

**INDEPENDENT SCHOOL DISTRICT OF BOISE CITY  
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.

**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.
- 3.S.1.2.2 Replicate and/or use models.

**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.
- 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**

**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.

**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.
- 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.
- 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**

**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.

**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.
- 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.

**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.

### **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.
- 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.
- 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**

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.

### **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.

### **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.
- 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**

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

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