

Kindergarten Science Proficiency Scales

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[PROFICIENCY SCALE FEEDBACK](#)

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Kindergarten Science

K.1.1 Learning Target

Strand 1: Weather Patterns

Essential Skill: Obtain, Evaluate, and Communicate Information

Standard K.1.1: Obtain, evaluate, and communicate information about local, observable weather conditions to describe patterns over time. Emphasize the students' collection and sharing of data. Examples of data could include sunny, cloudy, windy, rainy, cold, or warm. (ESS2.D)

Learning Target: I can observe, collect, and share information about the local weather.

Power School: K0.S.Cl.1A Obtain, evaluate, and communicate information about local, observable weather conditions to describe patterns over time. (K.1.1)

4: Above Proficient: I can complete all proficient tasks and also:

- ☐ Identify different types of weather, such as thunderstorms or fog.
- ☐ Predict what the weather will be like in the future (e.g., guessing if it will rain based on the clouds).
- ☐ Share predictions with others and explain why I think it will happen.
- ☐ Explain how different types of weather (like storms or sunshine) affect what people do.

3: Proficient: I can complete all approaching proficient tasks and also:

- ☐ Describe the weather, such as sunny, rainy, cloudy, or windy.
- ☐ Draw pictures or make simple charts to show the weather over time.
- ☐ Talk about how the weather changes day by day.

2: Approaching Proficient: I can

- ☐ Talk about basic weather patterns, like rain after clouds or sunshine after a storm.
- ☐ Notice the weather outside with help, (like noticing if it's sunny or cloudy).
- ☐ Use the following vocabulary correctly: *local, weather, patterns, sunlight, temperature, predict.*

1: Not Yet Proficient

- ☐ With support, I can partially achieve level 2 or level 3 tasks.

Kindergarten Science

K.1.2 Learning Target

Strand 1: Weather Patterns

Essential Skill: Obtain, evaluate, and communicate information

Standard K.1.2: Obtain, evaluate, and communicate information on the effect of forecasted weather patterns on human behavior. Examples could include how humans respond to local forecasts of typical and severe weather such as extreme heat, high winds, flash floods, thunderstorms, or snowstorms. (ESS3.B)

Learning Target: I can explain how people change what they do based on weather forecasts.

Power School: K0.S.Cl.1C Obtain, evaluate, and communicate information on the effect of forecasted weather patterns on human behavior. (K.1.2)

4: Above Proficient: I can complete all proficient tasks and also:

- ☐ Collect information from different sources, like books or videos, on how weather affects people.
- ☐ Describe why different types of weather (like storms or hot weather) can change what people do (e.g., staying inside when it's raining).
- ☐ Share what I've learned, explaining how weather impacts what people do.
- ☐ Predict how weather will change in the future based on patterns I observe.

3: Proficient: I can complete all approaching proficient tasks and also:

- ☐ Collect information about weather patterns with some help, using pictures, books, or other sources.
- ☐ Describe how different types of weather (like storms or hot weather) can change what people do (e.g., staying inside when it's raining or wearing a jacket when it's cold).
- ☐ Share what I learned about how weather affects people, using simple sentences to explain to others.
- ☐ Use simple charts or drawings to show weather patterns over time and explain them to others.

2: Approaching Proficient: I can....

- ☐ Gather information about weather patterns with teacher help.
- ☐ Talk about how weather can change what people do, like staying inside in the rain or driving carefully when it's snowing.
- ☐ Observe and talk about the current weather with teacher support.
- ☐ Sort pictures of different weather types (rain, snow, sunny) with help.
- ☐ Describe weather observations using basic sentences or words (e.g., "It's sunny" or "It's cold").
- ☐ Correctly use the following vocabulary: *forecast, weather, typical, severe, predictable, prepare.*

1: Not Yet Proficient

- ☐ With support, I can partially achieve level 2 or level 3 tasks.

Kindergarten Science

K.1.3 Learning Target

Strand 1: Weather Patterns

Essential Skill: Carry out an investigation

Standard K.1.3: Carry out an investigation using the five senses, to determine the effect of sunlight on different surfaces and materials. Examples could include measuring temperature, through touch or other methods, on natural and man-made materials in various locations throughout the day. (PS3.B)

Learning Target: I can use my senses to explore how sunlight affects different surfaces.

