

# Access Science Grade First   (#7720020)

# Course Standards

[SC.1.E.5.1:](https://cpalms.org/Public/PreviewStandard/Preview/1570) Observe and discuss that there are more stars in the sky than anyone can easily count and that they are not scattered evenly in the sky.

## Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.1.E.5.Su.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7512) | Recognize that there are many stars in the sky. |  |  |  |
| [SC.1.E.5.Pa.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7513) | Associate stars with the night sky. |  |  |  |
| Resources: |  |  |  |  |

[SC.1.E.5.2:](https://cpalms.org/Public/PreviewStandard/Preview/1571) Explore the Law of Gravity by demonstrating that Earth's gravity pulls any object on or near Earth toward it even though nothing is touching the object. Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.1.E.5.In.2:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7514) | Observe and recognize that an object will fall when it is dropped. |  |  |  |
| [SC.1.E.5.Su.2:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7515) | Indicate the location of an object before and after it falls. |  |  |  |
| [SC.1.E.5.Pa.2:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7516) | Track objects that fall to the ground. |  |  |  |
| Resources: |  |  |  |  |

[SC.1.E.5.3:](https://cpalms.org/Public/PreviewStandard/Preview/1572) Investigate how magnifiers make things appear bigger and help people see things they could not see without them.

## Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.1.E.5.In.3:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7517) | Identify that magnifiers enlarge the appearance of objects. |  |  |  |
| [SC.1.E.5.Su.3:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7518) | Match a magnified item to its original item. |  |  |  |
| [SC.1.E.5.Pa.3:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7519) | Recognize a familiar object enlarged by magnification. |  |  |  |
| Resources: |  |  |  |  |

[SC.1.E.5.4:](https://cpalms.org/Public/PreviewStandard/Preview/1573) Identify the beneficial and harmful properties of the Sun. Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.1.E.5.In.4:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7520) | Recognize positive and harmful effects of sunlight. |  |  |  |
| [SC.1.E.5.Su.4:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7521) | Recognize a positive effect and a negative effect of sunlight. |  |  |  |
| [SC.1.E.5.Pa.4:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7522) | Recognize effects of sunlight, such as warming and giving light. |  |  |  |
| Resources: | Science Lesson Plan: Sun 101 [Click here](https://accesstofls.weebly.com/uploads/2/3/7/3/23739164/science_k-2_sun_101.docx) |  |  |  |

[SC.1.E.6.1:](https://cpalms.org/Public/PreviewStandard/Preview/1585) Recognize that water, rocks, soil, and living organisms are found on Earth's surface.

## Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.1.E.6.In.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7523) | Identify rocks, water, and living things in the environment. |  |  |  |
| [SC.1.E.6.Su.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7524) | Recognize rocks and living things in the environment. |  |  |  |
| [SC.1.E.6.Pa.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7525) | Recognize living things in the environment. |  |  |  |
| Resources: | Science Lesson Plan: Rock Sorting [Click here](https://accesstofls.weebly.com/uploads/2/3/7/3/23739164/science_k-2_rock_sorting.docx) |  |  |  |

[SC.1.E.6.2:](https://cpalms.org/Public/PreviewStandard/Preview/1586) Describe the need for water and how to be safe around water.

**Related Access Points**

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.1.E.6.In.2:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7526) | Identify reasons people need water and safe practices around water. |  |  |  |
| [SC.1.E.6.Su.2:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7527) | Identify reasons people need water. |  |  |  |
| [SC.1.E.6.Pa.2:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7528) | Recognize one way people use water. |  |  |  |
| Resources: |  |  |  |  |

[SC.1.E.6.3:](https://cpalms.org/Public/PreviewStandard/Preview/1587) Recognize that some things in the world around us happen fast and some happen slowly.

**Remarks/Examples:**  
Fast: volcanic eruptions, flooding, hurricanes. Slow: drought.

**Related Access Points**

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.1.E.6.In.3:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7529) | Distinguish between events that happen slowly and those that happen fast. |  |  |  |
| [SC.1.E.6.Su.3:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7530) | Distinguish between actions that are fast or slow. |  |  |  |
| [SC.1.E.6.Pa.3:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7531) | Recognize an action as fast or slow. |  |  |  |
| Resources: |  |  |  |  |

[SC.1.L.14.1:](https://cpalms.org/Public/PreviewStandard/Preview/1591) Make observations of living things and their environment using the five senses.

