

**Access M/J Comprehensive Science 3**

**(#7820017)**

# Access M/J Comprehensive Science 3

# (#7820017)

# Course Standards

## [SC.8.E.5.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/1827)

Recognize that there are enormous distances between objects in space and apply our knowledge of light and space travel to understand this distance.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.E.5.In.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8101) | Compare the distances of the Moon, the Sun, and other stars from the Earth. |  |  |  |
| [SC.8.E.5.Su.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8102) | Identify the relative positions of the Sun and the Moon from Earth. |  |  |  |
| [SC.8.E.5.Pa.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8103) | Recognize that the Moon is closer to Earth than the Sun. |  |  |  |
| Resources: |  |  |  |  |

## [SC.8.E.5.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/1828)

Recognize that the universe contains many billions of galaxies and that each galaxy contains many billions of stars.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.E.5.In.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/8104) | Identify that the Earth and Sun are a part of the Milky Way galaxy. |  |  |  |
| [SC.8.E.5.Su.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/8105) | Recognize that the Solar System is part of a galaxy. |  |  |  |
| [SC.8.E.5.Pa.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8103) | Recognize that the Moon is closer to Earth than the Sun. |  |  |  |
| Resources: |  |  |  |  |

[SC.8.E.5.3:](https://www.cpalms.org/Public/PreviewStandard/Preview/1829)

Distinguish the hierarchical relationships between planets and other astronomical bodies relative to solar system, galaxy, and universe, including distance, size, and composition.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.E.5.In.3:](https://www.cpalms.org/Public/PreviewStandard/Preview/8106) | Identify Earth’s position in the Solar System, and its size relative to the Moon and Sun. |  |  |  |
| [SC.8.E.5.Su.3:](https://www.cpalms.org/Public/PreviewStandard/Preview/8107) | Identify that there are planets and moons in the Solar System. |  |  |  |
| [SC.8.E.5.Pa.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8103) | Recognize that the Moon is closer to Earth than the Sun. |  |  |  |
| Resources: |  |  |  |  |

## [SC.8.E.5.4:](https://www.cpalms.org/Public/PreviewStandard/Preview/1830)

Explore the Law of Universal Gravitation by explaining the role that gravity plays in the formation of planets, stars, and solar systems and in determining their motions.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.E.5.In.4:](https://www.cpalms.org/Public/PreviewStandard/Preview/8108) | Identify gravity as the force that holds orbiting planets in place in the Solar System. |  |  |  |
| [SC.8.E.5.Su.3:](https://www.cpalms.org/Public/PreviewStandard/Preview/8107) | Identify that there are planets and moons in the Solar System. |  |  |  |
| [SC.8.E.5.Pa.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8103) | Recognize that the Moon is closer to Earth than the Sun. |  |  |  |
| Resources: |  |  |  |  |

### [SC.8.E.5.5:](https://www.cpalms.org/Public/PreviewStandard/Preview/1831)

Describe and classify specific physical properties of stars: apparent magnitude (brightness), temperature (color), size, and luminosity (absolute brightness).

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.E.5.In.5:](https://www.cpalms.org/Public/PreviewStandard/Preview/8109) | Identify differences in physical properties of stars, such as brightness, color, and size. |  |  |  |
| [SC.8.E.5.Su.4:](https://www.cpalms.org/Public/PreviewStandard/Preview/8110) | Recognize that the Sun is the closest star to Earth and appears large and bright. |  |  |  |
| [SC.8.E.5.Pa.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/8111) | Recognize the Sun and stars as objects in space. |  |  |  |
| Resources: |  |  |  |  |

[SC.8.E.5.6:](https://www.cpalms.org/Public/PreviewStandard/Preview/1832)

Create models of solar properties including: rotation, structure of the Sun, convection, sunspots, solar flares, and prominences.

