Honors Biology Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
NDHS Per: \_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Cellular Structure**

**Types of Cells:**

**\_\_\_\_\_\_\_\_\_\_\_\_\_:**  No Nucleus, DNA, ribosomes, cell walls, cell membrane

 Examples: **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**\_\_\_\_\_\_\_\_\_\_\_\_**: True nucleus (DNA inside a nuclear membrane), ribosomes, cell walls (maybe), cell membrane, endoplasmic reticulum, Golgi bodies, Cytoskeleton, Vacuoles, Vesicles, Centrioles (maybe) , Cilia and Flagella, Mitochondria, Chloroplasts (maybe)

 Examples: **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Cellular Organelles**:

1) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: Everything between the **\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **\_\_\_\_\_\_\_\_\_\_\_\_\_**: **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** of the cytoplasm

2) **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**: Made of **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 Regulates what **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

3) **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**: Regulates **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 Contains:

 **\_\_\_\_\_\_\_\_\_**– controls cell process

 **\_\_\_\_\_\_\_\_\_**– center of ribosome production

4) **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**: synthesize **\_\_\_\_\_\_\_\_\_\_\_\_\_**

5) **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**: Two Types

 **\_\_\_\_\_\_\_\_\_\_\_**: Make **\_\_\_\_\_\_\_\_\_\_\_**
 “rough” because ribosomes are attached to the outside

 **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_:**
 1. Processes **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
 2. Stores **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** 3. Makes **\_\_\_\_\_\_\_\_\_\_**
 4. Detoxifies **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Smooth & Rough ER form vesicles that pinch off and travel to the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**.

6) **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**: Series of **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
 - **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** materials from the ER for **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

7) **\_\_\_\_\_\_\_\_\_\_\_\_\_**: Digests materials in the cell
 Digested materials go to mitochondria to generate energy

**ENDOMEMBRANE SYSTEM**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

8) **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**: **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**f the cell

 Transform food into **\_\_\_\_\_\_\_\_\_\_\_\_\_**
 Cellular Energy = **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

9) **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**: Site of **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

10) **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**: System of **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** that give **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** to a cell

 TYPES:

 **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**: tiny tubes used for moving things around inside or outside of a cell
 Ex:
 **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** – move cells or things across the surface of a cell

 **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** – move chromosomes around in cell division

 **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**– cluster of short tubes that form spindle fibers in animal cells

 **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**: tiny filaments used to move things in cells

 Ex: **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** in **\_\_\_\_\_\_\_\_\_\_\_**used for **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**with **\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**: fibers that give the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** – the actual real skeleton in a cell

11) **\_\_\_\_\_\_\_\_\_\_\_\_\_\_**: Storage centers of the cell – mainly in **\_\_\_\_\_\_\_\_\_**

 **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**of Plants – like a big water balloon

 **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

12) **\_\_\_\_\_\_\_\_\_\_\_\_\_\_**: Protective layer that gives **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Plants: **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
 Fungi: **\_\_\_\_\_\_\_**
 Bacteria: **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**(proteins and sugars)

Organelles Specific to Animals: **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Organelles Specific to Plants: **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**