**Remarks/Examples:**  
Integrate HE.1.C.1.6. Emphasize the correct names of human body parts.

## Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.1.L.14.In.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7541) | Use sight, hearing, and smell to make observations. |  |  |  |
| [SC.1.L.14.Su.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7542) | Use sight and hearing to make observations. |  |  |  |
| [SC.1.L.14.Pa.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7543) | Recognize and respond to different types of sensory stimuli. |  |  |  |
| Resources: | Science Lesson Plan: I Spy with My Little Eye [Click here](https://accesstofls.weebly.com/uploads/2/3/7/3/23739164/k-2__i_spy_with_my_little_eye.docx)  Science Lesson Plan: Do You Hear What I Hear [Click here](https://accesstofls.weebly.com/uploads/2/3/7/3/23739164/k-2_do_you_hear_what_i_hear.docx)  Science Lesson Plan: Soft & Smooth [Click here](https://accesstofls.weebly.com/uploads/2/3/7/3/23739164/k-2_soft_and_smooth_rough_and_bumpy.docx)  Science Lesson Plan: Taste Test [Click here](https://accesstofls.weebly.com/uploads/2/3/7/3/23739164/k-2_taste_test.docx)  Science Lesson Plan: What’s That Smell [Click here](https://accesstofls.weebly.com/uploads/2/3/7/3/23739164/k-2_whats_that_smell.docx) |  |  |  |

[SC.1.L.14.2:](https://cpalms.org/Public/PreviewStandard/Preview/1592) Identify the major parts of plants, including stem, roots, leaves, and flowers.

## Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.1.L.14.In.2:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7544) | Identify the leaf, flower, and stem of a plant. |  |  |  |
| [SC.1.L.14.Su.2:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7545) | Recognize the leaf and flower of a plant. |  |  |  |
| [SC.1.L.14.Pa.2:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7546) | Recognize that plants have leaves. |  |  |  |
| Resources: | Science Lesson Plan: Plantzilla [Click here](https://accesstofls.weebly.com/uploads/2/3/7/3/23739164/science_k-2_plantzilla.docx) |  |  |  |

[SC.1.L.14.3:](https://cpalms.org/Public/PreviewStandard/Preview/1593) Differentiate between living and nonliving things.

## Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.1.L.14.In.3:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7547) | Identify characteristics of living and nonliving things, including whether they need food or water. |  |  |  |
| [SC.1.L.14.Su.3:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7548) | Distinguish common living and nonliving things in the environment. |  |  |  |
| [SC.1.L.14.Pa.3:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7549) | Recognize self and others as living things. |  |  |  |
| Resources: |  |  |  |  |

[SC.1.L.16.1:](https://cpalms.org/Public/PreviewStandard/Preview/1594) Make observations that plants and animals closely resemble their parents, but variations exist among individuals within a population.

## Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.1.L.16.In.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7550) | Match offspring of specific animals to adult animals. |  |  |  |
| [SC.1.L.16.Su.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7551) | Recognize that baby plants and animals have parents. |  |  |  |
| [SC.1.L.16.Pa.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7552) | Recognize one’s own parents. |  |  |  |
| Resources: |  |  |  |  |

[SC.1.L.17.1:](https://cpalms.org/Public/PreviewStandard/Preview/1595) Through observation, recognize that all plants and animals, including humans, need the basic necessities of air, water, food, and space.

## Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.1.L.17.In.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7553) | Observe and recognize that plants and animals need water and food. |  |  |  |
| [SC.1.L.17.Su.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7554) | Observe and recognize that plants and animals need water. |  |  |  |
| [SC.1.L.17.Pa.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7555) | Observe and recognize that people need water. |  |  |  |
| Resources: | Science Lesson Plan: Harry the Dirty Dog [Click here](https://accesstofls.weebly.com/uploads/2/3/7/3/23739164/k-2_harry_the_dirty_dog.docx) |  |  |  |

[SC.1.N.1.1:](https://cpalms.org/Public/PreviewStandard/Preview/1566) Raise questions about the natural world, investigate them in teams through free exploration, and generate appropriate explanations based on those explorations.

**Remarks/Examples:**  
\* Florida Standards Connections: LAFS.1.SL.1.1. Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in groups.

## Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.1.N.1.In.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7502) | Request information about the environment. |  |  |  |
| [SC.1.N.1.Su.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7503) | Ask questions about common objects in the environment. |  |  |  |
| [SC.1.N.1.Pa.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7504) | Recognize common objects in the environment. |  |  |  |
| Resources: |  |  |  |  |

[SC.1.N.1.2:](https://cpalms.org/Public/PreviewStandard/Preview/1567) Using the five senses as tools, make careful observations, describe objects in terms of number, shape, texture, size, weight, color, and motion, and compare their observations with others.

**Remarks/Examples:**  
\* Florida Standards Connections: LAFS.1.W.3.8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.  
  
\* Refer to MAFS.K12.MP.5: Use appropriate tools strategically.

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.1.N.1.In.2:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7505) | Use careful observation to identify objects based on size, shape, color, or texture. |  |  |  |
| [SC.1.N.1.Su.2:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7506) | Recognize differences in objects through observation of size, shape, or color |  |  |  |
| [SC.1.N.1.Pa.2:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7507) | Recognize common objects as the same. |  |  |  |
| Resources: | Science Lesson Plan: Magnets and Motion [Click here](https://accesstofls.weebly.com/uploads/2/3/7/3/23739164/science_k-2_magnets_and_motion.docx)  Science Lesson Plan: Plantzilla [Click here](https://accesstofls.weebly.com/uploads/2/3/7/3/23739164/science_k-2_plantzilla.docx)  Science Lesson Plan: Sun 101 [Click here](https://accesstofls.weebly.com/uploads/2/3/7/3/23739164/science_k-2_sun_101.docx)  Science Lesson Plan: I Spy with My Little Eye [Click here](https://accesstofls.weebly.com/uploads/2/3/7/3/23739164/k-2__i_spy_with_my_little_eye.docx)  Science Lesson Plan: Do You Hear What I Hear [Click here](https://accesstofls.weebly.com/uploads/2/3/7/3/23739164/k-2_do_you_hear_what_i_hear.docx)  Science Lesson Plan: Soft & Smooth [Click here](https://accesstofls.weebly.com/uploads/2/3/7/3/23739164/k-2_soft_and_smooth_rough_and_bumpy.docx)  Science Lesson Plan: Taste Test [Click here](https://accesstofls.weebly.com/uploads/2/3/7/3/23739164/k-2_taste_test.docx)  Science Lesson Plan: Tug of War [Click here](https://accesstofls.weebly.com/uploads/2/3/7/3/23739164/k-2_tug_of_war.docx)  Science Lesson Plan: What’s That Smell [Click here](https://accesstofls.weebly.com/uploads/2/3/7/3/23739164/k-2_whats_that_smell.docx) |  |  |  |

[SC.1.N.1.3:](https://cpalms.org/Public/PreviewStandard/Preview/1568) Keep records as appropriate - such as pictorial and written records - of investigations conducted.

**Remarks/Examples:**  
\* Florida Standards Connections: MAFS.1.MD.3.4. Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

**Related Access Points**

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.1.N.1.In.3:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7508) | Draw pictures about investigations conducted. |  |  |  |
| [SC.1.N.1.Su.3:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7509) | Contribute to group recordings of observations. |  |  |  |
| [SC.1.N.1.Pa.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7504) | Recognize common objects in the environment. |  |  |  |
| Resources: | Science Lesson Plan: I Like to Move It, Move It [Click here](https://accesstofls.weebly.com/uploads/2/3/7/3/23739164/science_k-2_i_like_to_move_it_move_it.docx)  Science Lesson Plan: Magnets and Motion [Click here](https://accesstofls.weebly.com/uploads/2/3/7/3/23739164/science_k-2_magnets_and_motion.docx) |  |  |  |

[SC.1.N.1.4:](https://cpalms.org/Public/PreviewStandard/Preview/1569) Ask "how do you know?" in appropriate situations.

**Remarks/Examples:**  
\* Florida Standards Connections: LAFS.1.RI.2.4. Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.

## Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.1.N.1.In.4:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7510) | Ask a question about a science investigation. |  |  |  |
| [SC.1.N.1.Su.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7503) | Ask questions about common objects in the environment. |  |  |  |
| [SC.1.N.1.Pa.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7504) | Recognize common objects in the environment. |  |  |  |
| Resources: | Science Lesson Plan: Rock Sorting [Click here](https://accesstofls.weebly.com/uploads/2/3/7/3/23739164/science_k-2_rock_sorting.docx) |  |  |  |

[SC.1.P.8.1:](https://cpalms.org/Public/PreviewStandard/Preview/1588) Sort objects by observable properties, such as size, shape, color, temperature (hot or cold), weight (heavy or light), texture, and whether objects sink or float.

