

Decatur Public Schools

Essential Standards Chart

Grade 1 Science



NGSS Standard and Description	Student Friendly Learning Target	Example of Rigor	Prerequisite Skill	When Taught?	Common Assessment	Extension Standard
What is the essential standard to be learned?	Describe in student friendly vocabulary.	What does proficiency look like? Provide an example and/or description.	What prior knowledge, skills, and/or vocabulary is/are needed for a student to master this standard?	When will this standard be taught?	What assessments will be used to measure student mastery?	What will we do when students have learned the essential standard(s)?
Waves: Light and Sound 1-PS4-1 Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.	I can explain how vibrating materials make sound.	They will be able to create a simple device that allows them to communicate across the distance.	What is sound? Senses (vibration, sound, rain, storm, thunder) Experiment	Every 2-3 Weeks	Mystery Science Activity Sheets - Lesson 1	Follow-Up (post) lessons, if possible
1-PS4-2 Make observations to construct an evidence-based account that objects can be seen only when illuminated.	I can explain how lights help me see.	Students will identify sources of light around them.	What is light? Light, dark, experiment	Every 2-3 Weeks	Mystery Science Activity Sheets - Lesson 4	Follow-Up (post) lessons, if possible
1-PS4-3 Plan and conduct an investigation to determine the effect of placing objects made with different materials in the path of a beam of light.	I can explain how light can be affected by different materials.	Students will create a paper stained glass to describe how the light is altered through it.	Glass, metal, wood, material, light, transparent, opaque, translucent	Every 2-3 Weeks	Mystery Science Activity Sheets - Lesson 3	Follow-Up (post) lessons, if possible

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1-PS4-4 Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.	I can use patterns of light to communicate messages.	Students will create their own code, using different colors and patterns of light.	Light, sound, communicate, invent	Every 2-3 Weeks	Mystery Science Activity Sheets - Lesson 5	Follow-Up (post) lessons, if possible
Structure, Function, and Information Processing 1-LS1-1 Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.	I can explain how animals/plants and their different parts help them to survive.	Students will demonstrate how the shape of a bird's beak tells what that particular bird eats.	Structure, function, needs, survive, model, experiment	Every 2-3 Weeks	Mystery Science Activity Sheets - Lesson 2	Follow-Up (post) lessons, if possible
1-LS1-2 Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.	I can explain how animal mothers help their young.	Students will write/draw how animal mothers help their young.	Protect	Every 2-3 Weeks	Mystery Science Activity Sheets - Lesson 3	Follow-Up (post) lessons, if possible

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1-LS3-1 Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.	I can match each seedling to its parent plant.	Students will use clues to tell which adult plant a seedling will grow into.	Seed, seedling, root, stem, leaf, observe	Every 2-3 Weeks	Mystery Science Activity Sheets - Lesson 3	Follow-Up (post) lessons, if possible
Space Systems: Patterns and Cycles 1-ESS1-1 Use observations of the sun, moon, and stars to describe patterns that can be predicted.	I can explain why stars appear at night but not during the day.	Students will use a simple model to demonstrate why stars can only be seen at night,.	Astronomy, day vs. night, constellation, observe, telescope, model	Every 2-3 Weeks	Mystery Science Activity Sheets - Lesson 3	Follow-Up (post) lessons, if possible
1-ESS1-2 Make observations at different times of year to relate the amount of daylight to the time of year.	I can match the season to the length of days	Students will match the season to the length of days.	Sunrise/sunset, summer, winter, pattern, predict	Every 2-3 Weeks	Mystery Science Activity Sheets - Lesson 3	Follow-Up (post) lessons, if possible

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Engineering Design K-2-ETS1-1 Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.	I can provide examples of how the natural world helps us create products to meet human needs.	Students will design umbrellas that can stay up in a strong wind.	Tree, trunk, root, branch, leaf, shade, structure, engineer, design, invent	Every 2-3 Weeks	Mystery Science Activity Sheets - Lesson 2	Follow-Up (post) lessons, if possible
K-2-ETS1-2 Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.	I can provide examples of how the natural world helps us create products to meet human needs.	Students will design umbrellas that can stay up in a strong wind.	Tree, trunk, root, branch, leaf, shade, structure, engineer, design, invent	Every 2-3 Weeks	Mystery Science Activity Sheets - Lesson 2	Follow-Up (post) lessons, if possible
K-2-ETS1-3 Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.	I can provide examples of how the natural world helps us create products to meet human needs.	Students will design umbrellas that can stay up in a strong wind.	Tree, trunk, root, branch, leaf, shade, structure, engineer, design, invent	Every 2-3 Weeks	Mystery Science Activity Sheets - Lesson 2	Follow-Up (post) lessons, if possible