**Science Week:** Discover the Wonders of the Natural World!

Description: Immerse yourself in the captivating world of science during this engaging and educational Science Week. Through hands-on experiments and exploration of natural phenomena, children will develop a deep appreciation for the core fundamentals of scientific inquiry. This week aims to foster curiosity, critical thinking, and a love for discovering how the world works.

**Lesson Plans for Ages 0-3:**

1. **Sensory Exploration with Rocks** Materials: Various rocks of different shapes, sizes, and textures Duration: 20-30 minutes Description: Introduce infants and toddlers to the sensory wonders of the natural world through hands-on exploration with rocks. By touching, feeling, and observing the unique properties of rocks, children will develop early scientific inquiry skills and enhance their sensory development.
2. **Sink or Float Experiment** Materials: Large container of water, various objects (e.g., plastic toys, wooden blocks), towel or paper for drying Duration: 30-45 minutes Description: Engage infants and toddlers in a sink or float experiment to ignite their curiosity and encourage scientific predictions and observations. Through this activity, children will learn about object properties and develop early problem-solving skills.
3. **Colorful Volcanic Eruption** Materials: Baking soda, vinegar, dish soap, food coloring, small container Duration: 20-30 minutes Description: Spark excitement and scientific curiosity with a colorful volcanic eruption experiment. By combining simple ingredients and witnessing the vibrant eruption, children will be introduced to the concept of chemical reactions and learn about cause and effect relationships.

**Lesson Plans for Ages 4-7:**

1. **Crystal Creations** Materials: Borax, pipe cleaners, wide-mouth jars, boiling water, food coloring (optional) Duration: Multiple sessions (30-45 minutes each) Description: Dive into the world of crystals as children create mesmerizing borax crystal formations. By observing the growth of crystals and discussing the scientific principles behind them, children will develop an understanding of crystalline structures and the process of crystal growth.
2. **Bread Mold Experiment** Materials: Slices of bread, ziplock bags, spray bottle with water, magnifying glass Duration: Multiple sessions (20-30 minutes each) Description: Engage children in a bread mold experiment to explore the fascinating world of microbiology. Through the observation and documentation of mold growth in different environmental conditions, children will develop scientific inquiry skills and gain an understanding of living organisms.
3. **Balloon Rocket Race** Materials: Balloons, string, straws, tape, measuring tape Duration: 30-45 minutes Description: Experience the thrill of a balloon rocket race while exploring the principles of physics. By designing and launching balloon rockets, children will engage in scientific predictions, measurements, and discussions about motion, forces, and energy.

**Lesson Plans for Ages 8-11:**

1. **Investigating Photosynthesis** Materials: Potted plants, sunlight, black construction paper, scissors Duration: Multiple sessions (30-45 minutes each) Description: Engage children in a scientific investigation of photosynthesis. By examining the effects of sunlight on plant growth through the use of black construction paper, children will deepen their understanding of the vital process of photosynthesis and the role of light energy in plant development.
2. **Density Tower Experiment** Materials: Various liquids (e.g., water, oil, syrup), clear cups, small objects with different densities (e.g., paper clips, buttons) Duration: Multiple sessions (30-45 minutes each) Description: Dive into the concept of density as children create captivating density towers. Through layering different liquids and objects with varying densities, children will explore the principles of density and learn how substances interact and settle based on their mass and volume.
3. **Kitchen Chemistry: Edible Slime** Materials: Cornstarch, food coloring, water, mixing bowls, spoons Duration: 30-45 minutes Description: Unleash the scientist within as children delve into kitchen chemistry by creating edible slime. By mixing cornstarch, water, and food coloring, children will investigate the unique properties of non-Newtonian fluids and learn about the science behind this intriguing substance.

Remember to adjust the duration and specific instructions of the activities based on the age group and individual children's needs and abilities. Let Science Week ignite a passion for scientific exploration and inspire a lifelong love for learning!

**ALERT**-Be cautious of skin allergens and never create lesson plans with toxic materials.

Employee Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_