**Cell Features** (p. 55 - 61)

**I. The Cell Theory**

**1. List the three parts of the cell theory.**

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2. Why are many smaller cells more efficienct than one larger cell?**

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**3. Match the correct cell features with the correct definitions. *(Found in all cells)***

1. \_\_\_\_\_\_\_\_ Cell Membrane A. System of microscopic fibers

2. \_\_\_\_\_\_\_\_ Cytoplasm B. Provides instructions for protein synthesis

3. \_\_\_\_\_\_\_\_ Cytoskeleton C. Regulates what enters and leaves the cell

4. \_\_\_\_\_\_\_\_ DNA D. Cellular structures on which proteins are made

5. \_\_\_\_\_\_\_\_ Ribosomes E. Interior of the cell

**II. Prokaryotes**

**1. Define the term prokaryote.**

Prokaryote **–**

**2. A subset of prokaryotes is commonly called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

**3. Which of the following is not found in a prokaryotic cell?**

a. cytoplasm

b. circular loop of DNA

c. cell membrane

d. mitochondria

**4. Prokaryotic cells possess internal structures that divide cells into compartments.**

Circle One : True False

**5. Define the term cell wall.**

Cell Wall –

**6. Define the term flagella.**

Flagella –

**III. Eukaryotic Cells**

**1. Define the term eukaryote.**

Eukaryote –

**2. Match the terms with the correct definitions.**

1. \_\_\_\_\_\_\_ Nucleus A. Structure that carries out specific activities in the cell

2. \_\_\_\_\_\_\_ Organelle B. Internal component that houses DNA

**3. What are the boundaries of eukaryotic cytoplasm?**

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**4. Define the term cilia.**

Cilia –

**5. What is the purpose of the cytoskeleton?**

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**6. Match the cytoskeleton fibers with the correct definitions.**

1. \_\_\_\_\_\_\_\_ Actin Fibers A. Transport information from nucleus to cell parts

2. \_\_\_\_\_\_\_\_ Microtubules B. Contract & expand to determine cell shape

3. \_\_\_\_\_\_\_\_ Intermediate Fibers C. Anchors ribosomes and enzymes

**IV. The Cell Membrane**

**1. The cell membrane is selectively permeable.**

Circle One : True False

**2. Define the term phospholipid.**

Phospholipid –

**3. Explain the structure of a lipid bilayer.**

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**4. Match the cell membrane proteins with the correct definitions.**

1. \_\_\_\_\_\_\_\_ Enzyme A. Helps move substances across the cell membrane

2. \_\_\_\_\_\_\_\_ Marker Proteins B. Recognizes & binds to specific substances

3. \_\_\_\_\_\_\_\_ Receptor Proteins C. Assists chemical reactions inside cells

4. \_\_\_\_\_\_\_\_ Transport Proteins D. Attached to carbohydrates to identify cell type