

MOSCOW SCHOOL DISTRICT
CURRICULUM GUIDE
Subject/Course: Science
Grade 2

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

Standard 1: Nature of Science

Students identify questions that can be answered through observation, collection, recording, and analysis of data. Students explain that the shape of an item is determined by its function. Students follow multi-step instructions, work cooperatively and use communication skills.

<i>Goal – The student will:</i>	<i>Objectives (to be reached by the end of second grade)</i>	<i>Samples of Applications</i>	<i>Curriculum Materials (including technological resources)</i>	<i>Key Vocabulary for Standard 1</i>
Goal 1.1: Understand Systems, Order, and Organization - No objectives at this grade level			<ul style="list-style-type: none"> • Pebbles, Sand and Silt (FOSS) • New Plants (FOSS) • Balance and Motion (FOSS) 	State does not have vocabulary for this grade level.
Goal 1.2: Understand Concepts and Processes of Evidence, Models, and Explanations	<ul style="list-style-type: none"> • 2.S.1.2.1 Make observations, record and interpret data. (558.01.a) <u>New Plants</u> <ul style="list-style-type: none"> • Daily response in journal <u>Pebbles, Sand, Silt</u> <ul style="list-style-type: none"> • Observe, record, interpret <u>Planting Gloves</u> <ul style="list-style-type: none"> • Observe, record, interpret <u>Balance and Motion</u> <ul style="list-style-type: none"> • More observing, not so much record 			
Goal 1.3: Understand Constancy, Change, and Measurement	<ul style="list-style-type: none"> • 2.S.1.3.1 Measure in standard and non-standard units. (558.01.b) 	<u>New Plants</u> <ul style="list-style-type: none"> • Measuring in both (uses paper clips) 		
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	<ul style="list-style-type: none"> • 2.S.1.4.1 Apply the concepts of past, present, and future. (558.03.a) 	Pebbles, Sand, Silt addresses this <u>New Plants</u> <ul style="list-style-type: none"> • Life cycle 		
Goal 1.5: Understand Concepts of Form and Function	<ul style="list-style-type: none"> • 2.S.1.5.1 Identify shape and use of objects. (558.04.a) 	<ul style="list-style-type: none"> • Balance and Motion addresses this • Pebbles, Sand, Silt addresses this 		

Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills	<ul style="list-style-type: none"> • 2.S.1.6.1 Identify questions to be investigated. (559.01.a) • 2.S.1.6.2 Make observations. (559.01.b) • 2.S.1.6.3 Analyze information and evidence. (559.01.d) • 2.S.1.6.4 Communicate observations. (559.01.f) 	<ul style="list-style-type: none"> • Balance and Motion addresses this very well • Pebbles, Sand, Silt addresses this with activities 		
Goal 1.7: Understand That Interpersonal Relationships Are Important in Scientific Endeavors	<ul style="list-style-type: none"> • 2.S.1.7.1 Practice cooperation and interaction skills. (568.01.a) 	<ul style="list-style-type: none"> • All kits address this with activities 		
Goal 1.8: Understand Technical Communication	<ul style="list-style-type: none"> • 2.S.1.8.1 Follow multi-step instructions. (568.02a) 	<ul style="list-style-type: none"> • All kits address this with activities 		

Standard 2: Physical Science

Students describe objects by their properties and explain the affect motion has on an object.

<i>Goal – The student will:</i>	<i>Objectives (to be reached by the end of second grade)</i>	<i>Samples of Applications</i>	<i>Curriculum Materials (including technological resources)</i>	<i>Key Vocabulary for Standard 2</i>
Goal 2.1: Understand the Structure and Function of Matter and Molecules and Their Interactions	<ul style="list-style-type: none"> • 2.S.2.1.1 List properties of an object. (560.01.a) 	Pebbles, Sand and Silt	<ul style="list-style-type: none"> • Balance and Motion (FOSS) • Pebbles, Sand and Silt 	State does not have vocabulary for this grade level.
Goal 2.2: Understand Concepts of Motion and Forces	<ul style="list-style-type: none"> • 2.S.2.2.1 Explain how force affects the position and motion of objects. (560.01.a) 	Balance and Motion activites		
Goal 2.3: Understand the Total Energy in the Universe is Constant				
No objectives at this grade level.				
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 list the basic needs of animals.

<i>Goal – The student will:</i>	<i>Objectives (to be reached by the end of second grade)</i>	<i>Samples of Applications</i>	<i>Curriculum Materials (including technological resources)</i>	<i>Key Vocabulary for Standard 3</i>
Goal 3.1: Understand the Theory of Biological Evolution - No objectives at this grade level.			<ul style="list-style-type: none"> • New Plants (FOSS) • Weekly Reader • Scholastic News 	
Goal 3.2: Understand the Relationship between Matter and Energy in Living Systems	<ul style="list-style-type: none"> • 2.S.3.2.1 Identify four basic needs of all living things (food, shelter, water, space). (563.01.a) • 2.S.3.2.2 Discuss how animals are suited to live in different habitats. (547.01.b) 	<ul style="list-style-type: none"> • Ocean habitat • PCEI is used to study different habitats (research based unit) • Animal unit and learn different classifications (insects, birds, reptiles, amphibians, etc.) Covers habitats within these classifications. 		
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 describe weather conditions.

<i>Goal – The student will:</i>	<i>Objectives (to be reached by the end of second grade)</i>	<i>Samples of Applications</i>	<i>Curriculum Materials (including technological resources)</i>	<i>Key Vocabulary for Standard 4</i>
Goal 4.1: Understand Scientific Theories of Origin and Subsequent Changes in the Universe and Earth Systems	<ul style="list-style-type: none"> • 2.S.4.1.1 Describe the characteristics of different weather conditions. (564.01.b) 	<ul style="list-style-type: none"> • Addressed in Math and some teachers actually teach a weather unit. Every building is different. 		State does not have vocabulary for this grade level.
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 compare man-made and natural environments. Students identify scientific tools.

<i>Goal – The student will:</i>	<i>Objectives (to be reached by the end of second grade)</i>	<i>Samples of Applications</i>	<i>Curriculum Materials (including technological resources)</i>	<i>Key Vocabulary for Standard 5</i>
Goal 5.1: Understand Common Environmental Quality Issues, Both Natural and Human Induced	<ul style="list-style-type: none"> • 2.S.5.1.1 Compare and contrast man-made and natural environments. (566.01.a) 	<ul style="list-style-type: none"> • Some do an ecology unit, some discuss Earth Day. 	<ul style="list-style-type: none"> • Weekly Reader • Scholastic News • Time for Kids 	State does not have vocabulary for this grade level.

Goal 5.2: Understand the Relationship between Science and Technology	<ul style="list-style-type: none"> • 2.S.5.2.1 Identify tools people have invented for everyday life and for scientific investigations. (565.01.b) 	<ul style="list-style-type: none"> • Balance and Motion does address this. • Pebbles, Sand and Silt, New Plants – invented tools for agriculture. 		
Goal 5.3: Understand the Importance of Natural Resources and the Need to Manage and Conserve Them - No objectives at this grade level.				