### Clarifications: Florida Standards Connections: MAFS.K12.MP.4: Model with mathematics; and MAFS.K12.MP.7: Look for and make use of structure.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.E.5.In.6:](https://www.cpalms.org/Public/PreviewStandard/Preview/8112) | Describe the Sun as a mass of hot, burning gases that produces very high temperatures. |  |  |  |
| [SC.8.E.5.Su.5:](https://www.cpalms.org/Public/PreviewStandard/Preview/8113) | Recognize that the Sun is made of gases that are on fire. |  |  |  |
| [SC.8.E.5.Pa.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/8111) | Recognize the Sun and stars as objects in space. |  |  |  |
| Resources: |  |  |  |  |

### [SC.8.E.5.7:](https://www.cpalms.org/Public/PreviewStandard/Preview/1833)

Compare and contrast the properties of objects in the Solar System including the Sun, planets, and moons to those of Earth, such as gravitational force, distance from the Sun, speed, movement, temperature, and atmospheric conditions.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.E.5.In.7:](https://www.cpalms.org/Public/PreviewStandard/Preview/8114) | Compare conditions on other planets in the Solar System to those on Earth, such as gravity, temperature, and atmosphere. |  |  |  |
| [SC.8.E.5.Su.6:](https://www.cpalms.org/Public/PreviewStandard/Preview/8115) | Recognize that conditions on other planets in the Solar System are different than those on Earth. |  |  |  |
| [SC.8.E.5.Pa.2:](file:///C:\Public\PreviewAccessPoint\Preview\8111) | Recognize the Sun and stars as objects in space. |  |  |  |
| Resources: |  |  |  |  |

[SC.8.E.5.8:](https://www.cpalms.org/Public/PreviewStandard/Preview/1834)

Compare various historical models of the Solar System, including geocentric and heliocentric.

**Clarifications:**  
Florida Standards Connections: MAFS.K12.MP.4: Model with mathematics.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.E.5.In.8:](https://www.cpalms.org/Public/PreviewStandard/Preview/8116) | Identify that long ago people thought the Sun traveled around Earth (geocentric model) until scientists proved otherwise. |  |  |  |
| [SC.8.E.5.Su.3:](https://www.cpalms.org/Public/PreviewStandard/Preview/8107) | Identify that there are planets and moons in the Solar System. |  |  |  |
| [SC.8.E.5.Pa.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8103) | Recognize that the Moon is closer to Earth than the Sun. |  |  |  |
| Resources: |  |  |  |  |

[SC.8.E.5.9:](https://www.cpalms.org/Public/PreviewStandard/Preview/1835)

Explain the impact of objects in space on each other including:

1. the Sun on the Earth including seasons and gravitational attraction
2. the Moon on the Earth, including phases, tides, and eclipses, and the relative position of each body.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.E.5.In.10:](https://www.cpalms.org/Public/PreviewStandard/Preview/8118) | Recognize that the Moon's revolution around the Earth takes about thirty days. |  |  |  |
| [SC.8.E.5.In.9:](https://www.cpalms.org/Public/PreviewStandard/Preview/8117) | Recognize that the four seasons are related to Earth’s position as it travels (revolves) around the Sun. |  |  |  |
| [SC.8.E.5.Su.7:](https://www.cpalms.org/Public/PreviewStandard/Preview/8119) | Recognize that Earth revolves around the Sun creating the four seasons. |  |  |  |
| [SC.8.E.5.Pa.3:](https://www.cpalms.org/Public/PreviewStandard/Preview/8120) | Recognize the four seasons. |  |  |  |
| Resources: |  |  |  |  |

### [SC.8.E.5.10:](https://www.cpalms.org/Public/PreviewStandard/Preview/1836)

Assess how technology is essential to science for such purposes as access to outer space and other remote locations, sample collection, measurement, data collection and storage, computation, and communication of information.

**Clarifications:**  
Florida Standards Connections: MAFS.K12.MP.5: Use appropriate tools strategically; and, MAFS.K12.MP.6: Attend to precision.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.E.5.In.11:](https://www.cpalms.org/Public/PreviewStandard/Preview/8121) | Identify technology used by scientists to locate, view, and study objects in space. |  |  |  |
| [SC.8.E.5.Su.8:](https://www.cpalms.org/Public/PreviewStandard/Preview/8122) | Recognize that scientists use special tools to examine objects in space. |  |  |  |
| [SC.8.E.5.Pa.4:](https://www.cpalms.org/Public/PreviewStandard/Preview/8123) | Recognize a technology tool created for space exploration and adapted for personal use, such as computers, telescopes, or satellites. |  |  |  |
| Resources: |  |  |  |  |

[SC.8.E.5.11:](https://www.cpalms.org/Public/PreviewStandard/Preview/1837)

