Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Cell Specialization: The Diversity of Cellular Life Notes**

**Unicellular Organism**

All living things are made of \_\_\_\_\_\_\_\_\_\_\_

Sometimes, a \_\_\_\_\_\_\_\_\_\_\_cell IS the \_\_\_\_\_\_\_\_\_\_\_\_

Unicellular organisms:

\_\_\_\_\_\_\_\_\_\_\_\_

Respond to their \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Transform energy

Reproduce

According to \_\_\_\_\_\_\_\_\_\_\_\_\_, they dominate the Earth.

**Multicellular Organisms**

Made up of \_\_\_\_\_\_\_\_ cells

All \_\_\_\_\_\_\_\_\_\_\_\_ organisms depend on \_\_\_\_\_\_\_\_\_\_\_\_ and cooperation

among \_\_\_\_\_\_\_\_\_\_\_\_\_ cells

Cells throughout an organism can \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in \_\_\_\_\_\_\_\_\_\_\_\_ ways to perform different tasks.

= \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Specialized Animal Cells**

Animal cells are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in many ways:

\_\_\_\_\_\_\_\_\_ are specialized to transport \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Cells that produce \_\_\_\_\_\_\_\_\_\_\_ are found in the pancreas.

**Specialized Plant Cells**

Tiny openings called \_\_\_\_\_\_\_\_\_\_\_\_ on the underside of leaves are part of

\_\_\_\_\_\_\_\_\_\_\_\_ cells that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ gas exchange

**Levels of Organization**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ → TISSUES → ORGANS → \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Tissues**

\_\_\_\_\_\_\_\_\_\_\_ cells are grouped into tissues.

These cells \_\_\_\_\_\_\_\_\_\_\_\_\_ similar \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Most animals have \_\_\_\_\_\_\_\_\_\_ main types.

Muscle

\_\_\_\_\_\_\_\_\_\_

Nervous

\_\_\_\_\_\_\_\_\_\_

**Organs**

Some of the \_\_\_\_\_\_\_\_ we (and other organisms) do are too

\_\_\_\_\_\_\_\_\_\_\_\_\_ for one type of tissue… so \_\_\_\_\_\_\_\_\_\_\_\_\_ types of

\_\_\_\_\_\_\_\_\_\_\_\_\_ get together to work together as an \_\_\_\_\_\_\_\_\_\_\_\_\_

Ex: Each muscle in your \_\_\_\_\_\_\_\_\_\_ is an organ

Each muscle includes \_\_\_\_\_\_\_\_\_\_ tissue, nervous \_\_\_\_\_\_\_\_\_\_\_, and

connective tissue.

Each type of tissue \_\_\_\_\_\_\_\_ the organ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Organ System**

An organ \_\_\_\_\_\_\_\_\_\_\_ a series of tasks.

\_\_\_\_\_\_\_\_\_\_\_ of organs that work together to \_\_\_\_\_\_\_\_\_\_\_ a specific

function are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Ex: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, endocrine system….

This division of labor makes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ life possible… nerve

cells couldn’t \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ without pancreatic \_\_\_\_\_\_\_\_\_\_\_\_\_!

Examples:

Cell - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Tissue - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Organ - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Organ System - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_