Power School: K0.S.PI.2B Investigate using the 5 senses, to determine the effect of sunlight on different surfaces and materials. (K.1.3)

4: Above Proficient: I can complete all proficient tasks and also:

- ☐ Analyze patterns in how sunlight impacts various surfaces and predict how sunlight will affect them in the future (for example, which surface will get the hottest or fade first).
- ☐ Share detailed explanations with peers using full sentences, including reasons for my predictions about how sunlight will affect different surfaces.

3: Proficient: I can complete all approaching proficient tasks and also:

- ☐ Test how sunlight affects different materials, such as wood, metal, and fabric, and describe how they change in response to sunlight.
- ☐ Predict how different surfaces will change when exposed to sunlight for a certain amount of time (e.g., which surface will feel warmer or fade more quickly).
- ☐ Collect and record data, like temperature or changes in color, to show how sunlight affects different surfaces over time.

2: Approaching Proficient: I can....

- ☐ Use my senses to notice sunlight, like feeling warmth or seeing brightness.
- ☐ Identify one way sunlight changes a surface with help (like sunlight making something warmer).
- ☐ Correctly use the following vocabulary: *sunlight, shade, location, surfaces, materials, temperature, investigate, observation, data.*

1: Not Yet Proficient

- ☐ With support, I can partially achieve level 2 or level 3 tasks.

Kindergarten Science

K.1.4 Learning Target

Strand 1: Weather Patterns

Essential Skill: Design a Solution

Standard: K.1.4 Design a solution that will reduce the warming effect of sunlight on an area. Define the problem by **asking questions** and gathering information, convey designs through sketches, drawings, or physical models, and compare and test designs. (PS3.B, ETS1.A, ETS1.B, ETS1.C)

Learning Target: I can design a solution to keep an area in the sun cool.

Power School: Design and test a solution that will reduce the warming effect of sunlight on an area. (K.1.4)

4: Above Proficient: I can complete all proficient tasks and also:

- ☐ Notice a problem like the sun making a play area too hot and ask thoughtful questions to understand it better.
- ☐ Design and test a creative idea to reduce the warming effect of sunlight, explaining my reasons for choosing the solution.
- ☐ Use different materials to make detailed drawings or models of my idea, and improve it based on what I learned from testing.
- ☐ Explain how your design addresses the problem.

3: Proficient: I can complete all approaching proficient tasks and also:

- ☐ Identify a problem related to sunlight warming an area and ask simple questions to understand the issue.
- ☐ Design and draw a simple solution to reduce the sunlight's warming effect.
- ☐ Test my design and compare it with other possible solutions, making simple changes to improve it.

2: Approaching Proficient: I can

- ☐ Recognize sunlight warming an area with help.
- ☐ Ask simple questions to learn about the problem (e.g., "Why does it get hot in the sun?").
- ☐ Create simple sketches or models to show my solution, with assistance.
- ☐ Take part in testing activities and make basic observations about my design.
- ☐ Correctly use the following vocabulary terms: *reduce, sunlight, shade, effect, surface, materials, problem, design, compare, solution*

1: Not Yet Proficient

- ☐ With support, I can partially achieve level 2 or level 3 tasks.

Kindergarten Science

K.2.1 Learning Target

Strand 2: Living Things and Their Surroundings

Essential Skill: Obtain, evaluate, and communicate information.

Standards K.2.1: Obtain, evaluate, and communicate information to describe patterns of what living things (plants and animals, including humans) need to survive. Emphasize the similarities and differences between the survival needs of all living things. Examples could include that plants depend on air, water, minerals, and light to survive, or animals depend on plants or other animals to survive. (LS1.C)

Learning Target:: I can find out and share what plants and animals need to survive.

Power School: K0.S.Cl.1B Obtain, evaluate and communicate information to describe patterns of what living things need to survive. (K.2.1)

4: Above Proficient: I can complete all proficient tasks and also:

- ☐ Research survival needs of different living things on my own (e.g., animals, plants, humans).
- ☐ Compare survival needs of different living things and explain how they are similar and different (e.g., a cactus vs. a fish).

3: Proficient: I can complete all approaching proficient tasks and also:

- ☐ Talk about what plants, animals, and humans all need to survive (e.g., water, food, shelter).
- ☐ Explain the differences in what plants, animals, and humans need (e.g., plants need sunlight, humans need clothing).
- ☐ Collect information from books or classroom talks about survival needs.
- ☐ Explain what living things need to survive using information I've learned.