Identify and compare characteristics of the electromagnetic spectrum such as wavelength, frequency, use, and hazards and recognize its application to an understanding of planetary images and satellite photographs.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.E.5.In.12:](https://www.cpalms.org/Public/PreviewStandard/Preview/8124) | Recognize that technology allows special cameras and satellites to take pictures of objects in space. |  |  |  |
| [SC.8.E.5.Su.8:](https://www.cpalms.org/Public/PreviewStandard/Preview/8122) | Recognize that scientists use special tools to examine objects in space. |  |  |  |
| [SC.8.E.5.Pa.4:](https://www.cpalms.org/Public/PreviewStandard/Preview/8123) | Recognize a technology tool created for space exploration and adapted for personal use, such as computers, telescopes, or satellites. |  |  |  |
| Resources: |  |  |  |  |

[SC.8.E.5.12:](https://www.cpalms.org/Public/PreviewStandard/Preview/1838)

Summarize the effects of space exploration on the economy and culture of Florida.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.E.5.In.13:](https://www.cpalms.org/Public/PreviewStandard/Preview/8125) | Identify effects of space research and exploration on Florida’s economy. |  |  |  |
| [SC.8.E.5.Su.9:](https://www.cpalms.org/Public/PreviewStandard/Preview/8126) | Identify an effect space exploration has had on Florida’s economy. |  |  |  |
| [SC.8.E.5.Pa.4:](https://www.cpalms.org/Public/PreviewStandard/Preview/8123) | Recognize a technology tool created for space exploration and adapted for personal use, such as computers, telescopes, or satellites. |  |  |  |
| Resources: |  |  |  |  |

### [SC.8.L.18.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/1851)

Describe and investigate the process of photosynthesis, such as the roles of light, carbon dioxide, water and chlorophyll; production of food; release of oxygen.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.L.18.In.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8156) | Identify structures in plants that enable them to use the energy from the Sun to make their own food through a process called photosynthesis. |  |  |  |
| [SC.8.L.18.Su.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8157) | Recognize that plants make their own food through a process called photosynthesis. |  |  |  |
| [SC.8.L.18.Pa.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8158) | Recognize that plants need water and light to grow. |  |  |  |
| Resources: |  |  |  |  |

### [SC.8.L.18.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/1852)

Describe and investigate how cellular respiration breaks down food to provide energy and releases carbon dioxide.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.L.18.In.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/8159) | Recognize that cells break down food to release energy. |  |  |  |
| [SC.8.L.18.Su.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/8160) | Recognize that plants and animals get energy from food. |  |  |  |
| [SC.8.L.18.Pa.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/8161) | Recognize that food provides energy. |  |  |  |
| Resources: |  |  |  |  |

### [SC.8.L.18.3:](https://www.cpalms.org/Public/PreviewStandard/Preview/1853)

Construct a scientific model of the carbon cycle to show how matter and energy are continuously transferred within and between organisms and their physical environment.

**Clarifications:**  
Florida Standards Connections: MAFS.K12.MP.4: Model with mathematics.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.L.18.In.3:](https://www.cpalms.org/Public/PreviewStandard/Preview/8162) | Illustrate a model that shows how carbon is cycled between plants and animals. |  |  |  |
| [SC.8.L.18.Su.3:](https://www.cpalms.org/Public/PreviewStandard/Preview/8163) | Recognize that plants use the carbon dioxide that animals breathe out. |  |  |  |
| [SC.8.L.18.Pa.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/8161) | Recognize that food provides energy. |  |  |  |
| Resources: |  |  |  |  |

[SC.8.N.1.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/1816)

Define a problem from the eighth grade curriculum using appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.N.1.In.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8079) | Identify a problem from the eighth grade curriculum, use reference materials to gather information, carry out an experiment, collect and record data, and report results. |  |  |  |
| [SC.8.N.1.Su.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8080) | Recognize a problem from the eighth grade curriculum, use materials to gather information, conduct a simple experiment, and record and share results. |  |  |  |
| [SC.8.N.1.Pa.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8081) | Recognize a problem related to the eighth grade curriculum, observe and explore objects and activities, and recognize a solution. |  |  |  |
| Resources: |  |  |  |  |

