Name _____

# The Lego® of Life

**All living things are made up of one or more cells.**

**Owning my learning:** The learning intentions or goals for the unit are listed below. Completing this table can help you determine what you know and the level to which you know it. Place a check mark in the box that best describes your learning level at the beginning of the learning and after we have learned together. The columns are numbered 1 to 4 to indicate the following levels of proficiency:

| | | | | | |
|---|---|---|---|---|---|
| 1 | Emerging | "I'm just getting started." | 2 | Developing | "I get some of it." |
| 3 | Accomplished | "I get it." | 4 | Extending | "I can teach a friend." |

Be honest with yourself as you complete the checklist to filter what you know from what you don't know and remember to study efficiently and effectively, study what you don't know.

I Can Use:

| 1 | 2 | 3 | 4 | |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | diagrams of plant and animal cells to identify 13 cell structures (cell membrane, cell wall, chromosomes, endoplasmic reticulum, centrioles, chloroplasts, nucleus, vacuole, ribosomes, golgi body, lysosomes, cytoplasm, mitochondria) |
| ○ | ○ | ○ | ○ | the microscope to view cells at low, medium and high power |
| ○ | ○ | ○ | ○ | an egg to demonstrate osmosis |

I Can Describe:

| 1 | 2 | 3 | 4 | |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | the five characteristics of living things |
| ○ | ○ | ○ | ○ | the appearance and function of the 13 cell structures |
| ○ | ○ | ○ | ○ | photosynthesis |
| ○ | ○ | ○ | ○ | cellular respiration |
| ○ | ○ | ○ | ○ | the process of diffusion |
| ○ | ○ | ○ | ○ | the process of osmosis |
| ○ | ○ | ○ | ○ | a selectively permeable membrane |
| ○ | ○ | ○ | ○ | three methods in which materials can enter the cell against the concentration gradient (active transport, phagocytosis, pinocytosis) |
| ○ | ○ | ○ | ○ | some harmful and beneficial uses of bacteria |

I Can Explain:

| 1 | 2 | 3 | 4 | |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | why the cell is considered to be the basic unit of life |
| ○ | ○ | ○ | ○ | the difference between multicellular and unicellular organisms |
| ○ | ○ | ○ | ○ | the difference between prokaryotes and eukaryotes |
| ○ | ○ | ○ | ○ | why most cells are not gigantic |
| ○ | ○ | ○ | ○ | the difference between diffusion and osmosis |
| ○ | ○ | ○ | ○ | the difference between plant and animal cells |
| ○ | ○ | ○ | ○ | the difference between bacteria and viruses |

I Can Recognize:

| 1 | 2 | 3 | 4 | |
|---|---|---|---|---|
| | | | | unicellular and multicellular life in pond water |
| ○ | ○ | ○ | ○ | a sketch of a plant cell |
| ○ | ○ | ○ | ○ | a sketch of an animal cell |
| ○ | ○ | ○ | ○ | a sketch of a prokaryotic cell |
| ○ | ○ | ○ | ○ | a sketch of an eukaryotic cell |
| ○ | ○ | ○ | ○ | a sketch of a cell in a hypertonic solution |
| ○ | ○ | ○ | ○ | a sketch of a cell in an isotonic solution |
| ○ | ○ | ○ | ○ | a sketch of a cell in a hypotonic solution |

I Can Prepare:

| 1 | 2 | 3 | 4 | |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | a wet mount slide of pond water |

I Can Predict:

| 1 | 2 | 3 | 4 | |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | if more water will enter or exit cells when they are in a hypertonic, isotonic or hypotonic solution |