2: Approaching Proficient: I can....

- ☐ Find out about one or two survival needs of living things with help.
- ☐ Talk about what living things need to survive (e.g., plants need water).
- ☐ Know that plants need water, air, and sunlight.
- ☐ Know that animals need food, water, and shelter.
- ☐ Correctly use the following vocabulary: *survive, plants, animals, humans, survival needs*.

1: Not Yet Proficient

- ☐ With support, I can partially achieve level 2 or level 3 tasks.

Kindergarten Science

K.2.2 Learning Target

Strand 2: Living Things and Their Surroundings

Essential Skill: Obtain, evaluate, and communicate information.

Standard: K.2.2 Obtain, evaluate, and communicate information about patterns in the relationships between the needs of different living things (plants and animals, including humans) and the places they live. Emphasize that living things need water, air, and resources and that they live in places that have the things they need. Examples could include investigating plants grown in various locations and comparing the results or comparing animals with the places they live. (LS2.A, LS2.B, ESS3.A)

Learning Target: I can gather and share information about where living things might live, and what they get from their environments.

Power School: K0.S.CI.1D Obtain, evaluate and communicate patterns in the relationships between the needs of living things and where they live. (K.2.2)

4: Above Proficient: I can complete all proficient tasks and also:

- ☐ Talk about different living things and where they live, with examples.
- ☐ Explain how living things use the things around them to survive (like animals using plants for food or shelter).
- ☐ Give examples of how places, like deserts or forests, help certain living things stay alive (like how cacti and camels survive in the desert).

3: Proficient: I can complete all approaching proficient tasks and also:

- ☐ Talk about what makes a place (habitat) good for living things (like water, food, and shelter).
- ☐ Watch and talk about what living things need to stay in their home (habitat).
- ☐ Explain why certain animals or plants live in certain places (like why fish live in water or squirrels live in trees).

2: Approaching Proficient: I can....

- ☐ Name things that habitats have (like water, shelter, or plants).
- ☐ Help look at different places where animals and plants live.
- ☐ Talk about how living things need different habitats to live, with help.
- ☐ Say where humans, animals, and plants live.
- ☐ Correctly use the following vocabulary: *plant needs, animal needs, human needs, water, air, resources*.

1: Not Yet Proficient

- ☐ With support, I can partially achieve level 2 or level 3 tasks.

Kindergarten Science

K.2.3 Learning Target

Strand 2: Living Things and Their Surroundings

Essential Skill: Obtain, evaluate, and communicate information.

Learning Target: I can gather and share information about how plants, animals, and humans change their surroundings to help them survive.

Standard: K.2.3 Obtain, evaluate, and communicate information about how living things (plants and animals, including humans) affect their surroundings to survive. Examples could include squirrels digging in the ground to hide their food, plant roots breaking concrete, or humans building shelters. (ESS2.E)

Power School: K0.S.Cl.1E Obtain, evaluate and communicate information about how living things affect their surroundings to survive. (K.2.3)

4: Above Proficient: I can complete all proficient tasks and also:

- ☐ Predict how different actions can change the environment and living things, either for the better or worse (e.g., planting a tree helps, littering hurts).
- ☐ Connect what I learn in class to real-life actions in my community (e.g., recycling, protecting animals).
- ☐ Explain with examples how plants, animals, and humans can help the environment (e.g., planting flowers, saving water) or hurt it (e.g., pollution, cutting down trees).
- ☐ Share what I know with others about how living things and the environment work together.

3: Proficient: I can complete all approaching proficient tasks and also:

- ☐ Identify simple actions that change the environment, like recycling, littering, or building houses.
- ☐ Observe how plants, animals, and humans affect the environment, both good and bad (e.g., recycling helps, trash hurts).
- ☐ Talk about how planting trees helps the Earth and how littering hurts it.
- ☐ Talk about how people can help the environment, like by cleaning up or planting gardens.

2: Approaching Proficient: I can

- ☐ Recognize how living things (like animals and plants) affect the environment (e.g., animals eating plants, plants giving oxygen).
- ☐ Describe simple actions that people do that change the environment (e.g., planting trees, littering).
- ☐ Show that humans, animals, and plants all depend on the environment to survive (e.g., animals need plants for food).
- ☐ Name the places where humans, animals, and plants live (e.g., forest, ocean, city).
- ☐ Correctly use the following vocabulary: *survival, plants, animals, humans, impact, environment, cause, effect*.