**Remarks/Examples:**  
The use of the more familiar term "weight" instead of the term "mass" is recommended for grades K-2.

## Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.1.P.8.In.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7532) | Sort objects by observable properties, such as size, shape, color, or texture. |  |  |  |
| [SC.1.P.8.Su.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7533) | Sort objects by an observable property, such as size, shape, or color. |  |  |  |
| [SC.1.P.8.Pa.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7534) | Identify common classroom objects by one observable property, such as size or color. |  |  |  |
| Resources: | Science Lesson Plan: Magnets and Motion [Click here](https://accesstofls.weebly.com/uploads/2/3/7/3/23739164/science_k-2_magnets_and_motion.docx)  Science Lesson Plan: Rock Sorting [Click here](https://accesstofls.weebly.com/uploads/2/3/7/3/23739164/science_k-2_rock_sorting.docx) |  |  |  |

[SC.1.P.12.1:](https://cpalms.org/Public/PreviewStandard/Preview/1589) Demonstrate and describe the various ways that objects can move, such as in a straight line, zigzag, back-and-forth, round-and-round, fast, and slow.

## Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.1.P.12.In.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7535) | Demonstrate and identify that objects can move in different ways, such as up and down, in a straight line, and back and forth. |  |  |  |
| [SC.1.P.12.Su.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7536) | Demonstrate that objects can move in different ways, such as up and down. |  |  |  |
| [SC.1.P.12.Pa.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7537) | Track objects moving up and down. |  |  |  |
| Resources: | Science Lesson Plan: I Like to Move It, Move It [Click here](https://accesstofls.weebly.com/uploads/2/3/7/3/23739164/science_k-2_i_like_to_move_it_move_it.docx) |  |  |  |

[SC.1.P.13.1:](https://cpalms.org/Public/PreviewStandard/Preview/1590) Demonstrate that the way to change the motion of an object is by applying a push or a pull. Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.1.P.13.In.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7538) | Identify the effect that a push or pull has on an object, such as changing the way an object moves. |  |  |  |
| [SC.1.P.13.Su.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7539) | Demonstrate and recognize that pushing or pulling of an object makes it move. |  |  |  |
| [SC.1.P.13.Pa.1:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/7540) | Apply a push to move an object. |  |  |  |
| Resources: | Science Lesson Plan: I Like to Move It, Move It [Click here](https://accesstofls.weebly.com/uploads/2/3/7/3/23739164/science_k-2_i_like_to_move_it_move_it.docx)  Science Lesson Plan: Tug of War [Click here](https://accesstofls.weebly.com/uploads/2/3/7/3/23739164/k-2_tug_of_war.docx) |  |  |  |

[HE.1.C.1.5:](https://cpalms.org/Public/PreviewStandard/Preview/7024) Identify the correct names of human body parts.

**Remarks/Examples:**  
Stomach, intestines, heart, lungs, skin, muscles, and bones.

**Related Access Points**

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [HE.1.C.1.In.5:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/12984) | Identify body parts outside the body by name, such as arms, hands, legs, feet, head, eyes, nose, and mouth. |  |  |  |
| [HE.1.C.1.Su.5:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/12986) | Recognize body parts outside of the body, such as mouth, hands, arms, and head. |  |  |  |
| [HE.1.C.1.Pa.5:](https://www.cpalms.org/public/PreviewAccessPoint/Preview/12988) | Recognize selected body parts outside the body, such as a hand, mouth, and nose. |  |  |  |

[MA.K12.MTR.1.1:](https://www.cpalms.org//PreviewStandard/Preview/15875) Actively participate in effortful learning both individually and collectively.

Mathematicians who participate in effortful learning both individually and with others:

* Analyze the problem in a way that makes sense given the task.
* Ask questions that will help with solving the task.
* Build perseverance by modifying methods as needed while solving a challenging task.
* Stay engaged and maintain a positive mindset when working to solve tasks.
* Help and support each other when attempting a new method or approach.

