

THIRD GRADE MASTERY OBJECTIVES

Note: Students are expected to know content and apply skills from previous grades. The following objectives are to be mastered by the end of Grade 3.

Standard 1: Nature of Science

Goal 1.1: Understand Systems, Order, and Organization

_____ 3.S.1.1.1 Label the parts of a system.

Goal 1.2: Understand Concepts and Processes of Evidence, Models, and Explanations

_____ 3.S.1.2.1 Make observations, collect data and evaluate it.

_____ 3.S.1.2.2 Replicate and/or use models.

Goal 1.3: Understand Constancy, Change, and Measurement

_____ 3.S.1.3.1 Measure changes that occur.

_____ 3.S.1.3.2 Measure in both U.S. Customary and International System of Measurement (metric system) units.

Goal 1.4: Understand the Theory that Evolution is a Process that Relates to the Gradual Changes in the Universe and of Equilibrium as a Physical State-No objectives at this grade level.

Goal 1.5: Understand Concepts of Form and Function

_____ 3.S.1.5.1 Describe the relationship between shape and use.

Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills

_____ 3.S.1.6.1 Identify questions that can be answered by conducting scientific tests.

_____ 3.S.1.6.2 Conduct scientific tests

_____ 3.S.1.6.3 Use appropriate tools and techniques to gather and display data.

_____ 3.S.1.6.4 Use data to construct a reasonable explanation.

_____ 3.S.1.6.5 Make simple predictions based on data.

Notes

_____ 3.S.1.6.6 Identify logical alternative explanations.

_____ 3.S.1.6.7 Communicate the results of tests to others.

Goal 1.7: Understand That Interpersonal Relationships Are Important in Scientific Endeavors-No objectives at this grade level.

Goal 1.8: Understand Technical Communication

_____ 3.S.1.8.1 Read and give multi-step instructions.

Standard 2: Physical Science

Goal 2.1: Understand the Structure and Function of Matter and Molecules and Their Interactions

_____ 3.S.2.1.1 Use instruments to measure properties.

_____ 3.S.2.1.2 Identify the physical properties of solids, liquids, and gases.

_____ 3.S.2.1.3 Explain that heating and cooling can cause changes of state in common materials.

Goal 2.2: Understand Concepts of Motion and Forces-No objectives at this grade level.

Goal 2.3: Understand the Total Energy in the Universe is Constant

_____ 3.S.2.3.1 Identify potential and kinetic energy.

Goal 2.4: Understand the Structure of Atoms-No objectives at this grade level.

Goal 2.5: Understand Chemical Reactions-No objectives at this grade level.

Standard3: Biology

Goal 3.1: Understand the Theory of Biological Evolution

_____ 3.S.3.1.1 Describe the adaptations of plants and animals to their environment.

Goal 3.2: Understand the Relationship between Matter and Energy in Living Systems

_____ 3.S.3.2.1 Describe the energy needed for living systems to survive.

_____ 3.S.3.2.2 Compare and contrast the energy requirements of plants and animals.

_____ 3.S.3.2.3 Label a food chain that shows how organisms cooperate and compete in an ecosystem.

Notes

_____ 3.S.3.2.4 Diagram the food web and explain how organisms both cooperate and compete in ecosystems.

Goal 3.3: Understand the Cell is the Basis of Form and Function for All Living Things -No objectives at this grade level.

Standard 4: Earth and Space Systems

Goal 4.1: Understand Scientific Theories of Origin and Subsequent Changes in the Universe and Earth Systems

_____ 3.S.4.1.1 Explain the reasons for length of a day, the seasons, and the year on Earth.

Goal 4.2: Understand Geo-chemical Cycles and Energy in the Earth System-No objectives at this grade level.

Standards 5: Personal and Social Perspectives; Technology

Goal 5.1: Understand Common Environmental Quality Issues, Both Natural and Human Induced

_____ 3.S.5.1.1 Identify local environmental issues.

Goal 5.2: Understand the Relationship between Science and Technology

_____ 3.S.5.2.1 Describe how technology helps develop tools.

_____ 3.S.5.2.2 Describe the development of tools over time.

Goal 5.3: Understand the Importance of Natural Resources and the Need to Manage and Conserve Them

_____ 3.S.5.3.1 Explain the concept of recycling.

Notes