### [SC.8.N.1.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/1817)

Design and conduct a study using repeated trials and replication.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.N.1.In.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8079) | Identify a problem from the eighth grade curriculum, use reference materials to gather information, carry out an experiment, collect and record data, and report results. |  |  |  |
| [SC.8.N.1.Su.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8080) | Recognize a problem from the eighth grade curriculum, use materials to gather information, conduct a simple experiment, and record and share results. |  |  |  |
| [SC.8.N.1.Pa.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8081) | Recognize a problem related to the eighth grade curriculum, observe and explore objects and activities, and recognize a solution. |  |  |  |
| Resources: |  |  |  |  |

### [SC.8.N.1.3:](https://www.cpalms.org/Public/PreviewStandard/Preview/1822)

Use phrases such as "results support" or "fail to support" in science, understanding that science does not offer conclusive 'proof' of a knowledge claim.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.N.1.In.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8079) | Identify a problem from the eighth grade curriculum, use reference materials to gather information, carry out an experiment, collect and record data, and report results. |  |  |  |
| [SC.8.N.1.Su.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8080) | Recognize a problem from the eighth grade curriculum, use materials to gather information, conduct a simple experiment, and record and share results. |  |  |  |
| [SC.8.N.1.Pa.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8081) | Recognize a problem related to the eighth grade curriculum, observe and explore objects and activities, and recognize a solution. |  |  |  |
| Resources: |  |  |  |  |

### [SC.8.N.1.4:](https://www.cpalms.org/Public/PreviewStandard/Preview/1823)

Explain how hypotheses are valuable if they lead to further investigations, even if they turn out not to be supported by the data.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.N.1.In.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/8082) | Identify a possible explanation (hypothesis) for a science problem. |  |  |  |
| [SC.8.N.1.Su.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/8083) | Recognize a possible explanation (hypothesis) for a science problem. |  |  |  |
| [SC.8.N.1.Pa.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/8084) | Recognize science as a way to solve problems about the natural world. |  |  |  |
| Resources: |  |  |  |  |

[SC.8.N.1.5:](https://www.cpalms.org/Public/PreviewStandard/Preview/1824)

Analyze the methods used to develop a scientific explanation as seen in different fields of science.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.N.1.In.3:](https://www.cpalms.org/Public/PreviewStandard/Preview/8085) | Identify methods used in different areas of science, such as life science, earth and space science, and physical science. |  |  |  |
| [SC.8.N.1.Su.3:](https://www.cpalms.org/Public/PreviewStandard/Preview/8086) | Recognize methods used in different areas of science, such as life science, earth and space science, and physical science. |  |  |  |
| [SC.8.N.1.Pa.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/8084) | Recognize science as a way to solve problems about the natural world. |  |  |  |
| Resources: |  |  |  |  |

[SC.8.N.1.6:](https://www.cpalms.org/Public/PreviewStandard/Preview/1825)

Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations and models to make sense of the collected evidence.

### Clarifications: Florida Standards Connections: MAFS.K12.MP.4: Model with mathematics.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.N.1.In.4:](https://www.cpalms.org/Public/PreviewStandard/Preview/8087) | Identify that the process used in scientific investigations involves asking a research question, forming a hypothesis, reviewing what is already known, collecting evidence through observations or experiments, determining results, and reaching conclusions. |  |  |  |
| [SC.8.N.1.Su.4:](https://www.cpalms.org/Public/PreviewStandard/Preview/8088) | Recognize that the basic process used in scientific investigations involves questioning, observing, and recording and sharing results. |  |  |  |
| [SC.8.N.1.Pa.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/8084) | Recognize science as a way to solve problems about the natural world. |  |  |  |
| Resources: |  |  |  |  |

### [SC.8.N.2.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/1818)

Distinguish between scientific and pseudoscientific ideas.

**Clarifications:**  
Science is testable, pseudo-science is not; science seeks falsifications, pseudo-science seeks confirmations (e.g. astrology is pseudoscience).

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.N.2.In.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8089) | Identify that scientific knowledge must be supported by evidence. |  |  |  |
| [SC.8.N.2.Su.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8090) | Recognize examples of evidence that supports scientific knowledge. |  |  |  |
| [SC.8.N.2.Pa.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8091) | Recognize an example of observable evidence related to science. |  |  |  |
| Resources: |  |  |  |  |

### [SC.8.N.2.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/1819)

Discuss what characterizes science and its methods.

