

Idaho Extended Content Standards Draft
Extended Content Indicators
Grade 3
Science

Standard 1: Nature of Science - Students apply scientific methods to conduct experiments. Students read and give multi-step instructions.

Extended Standard 1: Students apply some of the steps in the scientific method to conduct experiments by asking questions, observing, collecting data, displaying data or providing an explanation of data. Students follow multi-step instructions.

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Topic	Gr	Goal	Objectives	Essence	Extended Content Indicators
Interrelated nature of science	3.S.1.2	Understand Concepts and Processes of Evidence, Models, and Explanation	3.S.1.2.1 Make observations, collect data and evaluate it. (573.02.a)		3.S.1.2.1.A Make observations, collect and record data.
			3.S.1.2.2 Replicate and/or use models. (573.02.b)		3.S.1.2.2.A Attend to and/or replicate scientific models.

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Topic	Gr	Goal	Objectives	Essence	Extended Content Indicators
Interrelated Nature of Science	3.S.1.3	Understand Constancy, Change, and Measurement	3.S.1.3.1 Measure changes that occur. (573.03.b)		3.S.1.3.1.A Measure changes that occur.
			3.S.1.3.2 Measure in both U.S. Customary and International System of Measurement (metric system) units. (573.03.c)		3.S.1.3.2.A Measure in U.S. Customary System of Measurement.

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Topic	Gr	Goal	Objectives	Essence	Extended Content Indicators
	3.S.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.		No objectives at this grade level.

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Topic	Gr	Goal	Objectives	Essence	Extended Content Indicators
Interrelated Nature of Science	3.S.1.5	Understand Concepts of Form and Function	3.S.1.5.1 Describe the relationship between shape and use. (573.05.a)		3.S.1.5.1.A Sort common objects by use.

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Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
	3.S.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. (574.01.a)		3.S.1.6.1.A Generate questions about observations.
			3.S.1.6.2 Conduct scientific tests (574.01.b)		3.S.1.6.2.A Follow steps in scientific test.
			3.S.1.6.3 Use appropriate tools and techniques to gather and display data. (574.01.c)		3.S.1.6.3.A Use appropriate tools to gather data.
			3.S.1.6.4 Use data to construct a reasonable explanation. (574.01.d)		3.S.1.6.4.A Use data to for a reasonable explanation.
			3.S.1.6.5 Make simple predictions based on data. (574.01.e)		3.S.1.6.5.A Make simple predictions based on data.
			3.S.1.6.6 Identify logical alternative explanations. (574.01.f)		3.S.1.6.6.A Select reasonable explanations.
			3.S.1.6.7 Communicate the results of tests to others. (574.01.g)		3.S.1.6.7.A State a result of a test to others.

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Topic	Gr	Goal	Objectives	Essence	Extended Content Indicators
Interrelated Nature of Science	3.S.1.7	Understand That Interpersonal Relationships Are Important in Scientific Endeavors	No objectives at this grade level.		No objectives at this grade level.

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Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
	3.S.1.8	Understand Technical Communication	3.S.1.8.1 Read and give multi-step instructions. (583.02.a)		3.S.1.8.1.A Follow multi-step instructions.

Standard 2: Physical Science - Students use scientific instruments to describe the physical properties of the three states of matter.

Extended Standard 2: Students observe the three states of matter and use scientific instruments to measure physical properties of liquid and solid states.

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
Physical Science	3.S.2.1	Understand the Structure and Function of Matter and Molecules and Their Interactions	3.S.2.1.1 Use instruments to measure properties. (575.01.a)		3.S.2.1.1.A Use instruments to measure properties.
			3.S.2.1.2 Identify the physical properties of solids, liquids, and gases. (575.01.b)		3.S.2.1.2.A Observe and match physical properties to solids, liquids, or gases.
			3.S.2.1.3 Explain that heating and cooling can cause changes of state in common materials. (575.01.c)		3.S.2.1.3.A Observe that heating and cooling can cause changes of state in common materials.

Standard 2: Physical Science - Students use scientific instruments to describe the physical properties of the three states of matter.

Extended Standard 2: Students observe the three states of matter and use scientific instruments to measure physical properties of liquid and solid states.

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
Physical Science	3.S.2.2	Understand Concepts of Motion and Forces	No objectives at this grade level.		No objectives at this grade level.

Standard 2: Physical Science - Students use scientific instruments to describe the physical properties of the three states of matter.