**Clarifications:**  
Teachers who encourage students to participate actively in effortful learning both individually and with others:

* Cultivate a community of growth mindset learners.
* Foster perseverance in students by choosing tasks that are challenging.
* Develop students’ ability to analyze and problem solve.
* Recognize students’ effort when solving challenging problems.

[MA.K12.MTR.2.1:](https://www.cpalms.org//PreviewStandard/Preview/15876) Demonstrate understanding by representing problems in multiple ways.

Mathematicians who demonstrate understanding by representing problems in multiple ways:

* Build understanding through modeling and using manipulatives.
* Represent solutions to problems in multiple ways using objects, drawings, tables, graphs and equations.
* Progress from modeling problems with objects and drawings to using algorithms and equations.
* Express connections between concepts and representations.
* Choose a representation based on the given context or purpose.

**Clarifications:**  
Teachers who encourage students to demonstrate understanding by representing problems in multiple ways:

* Help students make connections between concepts and representations.
* Provide opportunities for students to use manipulatives when investigating concepts.
* Guide students from concrete to pictorial to abstract representations as understanding progresses.
* Show students that various representations can have different purposes and can be useful in different situations.

[MA.K12.MTR.3.1:](https://www.cpalms.org//PreviewStandard/Preview/15877) Complete tasks with mathematical fluency.

Mathematicians who complete tasks with mathematical fluency:

* Select efficient and appropriate methods for solving problems within the given context.
* Maintain flexibility and accuracy while performing procedures and mental calculations.
* Complete tasks accurately and with confidence.
* Adapt procedures to apply them to a new context.
* Use feedback to improve efficiency when performing calculations.

**Clarifications:**  
Teachers who encourage students to complete tasks with mathematical fluency:

* Provide students with the flexibility to solve problems by selecting a procedure that allows them to solve efficiently and accurately.
* Offer multiple opportunities for students to practice efficient and generalizable methods.
* Provide opportunities for students to reflect on the method they used and determine if a more efficient method could have been used.

[MA.K12.MTR.4.1:](https://www.cpalms.org//PreviewStandard/Preview/15878) Engage in discussions that reflect on the mathematical thinking of self and others.

Mathematicians who engage in discussions that reflect on the mathematical thinking of self and others:

* Communicate mathematical ideas, vocabulary and methods effectively.
* Analyze the mathematical thinking of others.
* Compare the efficiency of a method to those expressed by others.
* Recognize errors and suggest how to correctly solve the task.
* Justify results by explaining methods and processes.
* Construct possible arguments based on evidence.

**Clarifications:**  
Teachers who encourage students to engage in discussions that reflect on the mathematical thinking of self and others:

* Establish a culture in which students ask questions of the teacher and their peers, and error is an opportunity for learning.
* Create opportunities for students to discuss their thinking with peers.
* Select, sequence and present student work to advance and deepen understanding of correct and increasingly efficient methods.
* Develop students’ ability to justify methods and compare their responses to the responses of their peers.

[MA.K12.MTR.5.1:](https://www.cpalms.org//PreviewStandard/Preview/15879) Use patterns and structure to help understand and connect mathematical concepts.

Mathematicians who use patterns and structure to help understand and connect mathematical concepts:

* Focus on relevant details within a problem.
* Create plans and procedures to logically order events, steps or ideas to solve problems.
* Decompose a complex problem into manageable parts.
* Relate previously learned concepts to new concepts.
* Look for similarities among problems.
* Connect solutions of problems to more complicated large-scale situations.

**Clarifications:**  
Teachers who encourage students to use patterns and structure to help understand and connect mathematical concepts:

* Help students recognize the patterns in the world around them and connect these patterns to mathematical concepts.
* Support students to develop generalizations based on the similarities found among problems.
* Provide opportunities for students to create plans and procedures to solve problems.
* Develop students’ ability to construct relationships between their current understanding and more sophisticated ways of thinking.

[MA.K12.MTR.6.1:](https://www.cpalms.org//PreviewStandard/Preview/15880) Assess the reasonableness of solutions.

Mathematicians who assess the reasonableness of solutions:

* Estimate to discover possible solutions.
* Use benchmark quantities to determine if a solution makes sense.
* Check calculations when solving problems.
* Verify possible solutions by explaining the methods used.
* Evaluate results based on the given context.