**Clarifications:**  
Science is the systematic, organized inquiry that is derived from observations and experimentation that can be verified through testing to explain natural phenomena.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.N.2.In.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8089) | Identify that scientific knowledge must be supported by evidence. |  |  |  |
| [SC.8.N.2.Su.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8090) | Recognize examples of evidence that supports scientific knowledge. |  |  |  |
| [SC.8.N.2.Pa.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8091) | Recognize an example of observable evidence related to science. |  |  |  |
| Resources: |  |  |  |  |

[SC.8.N.3.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/1820)

Select models useful in relating the results of their own investigations.

**Clarifications:**  
Florida Standards Connections: MAFS.K12.MP.4: Model with mathematics.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.N.3.In.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8092) | Identify models used in the context of one’s own study of science. |  |  |  |
| [SC.8.N.3.Su.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8093) | Recognize models used in the context of one’s own study of science. |  |  |  |
| [SC.8.N.3.Pa.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8094) | Associate a model with an activity used in the context of one’s own study of science. |  |  |  |
| Resources: |  |  |  |  |

### [SC.8.N.3.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/1821)

Explain why theories may be modified but are rarely discarded.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.N.3.In.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/8095) | Identify that scientific theories can change. |  |  |  |
| [SC.8.N.3.Su.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/8096) | Recognize that scientific theories can change. |  |  |  |
| [SC.8.N.3.Pa.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/8097) | Observe and recognize a cause-effect relationship related to a science topic. |  |  |  |
| Resources: |  |  |  |  |

### [SC.8.N.4.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/1826)

Explain that science is one of the processes that can be used to inform decision making at the community, state, national, and international levels.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.N.4.In.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8098) | Identify ways that science processes can be used to make informed decisions in the community, state, and nation. |  |  |  |
| [SC.8.N.4.Su.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8099) | Recognize that science processes can be used to help people in the community and state make wise choices. |  |  |  |
| [SC.8.N.4.Pa.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8100) | Recognize a way science is used in the community. |  |  |  |
| Resources: |  |  |  |  |

### [SC.8.N.4.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/1790)

Explain how political, social, and economic concerns can affect science, and vice versa.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.N.4.In.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8098) | Identify ways that science processes can be used to make informed decisions in the community, state, and nation. |  |  |  |
| [SC.8.N.4.Su.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8099) | Recognize that science processes can be used to help people in the community and state make wise choices. |  |  |  |
| [SC.8.N.4.Pa.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8100) | Recognize a way science is used in the community. |  |  |  |
| Resources: |  |  |  |  |

[SC.8.P.8.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/1839)

Explore the scientific theory of atoms (also known as atomic theory) by using models to explain the motion of particles in solids, liquids, and gases.

**Clarifications:**  
Recognize that matter is composed of discrete units called atoms and atoms are composed of sub-atomic particles called protons, neutrons, and electrons. Solid is the state in which intermolecular attractions keep the molecules in fixed spatial relationships. Liquid is the state in which intermolecular attractions keep molecules in proximity, but not in fixed relationships. Gas is the state in which molecules are comparatively separated and intermolecular attractions have relatively little effect on their respective motions.  
Florida Standards Connections: MAFS.K12.MP.4: Model with mathematics.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.P.8.In.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8127) | Compare properties of solids, liquids, and gases. |  |  |  |
| [SC.8.P.8.Su.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8128) | Recognize three states of matter, including solids, liquids, and gases. |  |  |  |
| [SC.8.P.8.Pa.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8129) | Recognize examples of the gaseous state of matter, such as steam or smoke. |  |  |  |
| Resources: |  |  |  |  |

### [SC.8.P.8.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/1840)

Differentiate between weight and mass recognizing that weight is the amount of gravitational pull on an object and is distinct from, though proportional to, mass.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.P.8.In.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/8130) | Recognize that the weight of an object is related to the pull of gravity. |  |  |  |
| [SC.8.P.8.Su.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/8131) | Compare the weight of different sized objects. |  |  |  |
| [SC.8.P.8.Pa.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/8132) | Recognize the heavier of two objects. |  |  |  |
| Resources: |  |  |  |  |

### [SC.8.P.8.3:](https://www.cpalms.org/Public/PreviewStandard/Preview/1841)

Explore and describe the densities of various materials through measurement of their masses and volumes.