1: Not Yet Proficient

- ☐ With support, I can partially achieve level 2 or level 3 tasks.

Kindergarten Science

K.2.4 Learning Target

Strand 2: Living Things and Their Surroundings

Essential Skill: Design a solution.

Standard: K.2.4 Design and communicate a solution to address the effects that living things (plants and animals, including humans) experience while trying to survive in their surroundings. *Define the problem by asking questions and gathering information, convey designs through sketches, drawings, or physical models, and compare designs.* Emphasize students working from a plant, animal, or human perspective. Examples could include a plant growing to get more sunlight, a beaver building a dam, or humans caring for the Earth by reusing and recycling natural resources. (ESS3.C, ETS1.A, ETS1.B, ETS1.C)

Learning Target: I can design and communicate a solution to a problem that will help a living thing survive in its environment.

Power School: K0.S.CE.3A Design and communicate a solution to address the effects that living things experience while trying to survive in their surroundings. (K.2.4)

4: Above Proficient: I can complete all proficient tasks and also:

- ☐ Independently identify a problem that a living thing faces in its environment, like not having enough food or shelter.
- ☐ Create a smart and creative solution that will help a living thing survive better in its environment (e.g., building a safe place for a bird to live).
- ☐ Explain my solution clearly, using simple and clear examples to show why my idea works.
- ☐ Use pictures, models, or drawings to show my idea and how it helps the living thing survive.
- ☐ Make changes to my solution if I learn something new, showing how I can improve it.

3: Proficient: I can complete all approaching proficient tasks and also:

- ☐ Identify a problem that a living thing has in its environment (e.g., an animal needs shelter).
- ☐ Come up with a simple and solution to the problem, like making sure the animal has food or shelter.
- ☐ Explain my solution with examples, using words and pictures to show how it works.
- ☐ Draw pictures, make models, or use sketches to show my solution.

2: Approaching Proficient: I can

- ☐ Recognize what living things need to survive, like food, water, and shelter.
- ☐ Share a simple idea to solve a problem but might need help explaining why it works (e.g., giving an animal food or building a home).
- ☐ Design a simple solution with help, but it may not completely solve the problem.
- ☐ Understand that living things need special things to survive (e.g., animals need food, plants need sunlight).
- ☐ Correctly use the following vocabulary: *survival, human, environment, natural resources, surroundings, respond, cause, effect.*

1: Not Yet Proficient

- ☐ With support, I can partially achieve level 2 or level 3 tasks.

Kindergarten Science

K.3.1 Learning Target

Strand 3: Forces, Motions, and Interactions

Essential Skill: Plan and conduct an investigation.

Standard: K.3.1 **Plan and conduct an investigation** to compare the effects of different strengths or different directions of forces on the motion of an object. Emphasize forces as a push and pull on an object. The idea of strength should be kept separate from the idea of direction.

Learning Target: I can investigate how pushing and pulling on an object changes how it moves.

Power School: K0.S.PI.2A Plan and conduct an investigation to compare the effects of different strengths or different directions of forces on the motion of an object.

4: Above Proficient: I can complete all proficient tasks and also:

- ☐ Create my own experiment to test how different strengths and directions of pushes and pulls change how far or fast something moves.
- ☐ Use different materials (e.g., toy cars, ramps) to see how force affects motion and explain my ideas clearly.
- ☐ Draw or build models to show how different strengths (hard push vs. soft push) and directions (push forward or pull backward) change how an object moves.
- ☐ Predict how an object will move before testing it, using what I know about pushes and pulls.

3: Proficient: I can complete all approaching proficient tasks and also:

- ☐ Plan and carry out an investigation to compare how different strengths (strong vs. weak push) and directions (pushing forward vs. pulling back) of forces affect the motion of an object.
- ☐ Explain how a stronger push makes an object move faster, while a weaker push makes it move slower.
- ☐ Understand that pushing in different directions (e.g., forward, backward) makes an object move in different ways.
- ☐ Clearly communicate my findings using visuals like diagrams, charts, or models to show how force strength and direction affect the motion of an object.

2: Approaching Proficient: I can....

