

**IDAHO ACHIEVEMENT STANDARDS
GRADE 3
SCIENCE**

Students are expected to know content and apply skills from previous grades.

Standard 1: Nature of Science

Students apply scientific methods to conduct experiments. Students read and give multi-step instructions.

Goal 1.1: Understand Systems, Order, and Organization

Objective(s): By the end of Grade 3, the student will be able to:

- 3.S.1.1.1 Label the parts of a system. (573.01.a)

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

Objective(s): By the end of Grade 3, the student will be able to:

- 3.S.1.2.1 Make observations, collect data and evaluate it. (573.02.a)
- 3.S.1.2.2 Replicate and/or use models. (573.02.b)

Goal 1.3: Understand Constancy, Change, and Measurement

Objective(s): By the end of Grade 3, the student will be able to:

- 3.S.1.3.1 Measure changes that occur. (573.03.b)
- 3.S.1.3.2 Measure in both U.S. Customary and International System of Measurement (metric system) units. (573.03.c)

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

Objective(s): By the end of Grade 3, the student will be able to:

- 3.S.1.5.1 Describe the relationship between shape and use. (573.05.a)

Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills

Objective(s): By the end of Grade 3, the student will be able to:

- 3.S.1.6.1 Identify questions that can be answered by conducting scientific tests. (574.01.a)
- 3.S.1.6.2 Conduct scientific tests (574.01.b)
- 3.S.1.6.3 Use appropriate tools and techniques to gather and display data. (574.01.c)
- 3.S.1.6.4 Use data to construct a reasonable explanation. (574.01.d)
- 3.S.1.6.5 Make simple predictions based on data. (574.01.e)
- 3.S.1.6.6 Identify logical alternative explanations. (574.01.f)

3.S.1.6.7 Communicate the results of tests to others. (574.01.g)

Goal 1.7: Understand That Interpersonal Relationships Are Important in Scientific Endeavors

No objectives at this grade level.

Goal 1.8: Understand Technical Communication

Objective(s): By the end of Grade 3, the student will be able to:

3.S.1.8.1 Read and give multi-step instructions. (583.02.a)

Standard 2: Physical Science

Students use scientific instruments to describe the physical properties of the three states of matter.

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

Objective(s): By the end of Grade 3, the student will be able to:

3.S.2.1.1 Use instruments to measure properties. (575.01.a)

3.S.2.1.2 Identify the physical properties of solids, liquids, and gases. (575.01.b)

3.S.2.1.3 Explain that heating and cooling can cause changes of state in common materials. (575.01.c)

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. (590.03.a)

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.

Standard 3: Biology

Students explore the diversity of plants and animals in their environments. Students demonstrate an understanding of food webs.

Goal 3.1: Understand the Theory of Biological Evolution

Objective(s): By the end of Grade 3, the student will be able to:

- 3.S.3.1.1 Describe the adaptations of plants and animals to their environment. (577.01.a)

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

Objective(s): By the end of Grade 3, the student will be able to:

- 3.S.3.2.1 Describe the energy needed for living systems to survive. (578.01.a)
- 3.S.3.2.2 Compare and contrast the energy requirements of plants and animals. (593.01.a)
- 3.S.3.2.3 Label a food chain that shows how organisms cooperate and compete in an ecosystem. (578.01.b)
- 3.S.3.2.4 Diagram the food web and explain how organisms both cooperate and compete in ecosystems. (593.01.b)

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

Students explore the relationship between the sun and Earth.

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

Objective(s): By the end of Grade 3, the student will be able to:

- 3.S.4.1.1 Explain the reasons for length of a day, the seasons, and the year on Earth. (594.01.a)

Goal 4.2: Understand Geo-chemical Cycles and Energy in the Earth System

No objectives at this grade level.

Standard 5: Personal and Social Perspectives; Technology

Students identify local environmental issues. Students identify the relationship of tools to scientific investigation.

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

Objective(s): By the end of Grade 3, the student will be able to:

- 3.S.5.1.1 Identify local environmental issues. (581.01.a)

Goal 5.2: Understand the Relationship between Science and Technology

Objective(s): By the end of Grade 3, the student will be able to:

- 3.S.5.2.1 Describe how technology helps develop tools. (580.01.a)

3.S.5.2.2 Describe the development of tools over time. (580.01.b)

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

Objective(s): By the end of Grade 3, the student will be able to:

3.S.5.3.1 Explain the concept of recycling. (581.03.a)