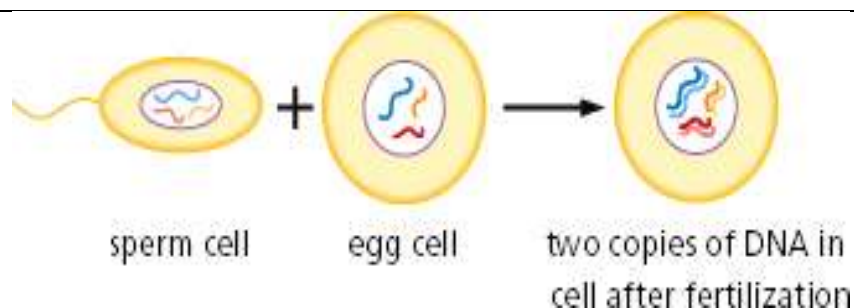
The first is:

\_\_\_\_\_ is a cellular process in sexual reproduction that allows the \_\_\_\_\_ and egg cells to duplicate its \_\_\_\_\_ material and then divide.

Fertilization is the second and occurs when the \_\_\_\_\_ cell bonds with the \_\_\_\_\_ cell.

A \_\_\_\_\_ egg is a single \_\_\_\_\_ with the DNA of both \_\_\_\_\_.

Once the \_\_\_\_\_ cell is fertilized it \_\_\_\_\_ and continues dividing specializing forming different \_\_\_\_\_, organs, etc.



\_\_\_\_\_ is a form of \_\_\_\_\_ reproduction. In budding, a second organism grows off, or buds from another.

Organism can reproduce more often \_\_\_\_\_, but are limited with \_\_\_\_\_ diversity.