- ☐ Identify the strength of a push or pull with help (e.g., gentle push vs. strong push).
- ☐ Recognize that pushing or pulling changes the motion of an object (e.g., a push makes something move).
- ☐ Understand the idea that pushing or pulling in different directions makes things move in different ways (e.g., forward, backward, up).
- ☐ Participate in investigations to observe the effects of pushes and pulls on objects, like pushing a toy car harder to see how far it goes.
- ☐ Correctly use the following vocabulary: *push, pull, direction, cause, effect, change, strength, speed, motion*.

1: Not Yet Proficient

- ☐ With support, I can partially achieve level 2 or level 3 tasks.

Kindergarten Science

K.3.2 Learning Target

Strand 3: Forces, Motions, and Interactions

Essential Skill: Analyze Data

Standard: K.3.2 Analyze data to determine how a design solution causes a change in the speed or direction of an object with a push or a pull. Define the problem by asking questions and gathering information, convey designs through sketches, drawings, or physical models, and compare and test designs. Examples of problems requiring a solution could include having a marble or other object move a certain distance, follow a particular path, or knock down other objects. (PS2.A, PS2.B, PS2.C, PS3.C, ETS1.A, ETS1.B, ETS1.C)

Learning Target: I can analyze data to see how pushing or pulling changes how fast or in which direction an object moves.

Power School: K0.S.CE.3C Analyze data and ask questions to determine how a design solution causes a change the speed or direction of an object with a push or pull. (K.3.2)

4: Above Proficient: I can complete all proficient tasks and also:

- ☐ Identify problems and ask questions to understand them better (e.g., how to make a marble move or follow a path).
- ☐ Look at data to see how a push or pull changes the speed or direction of an object.
- ☐ Gather information and improve my design based on testing.
- ☐ Create and share clear designs with pictures or models, showing how my solution works.
- ☐ Test different designs and explain how the changes in my design helped improve the movement of the object.

3: Proficient: I can complete all approaching proficient tasks and also:

- ☐ Identify a problem and ask questions to help solve it (e.g., how to make something move or follow a path).
- ☐ Test designs to see how a push or pull changes the speed or direction of an object.
- ☐ Use pictures or models to explain my design and how it solves the problem.
- ☐ Test different designs and explain what works better, making changes based on what I learned.

2: Approaching Proficient: I can....

- ☐ Identify a problem (e.g., making an object move or follow a path) with some help.
- ☐ Understand that a push or pull can change how an object moves, but I may need help explaining it.
- ☐ Draw or make simple models of a solution with guidance.
- ☐ Participate in testing and describe how the push or pull affects the object's movement.
- ☐ Correctly use the following vocabulary: *strength, direction, push, pull, change, motion, analyze, relationship*.

1: Not Yet Proficient

- ☐ With support, I can partially achieve level 2 or level 3 tasks.

Proficiency Scales

Science

Strand 1: Weather Patterns

Essential Skill: Obtain, Evaluate, and Communicate Information

Standard K.1.1: Obtain, evaluate, and communicate information about local, observable weather conditions to describe patterns over time. Emphasize the students' collection and sharing of data. Examples of data could include sunny, cloudy, windy, rainy, cold, or warm. (ESS2.D)

Learning Target: I can observe, collect, and share information about the local weather.

Power School: K0.S.Cl.1A **Obtain, evaluate, and communicate information** about local, observable weather conditions to describe patterns over time. (K.1.1)

4: Above Proficient: I can complete all proficient tasks and also:

- ☐ Identify different types of weather, such as thunderstorms or fog.
- ☐ Predict what the weather will be like in the future (e.g., guessing if it will rain based on the clouds).
- ☐ Share predictions with others and explain why I think it will happen.
- ☐ Explain how different types of weather (like storms or sunshine) affect what people do.

3: Proficient: I can complete all approaching proficient tasks and also:

- ☐ Describe the weather, such as sunny, rainy, cloudy, or windy.
- ☐ Draw pictures or make simple charts to show the weather over time.
- ☐ Talk about how the weather changes day by day.

2: Approaching Proficient: I can

- ☐ Talk about basic weather patterns, like rain after clouds or sunshine after a storm.
- ☐ Notice the weather outside with help, (like noticing if it's sunny or cloudy).
- ☐ Use the following vocabulary correctly: *local, weather, patterns, sunlight, temperature, predict.*

1: Not Yet Proficient

- ☐ With support, I can partially achieve level 2 or level 3 tasks.