

SCIENCE - Grade 2

Christ Lutheran School, Costa Mesa, CA

Revised 2008

Goal: The student will develop an appreciation for the fascinating and awesome world God created using the scientific method to investigate and explore scientific topics.

Objectives:

Physical Science

1. The student will recognize that the motion of objects can be observed and measured.

- The position of an object can be described by locating it in relation to another object or to the background.
- The motion of an object can be described by recording the change in position of the object over time.
- Magnets can be used to make some objects move without being touched.
- Sound is made by vibrating objects and can be described by pitch and volume.
- Objects fall to the ground unless something holds them up.

Materials: Evan-Moor, *Hands-On Science 10 Themes for the Whole Year*, Saxon Math, *Second Grade* curriculum materials; "Roly-Poly" by Janice Van-Cleave, *Adventures*, Houghton Mifflin Reading 2003; "Moses Goes to a Concert" by Isaac Millman, *Delights*, Houghton Mifflin Reading 2003

Life Science

1. The student will understand that plants and animals have predictable life cycles.

- Organisms reproduce offspring of their own kind which resemble the parent and one another.
- Stages of life vary between different plants and animals.
- Many characteristics of a living organism are inherited from the parent while others are caused or influenced by the environment.
- There is variation among individuals of one kind in a population.

- Germination, growth, and development of plants can be affected by various factors.

Materials: Evan-Moor MAKING BOOKS WITH POCKETS, APRIL; Creative Teaching Press, LIFE CYCLES RESOURCE GUIDE 1999; AIMS Education Foundation 1998 *Cycles of Knowing and Growing*; "Ant" by Rebecca Stefoff, *Delights*, Houghton Mifflin Reading 2003; "Around the Pond: Who's Been Here" by Lindsay Barrett George, *Adventures*, Houghton Mifflin Reading 2003; "Life Cycle of a Butterfly" NMUSD materials; various teacher collected materials

Earth Science

1. The student will recognize that the earth is made of materials with distinct characteristics that provide resources for people.

- Rocks and soil have unique properties that can be identified.
- Smaller rocks come from the breakage and weathering of larger rocks.
- Soil is made from weathered rock and organic material and can differ in appearance, capacity to retain water, and ability to support plant growth.
- Fossils provide evidence about plants and animals of the past and help scientists learn about life in the past.
- Rocks, water, plants, and soil provide many resources for people.

Materials: The Mailbox, SCIENCE IN A BOX Grades 2-3, Aims Educational Foundation *Primary Earth*, Grades K-3

Investigation and Experimentation

1. The student will develop an understanding of the scientific method.

- Make predictions based on patterns of observation.
- Understand that it is acceptable to make a 'wrong' guess or hypothesis.
- Measure and express measurement using appropriate tools.
- Construct graphs to record data.
- Compare and sort objects based on physical attributes.
- Collect and record data in structured format.

Materials: Aims Education Foundation 1984, *Color in Our World*; Saxon Math Second Grade Curriculum; integrated with other units