**Clarifications:**  
Florida Standards Connections: MAFS.K12.MP.5: Use appropriate tools strategically; and, MAFS.K12.MP.6: Attend to precision.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.P.8.In.3:](https://www.cpalms.org/Public/PreviewStandard/Preview/8133) | Observe and compare the density of various materials. |  |  |  |
| [SC.8.P.8.Su.3:](https://www.cpalms.org/Public/PreviewStandard/Preview/8134) | Recognize that smaller objects can weigh more than bigger objects because of density. |  |  |  |
| [SC.8.P.8.Pa.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8129) | Recognize examples of the gaseous state of matter, such as steam or smoke. |  |  |  |
| Resources: |  |  |  |  |

### [SC.8.P.8.4:](https://www.cpalms.org/Public/PreviewStandard/Preview/1842)

Classify and compare substances on the basis of characteristic physical properties that can be demonstrated or measured; for example, density, thermal or electrical conductivity, solubility, magnetic properties, melting and boiling points, and know that these properties are independent of the amount of the sample.

**Clarifications:**  
Florida Standards Connections: MAFS.K12.MP.5: Use appropriate tools strategically; and, MAFS.K12.MP.6: Attend to precision.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.P.8.In.4:](https://www.cpalms.org/Public/PreviewStandard/Preview/8135) | Observe and compare substances based on their physical properties, such as thermal and electrical conductivity, solubility, or magnetic properties. |  |  |  |
| [SC.8.P.8.Su.4:](https://www.cpalms.org/Public/PreviewStandard/Preview/8136) | Observe and compare substances by physical properties, such as weight, size, boiling and melting points, and magnetic properties. |  |  |  |
| [SC.8.P.8.Pa.3:](https://www.cpalms.org/Public/PreviewStandard/Preview/8137) | Recognize substances by physical properties, such as weight (heavy and light), size (big and small), and temperature (hot and cold). |  |  |  |
| Resources: |  |  |  |  |

[SC.8.P.8.5:](https://www.cpalms.org/Public/PreviewStandard/Preview/1843)

Recognize that there are a finite number of elements and that their atoms combine in a multitude of ways to produce compounds that make up all of the living and nonliving things that we encounter.

**Clarifications:**  
Demonstrate with atomic models how atoms can combine in many ways. Explain why there are many, but limited, combinations. Use models to demonstrate the conservation of mass in modeled chemical reactions.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.P.8.In.5:](https://www.cpalms.org/Public/PreviewStandard/Preview/8138) | Recognize that common elements combine in different ways to make up all living and nonliving things. |  |  |  |
| [SC.8.P.8.Su.5:](https://www.cpalms.org/Public/PreviewStandard/Preview/8139) | Recognize that parts of matter can be separated in tiny particles. |  |  |  |
| [SC.8.P.8.Pa.5:](https://www.cpalms.org/Public/PreviewStandard/Preview/8140) | Separate a mixture into its parts. |  |  |  |
| Resources: |  |  |  |  |

### [SC.8.P.8.6:](https://www.cpalms.org/Public/PreviewStandard/Preview/1844)

Recognize that elements are grouped in the periodic table according to similarities of their properties.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.P.8.In.6:](https://www.cpalms.org/Public/PreviewStandard/Preview/8141) | Identify common elements, such as oxygen, iron, and carbon. |  |  |  |
| [SC.8.P.8.Su.6:](https://www.cpalms.org/Public/PreviewStandard/Preview/8142) | Recognize examples of common elements, such as carbon or iron. |  |  |  |
| [SC.8.P.8.Pa.5:](https://www.cpalms.org/Public/PreviewStandard/Preview/8140) | Separate a mixture into its parts. |  |  |  |
| Resources: |  |  |  |  |

### [SC.8.P.8.7:](https://www.cpalms.org/Public/PreviewStandard/Preview/1845)

Explore the scientific theory of atoms (also known as atomic theory) by recognizing that atoms are the smallest unit of an element and are composed of sub-atomic particles (electrons surrounding a nucleus containing protons and neutrons).