**Clarifications:**  
Teachers who encourage students to assess the reasonableness of solutions:

* Have students estimate or predict solutions prior to solving.
* Prompt students to continually ask, “Does this solution make sense? How do you know?”
* Reinforce that students check their work as they progress within and after a task.
* Strengthen students’ ability to verify solutions through justifications.

[MA.K12.MTR.7.1:](https://www.cpalms.org//PreviewStandard/Preview/15881) Apply mathematics to real-world contexts.

Mathematicians who apply mathematics to real-world contexts:

* Connect mathematical concepts to everyday experiences.
* Use models and methods to understand, represent and solve problems.
* Perform investigations to gather data or determine if a method is appropriate. • Redesign models and methods to improve accuracy or efficiency.

**Clarifications:**  
Teachers who encourage students to apply mathematics to real-world contexts:

* Provide opportunities for students to create models, both concrete and abstract, and perform investigations.
* Challenge students to question the accuracy of their models and methods.
* Support students as they validate conclusions by comparing them to the given situation.
* Indicate how various concepts can be applied to other disciplines.

[ELA.K12.EE.1.1:](https://www.cpalms.org//PreviewStandard/Preview/15201) Cite evidence to explain and justify reasoning.

**Clarifications:**  
K-1 Students include textual evidence in their oral communication with guidance and support from adults. The evidence can consist of details from the text without naming the text. During 1st grade, students learn how to incorporate the evidence in their writing.

2-3 Students include relevant textual evidence in their written and oral communication. Students should name the text when they refer to it. In 3rd grade, students should use a combination of direct and indirect citations.

4-5 Students continue with previous skills and reference comments made by speakers and peers. Students cite texts that they’ve directly quoted, paraphrased, or used for information. When writing, students will use the form of citation dictated by the instructor or the style guide referenced by the instructor.

6-8 Students continue with previous skills and use a style guide to create a proper citation.

9-12 Students continue with previous skills and should be aware of existing style guides and the ways in which they differ.

[ELA.K12.EE.2.1:](https://www.cpalms.org//PreviewStandard/Preview/15202) Read and comprehend grade-level complex texts proficiently.

**Clarifications:**  
See [Text Complexity](https://cpalmsmediaprod.blob.core.windows.net/uploads/docs/standards/best/la/appendixb.pdf) for grade-level complexity bands and a text complexity rubric.

[ELA.K12.EE.3.1:](https://www.cpalms.org//PreviewStandard/Preview/15203) Make inferences to support comprehension.

**Clarifications:**  
Students will make inferences before the words infer or inference are introduced. Kindergarten students will answer questions like “Why is the girl smiling?” or make predictions about what will happen based on the title page. Students will use the terms and apply them in 2nd grade and beyond.

[ELA.K12.EE.4.1:](https://www.cpalms.org//PreviewStandard/Preview/15204) Use appropriate collaborative techniques and active listening skills when engaging in discussions in a variety of situations.

**Clarifications:**  
In kindergarten, students learn to listen to one another respectfully.

In grades 1-2, students build upon these skills by justifying what they are thinking. For example: “I think \_\_\_\_\_\_\_\_ because \_\_\_\_\_\_\_.” The collaborative conversations are becoming academic conversations.

In grades 3-12, students engage in academic conversations discussing claims and justifying their reasoning, refining and applying skills. Students build on ideas, propel the conversation, and support claims and counterclaims with evidence.

[ELA.K12.EE.5.1:](https://www.cpalms.org//PreviewStandard/Preview/15205) Use the accepted rules governing a specific format to create quality work.

**Clarifications:**  
Students will incorporate skills learned into work products to produce quality work. For students to incorporate these skills appropriately, they must receive instruction. A 3rd grade student creating a poster board display must have instruction in how to effectively present information to do quality work.

[ELA.K12.EE.6.1:](https://www.cpalms.org//PreviewStandard/Preview/15206) Use appropriate voice and tone when speaking or writing.

**Clarifications:**  
In kindergarten and 1st grade, students learn the difference between formal and informal language. For example, the way we talk to our friends differs from the way we speak to adults. In 2nd grade and beyond, students practice appropriate social and academic language to discuss texts.

[ELD.K12.ELL.SC.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8643)

English language learners communicate information, ideas and concepts necessary for academic success in the content area of Science.

[ELD.K12.ELL.SI.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8640)

English language learners communicate for social and instructional purposes within the school setting.