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|  | **Earth /Space Science**  ***Students in grade three will understand that Earth is a unique member of our solar system and the relationship between the earth, sun, and moon.***  ***Students will:*** | **Physical Science**  ***Students in grade three will understand that all living and non-living things are composed of matter having characteristic properties that distinguish one substance from another.***  ***Students will:*** | **Physical Science**  ***Students in grade three will understand that all living and non-living things are composed of matter having characteristic properties that distinguish one substance from another.***  ***Students will:*** |
| **Change** | Recognize the basic patterns of the sun, including its appearance during the daytime, and how its position in the sky changes through the seasons. | *Observe how states of matter can change due to differences in air pressure, temperature, and chemistry.* | *Identify and use simple machines to change the amount of force necessary do work.* |
| **Interrelationships** | Recognize that the light and heat the sun provides to Earth is necessary for life. | *Recognize the relationship between solids, liquids, and gasses (i.e. water, vapor, and ice)* | *Recognize how simple machines affect our everyday life.* |
| **Scale** | Compare the size of the earth and the moon. | *Demonstrate an understanding that different objects have different masses that can be weighed and measured.* | *Measure the force needed to move objects of different mass.* |
| **Modeling** | Model the moon’s phases using a flashlight and a ball. | *Create a model of the water cycle.* | *Demonstrate through different experiments how the six simple machines reduce work needed to overcome the forces of gravity and friction.* |
| **Inquiry/Process** | Investigate how the sun and moon appear to move and change in our sky. | *Collect and organize data about physical properties in order to classify objects or draw conclusions about properties of objects (i.e. temperature, color, size, shape, weight, texture, and flexibility)* | *Design devices to measure force needed to do work.*  *Identify and describe how simple machines change effort.* |

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|  | **Life Science**  ***Students in grade three will understand that living organisms have identifiable structures and characteristics. Energy flows and matter recycles. Groups of organisms show evidence of change over time.***  ***Students will:*** | **Life Science**  ***Students in grade three will understand that*** c***ells are the building blocks of the human body and make up the different body organs and systems.***  ***Students will:*** | **Life Science**  ***Students in grade three will understand that all living organisms have identifiable structures and characteristics that allow for survival in specific biomes with different features (i.e. climate, landforms, life)***  ***Students will:*** |
| **Change** | *Recognize that living things have a life cycle.* | *Describe how organisms show evidence of change over time.* | Recognize changes in organisms brought about by seasons and climate. |
| **Interrelationships** | *Identify how physical structures of an organism allow it to survive in its environment.*  *Describe ways that plants and animals depend on each other.* | *Recognize that humans are composed of cells linked to form tissues, linked to make organs which function in systems.*    *Describe how systems rely on each other for survival of the organism.* | Identify that plant and animal life within a biome are dependant upon the climate and each other. |
| **Scale** | *Measure, observe, and record the growth of a plant over time.* | *Compare cells, tissues, and organs and the systems they make up with others in the human body.*  *Recognize that systems are only a part of the entire organism.* | *Identify the difference between habitats and biomes.* |
| **Modeling** | *Identify and draw simple seed/plant structures and describe their functions.* | *Create a model of the body with all organs and systems and a specific body part or organ.* | Build/draw a mural of a biome showing plants, animals, and climate.) |
| **Inquiry/Process** | *What happens to seeds grown in variable conditions (i.e. light, water, soil)* | *Research how organs and systems are interrelated and how the physical structures of an organism allow it to survive.* | State the characteristics that define a biome.  Demonstrate how species within a biome are dependant on each other. |