**Clarifications:**  
Florida Standards Connections: MAFS.K12.MP.4: Model with mathematics.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.P.8.In.7:](https://www.cpalms.org/Public/PreviewStandard/Preview/8143) | Identify that matter is made of small particles called atoms. |  |  |  |
| [SC.8.P.8.Su.5:](https://www.cpalms.org/Public/PreviewStandard/Preview/8139) | Recognize that parts of matter can be separated in tiny particles. |  |  |  |
| [SC.8.P.8.Pa.5:](https://www.cpalms.org/Public/PreviewStandard/Preview/8140) | Separate a mixture into its parts. |  |  |  |
| Resources: |  |  |  |  |

### [SC.8.P.8.8:](https://www.cpalms.org/Public/PreviewStandard/Preview/1849)

Identify basic examples of and compare and classify the properties of compounds, including acids, bases, and salts.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.P.8.In.8:](https://www.cpalms.org/Public/PreviewStandard/Preview/8144) | Identify common acids, such as lemon juice and vinegar, and bases, such as baking soda and ammonia, and their hazardous properties. |  |  |  |
| [SC.8.P.8.Su.7:](https://www.cpalms.org/Public/PreviewStandard/Preview/8145) | Recognize common acids, such as vinegar, and bases, such as ammonia, and their hazardous properties. |  |  |  |
| [SC.8.P.8.Pa.4:](https://www.cpalms.org/Public/PreviewStandard/Preview/8146) | Recognize common acids as safe or harmful. |  |  |  |
| Resources: |  |  |  |  |

[SC.8.P.8.9:](https://www.cpalms.org/Public/PreviewStandard/Preview/1846)

Distinguish among mixtures (including solutions) and pure substances.

**Clarifications:**  
Pure substances include elements and compounds. Mixtures are classified as heterogeneous (mixtures) or homogeneous (solutions). Methods for separating mixtures include: distillation, chromatography, reverse osmosis, diffusion through semi-permeable membranes.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.P.8.In.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/8130) | Recognize that the weight of an object is related to the pull of gravity. |  |  |  |
| [SC.8.P.8.Su.8:](https://www.cpalms.org/Public/PreviewStandard/Preview/8148) | Recognize examples of pure substances and mixtures. |  |  |  |
| [SC.8.P.8.Pa.5:](https://www.cpalms.org/Public/PreviewStandard/Preview/8140) | Separate a mixture into its parts. |  |  |  |
| Resources: |  |  |  |  |

### [SC.8.P.9.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/1850)

Explore the Law of Conservation of Mass by demonstrating and concluding that mass is conserved when substances undergo physical and chemical changes.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.P.9.In.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8149) | Observe and classify changes in matter as physical (reversible) or chemical (irreversible). |  |  |  |
| [SC.8.P.9.Su.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8150) | Observe and recognize physical changes in matter as able to change back (reversible), such as water to ice, and chemical changes of matter as unable to change back (irreversible), such as cake to cake batter. |  |  |  |
| [SC.8.P.9.Pa.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8151) | Recognize an example of a physical change, such as ice changing to water. |  |  |  |
| Resources: |  |  |  |  |

### [SC.8.P.9.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/1847)

Differentiate between physical changes and chemical changes.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.P.9.In.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8149) | Observe and classify changes in matter as physical (reversible) or chemical (irreversible). |  |  |  |
| [SC.8.P.9.Su.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8150) | Observe and recognize physical changes in matter as able to change back (reversible), such as water to ice, and chemical changes of matter as unable to change back (irreversible), such as cake to cake batter. |  |  |  |
| [SC.8.P.9.Pa.1:](https://www.cpalms.org/Public/PreviewStandard/Preview/8151) | Recognize an example of a physical change, such as ice changing to water. |  |  |  |
| [SC.8.P.9.Pa.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/8152) | Recognize that heat influences changes (chemical) in matter, such as cooking. |  |  |  |
| Resources: |  |  |  |  |

### [SC.8.P.9.3:](https://www.cpalms.org/Public/PreviewStandard/Preview/1848)

Investigate and describe how temperature influences chemical changes.

### Related Access Points

| **Name** | **Description** | **Date(s) Instruction** | **Date(s) Assessment** | **Date Mastery** |
| --- | --- | --- | --- | --- |
| [SC.8.P.9.In.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/8153) | Observe and identify how temperature influences chemical changes. |  |  |  |
| [SC.8.P.9.Su.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/8154) | Observe and recognize changes caused by heat on substances. |  |  |  |
| [SC.8.P.9.Pa.2:](https://www.cpalms.org/Public/PreviewStandard/Preview/8155) | Recognize that heat influences changes (chemical) in matter, such as cooking. |  |  |  |
| Resources: |  |  |  |  |

[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.