



Mad Science Workshops & 3rd Grade Science

Weeks 1-4 August: Scientific Thinking (4 weeks)

Sunshine State Standard - The Nature of science – H

- All Mad Science Programs - Scientific Method

Weeks 5-14 October – December: The Earth (10 weeks)

Sunshine State Standard – Processes that shape the Earth – D

Sunshine State Standard – Earth and Space – E

- Mad Science Workshop - Mineral Mania
- Mad Science Workshop - Space
- Mad Science Workshop - The Dirt on Garbage (Recycling)

These workshops address most Essential to know and Important to know benchmarks

- Smaller rocks come from the weathering of larger rocks (Erosion)
- 75% of the earth is covered by water
- Know and understand the processes of weathering and erosion
- That land forms change over time
- Reusing, recycling and reducing the use of natural resources improve and protect the quality of life
- The sun is a star and larger than other stars
- Characteristics of planets in our solar system including their relative positions in our solar system
- In addition to the sun there are many stars that are much farther away

Weeks 15-18 January: Force & Motion (4 weeks)

Sunshine State Standard – Force and Motion – C

- Mad Science Workshop - Moving Motion
- Mad Science Workshop - Energy Burst

These workshops address all Essential to know and Important to know benchmarks

- An object may move in straight line at a constant speed up, slow down and down or change direction dependent on net force acting on the objects.
- Describe the motion of various objects such as moving forward or a circular motion
- Know the characteristics of waves such as crest, trough and length

Weeks 19-22 September: Energy (4 weeks)

Sunshine State Standard - Energy – B

- Mad Science Workshop - Harnessing Heat
- Mad Science Workshop - Energy Burst
- Mad Science Workshop - Electricity

These workshops address all Essential to know and Important to know benchmarks

- Sun provides energy in the form of light and heat.
- How to use a variety of tools to measure the gain and loss or loss of energy
- When warmer object comes in contact with cooler object heat loss results from warmer object while cooler object gains heat energy until equilibrium of objects



Weeks 23-32 February – April: Living Systems (10 weeks)

Sunshine State Standard – Processes of Life – F

Sunshine State Standard - How Living things Interact with Their Environment – G

Sunshine State Standard - Energy – B

- [Mad Science Workshop - Ecosystems](#)
- [Mad Science Workshop - Cells](#)
- [Mad Science Workshop - Photosynthesis](#)

These workshops address most Essential to know and Important to know benchmarks

- Know the behavioral and structural adaptations that allow plants and animals to survive
- Know that plants and animals share and compete for limited resources (oxygen, food, space)
- Know that natural processes are important
- Know the similarities and differences among plants
- Know how plants and animals are different but have common characteristics, and both have structures for reproduction, respiration, and growth
- Know that energy is transferred to living organisms through the food they eat
- Living things are classified as producers, or consumers, and carnivores, herbivores, or omnivores
- Energy and its various forms is needed for organisms to survive and grow

Weeks 33-36 April – May: Nature of Matter (4 weeks)

Sunshine State Standard – The Nature of Matter – A

- [Mad Science Workshop – Turn up the Volume](#)
- [Mad Science Workshop – Matter of Fact](#)

These workshops address all Essential to know and Important to know benchmarks

- Determine Physical properties of matter using metric measurements and tools, (rulers, Thermometers, Balances)
- Physical changes in the states of matter can be produced by heating and cooling
- Weight of an object is equal to the sum of the weight of its parts
- Identify organisms or objects too small to be seen without a microscope