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Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
Physical Science	3.S.2.3	Understand the Total Energy in the Universe is Constant	3.S.2.3.1 Identify potential and kinetic energy. (590.03.a)		3.S.2.3.1.A Observe potential and kinetic energy.

Standard 2: Physical Science - Students use scientific instruments to describe the physical properties of the three states of matter.

Extended Standard 2: Students observe the three states of matter and use scientific instruments to measure physical properties of liquid and solid states.

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
Physical Science	3.S.2.4	Understand the Structure of Atoms	No objectives at this grade level.		No objectives at this grade level.

Standard 2: Physical Science - Students use scientific instruments to describe the physical properties of the three states of matter.

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Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
Physical Science	3.S.2.5	Understand Chemical Reactions	No objectives at this grade level.		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.

Extended Standard 3: Students explore the diversity of plants and animals in their environments. Students demonstrate a simple, basic food web.

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
Biology	3.S.3.1	Understand the Theory of Biological Evolution	3.S.3.1.1 Describe the adaptations of plants and animals to their environment. (577.01.a)		3.S.3.1.1.A Identify when plants and animals adapt to their environment.

Standard 3: Biology: - Students explore the diversity of plants and animals in their environments. Students demonstrate an understanding of food webs.

Extended Standard 3: Students explore the diversity of plants and animals in their environments. Students demonstrate a simple, basic food web.

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
Biology	3.S.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. (578.01.a)		3.S.3.2.1.A Select the energy needed for a living system to survive.
			3.S.3.2.2 Compare and contrast the energy requirements of plants and animals. (593.01.a)		3.S.3.2.2.A Identify how energy requirements of plants and animals are different.
			3.S.3.2.3 Label a food chain that shows how organisms cooperate and compete in an ecosystem. (578.01.b)		3.S.3.2.3.A Organize a simple food chain.
			3.S.3.2.4 Diagram the food web and explain how organisms both cooperate and compete in ecosystems. (593.01.b)		3.S.3.2.4.A Develop a food web.

Standard 3: Biology: - Students explore the diversity of plants and animals in their environments. Students demonstrate an understanding of food webs.

Extended Standard 3: Students explore the diversity of plants and animals in their environments. Students demonstrate a simple, basic food web.

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
Biology	3.S.3.3	Understand the Cell is the Basis of Form and Function for All Living Things	No objectives at this grade level.		No objectives at this grade level.

Standard 4: Earth and Space Systems – Students explore the relationship between the sun and Earth.

Extended Standard 4: Students identify how the sun relates to days and seasons on Earth.

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
Earth and Space Systems	3.S.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. (594.01.a)		3.S.4.1.1.A Identify how the sun relates to the length of a day and/or the seasons on Earth.

Standard 4: Earth and Space Systems – Students explore the relationship between the sun and Earth.

Extended Standard 4: Students identify how the sun relates to days and seasons on Earth.

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
Earth and Space Systems	3.S.4.2	Understand Geo-chemical Cycles and Energy in the Earth System	No objectives at this grade level.		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.

Extended Standard 5: Students participate in identifying local environmental issues. Students explore the relationship of tools to scientific investigation.

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
Environmental Science	3.S.5.1	Understand Common Environmental Quality Issues, Both Natural and Human Induced	3.S.5.1.1 Identify local environmental issues. (581.01.a)		3.S.5.1.1.A Recognize local environmental issues.

Standard 5: Personal and Social Perspectives; Technology - Students identify local environmental issues. Students identify the relationship of tools to scientific investigation.

Extended Standard 5: Students participate in identifying local environmental issues. Students explore the relationship of tools to scientific investigation.

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
Technology	5.S.5.2	Understand the Relationship between Science and Technology	3.S.5.2.1 Describe how technology helps develop tools. (580.01.a)		3.S.5.2.1.A Explore how technology helps develop tools.
			3.S.5.2.2 Describe the development of tools over time. (580.01.b)		3.S.5.2.2.A Order the development of tools over time.

Standard 5: Personal and Social Perspectives; Technology - Students identify local environmental issues. Students identify the relationship of tools to scientific investigation.

Extended Standard 5: Students participate in identifying local environmental issues. Students explore the relationship of tools to scientific investigation.

Topic	Gr	Goal	Objective	Essence	Extended Content Indicators
Natural Resources	3.S.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. (581.03.a)		3.S.5.3.1.A Uses methods of recycling.