

KINDERGARTEN COURSE OVERVIEW

In Kindergarten, students observe and describe the natural world using their senses. Students do science as inquiry in order to develop and enrich their abilities to understand scientific concepts and processes. Students develop vocabulary through their experiences investigating properties of common objects, earth materials, and organisms.

A central theme throughout the study of scientific investigation and reasoning; matter and energy; force, motion, and energy; Earth and space; and organisms and environment is active engagement in asking questions, creating a method to answer those questions, answering those questions, communicating ideas, and exploring with scientific tools. Scientific investigation and reasoning involves practicing safe procedures, asking questions about the natural world, and seeking answers to those questions through simple observations used in descriptive investigations.

SCIENCE TEKS

| TIMEFRAME | UNIT SUMMARY | TEKS |
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| 14 days | <p>Unit 1: Properties of Objects In this unit, students will understand that...</p> <ul style="list-style-type: none"> ● objects have observable physical properties. ● objects can be classified by their physical properties. ● patterns can be used to describe phenomena; for example, objects can have the same shape, size, color, and material. | K.6A |
| 26 Days | <p>Unit 2: Everyday Force and Energy In this unit, students will...</p> <ul style="list-style-type: none"> ● how a magnet can create a force that causes changes in motion and position of some everyday objects. ● that magnets cause changes in motion and position in some metal objects. ● that magnets have many practical applications. They are used in all kinds of everyday objects, from elevators to cell phones to toy trains. ● that magnets pull, or attract, objects made of nickel, iron, or cobalt. They push away the like poles of other magnets. ● the effects of light can be observed in everyday light. ● objects can be seen only when a light source is present. ● objects can look different depending on the amount of light present. ● light can travel through some objects but is blocked by other objects, creating shadows. | K.7A, K.8A, K.8B |

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| 17 Days | <p>Unit 3: Patterns in the Natural World In this unit, students will...</p> <ul style="list-style-type: none"> ● explore recognizable patterns in the natural world and among objects in the sky. ● understand that the natural world includes systems that can be observed. ● identify patterns to which objects appear in the day and night sky. | K.9A, K.9B |
| 25 Days | <p>Unit 4: Our Natural World In this unit, students will...</p> <ul style="list-style-type: none"> ● learn that rocks are earth materials that can be described and classified by physical properties, such as size, shape, color, and texture. ● understand how earth materials, such as rock, soil, and water, are used in everyday applications, such as in building and agriculture. | K.10A, K.11A |
| 28 Days | <p>Unit 5: Everyday Weather and Seasons In this unit, students will...</p> <ul style="list-style-type: none"> ● learn that there are patterns in how the weather changes from day to day. ● recognize that seasons follow a pattern, and there are weather patterns that are characteristic of each season. ● use weather tools to observe, describe, and record weather measurements where they live. ● observe and identify different types of weather commonly experienced during each season. ● understand air is all around us, and wind is moving air. | K.10B, K.10C |
| 35 Days | <p>Unit 6: Animals Plants In this unit, students will...</p> <ul style="list-style-type: none"> ● understand that plants are living things with several key structures, including roots, stems, leaves, flowers, and fruit. ● learn that all plants depend on the environment to meet their basic needs for survival; these needs include air, sunlight, water, nutrients in the soil, and space to grow. ● identify and record the changes that plants undergo from seed to seedling, adult plant, flower, and fruit in a simple life cycle. ● compare the parts of young plants that resemble parts of the parent plant. | K.12A, K13.A, K13.C, K.13D |

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| 17 Days | Unit 7: Animals In this unit, students will... <ul style="list-style-type: none">● learn that animals depend on food, air, water, space, and shelter to survive.● understand how animals get what they need from their environment.● identify the specialized structures animals have that enable them to interact with their environment, such as parts that help them see, hear, move, and grasp objects.● use words and pictures to record data about animal needs and animal parts. | K.12B, K13.B |
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