

Common Core Standards for ELA

Reading Informational Text, Speaking, Listening, & Literacy in History/Social Studies

Key Ideas and Details:

- Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text. [CCSS.ELA-Literacy.CCRA.R.1](#)

Craft and Structure:

- Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone. [CCSS.ELA-Literacy.CCRA.R.4](#)

Integration of Knowledge and Ideas:

- Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words. [CCSS.ELA-Literacy.CCRA.R.7](#)

Comprehension and Collaboration:

- Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally. [CCSS.ELA-Literacy.CCRA.SL.2](#)

Key Ideas and Details:


- Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions. [CCSS.ELA-Literacy.RST.6-8.2](#)
- Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. [CCSS.ELA-Literacy.RST.6-8.3](#)

Craft and Structure:

- Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to *grades 6-8 texts and topics*. [CCSS.ELA-Literacy.RST.6-8.4](#)
- Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text. [CCSS.ELA-Literacy.RST.6-8.6](#)

Integration of Knowledge and Ideas:



- Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). [CCSS.ELA-Literacy.RST.6-8.7](#)

-  Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. [CCSS.ELA-Literacy.RST.6-8.9](#)





Common Core Standards for Mathematical Practice

Number and Operations: Fractions and Measurement & Data


Extend understanding of fraction equivalence and ordering.

-  Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions. [CCSS.Math.Content.4.NF.A.1](#)
-  Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1/2$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model. [CCSS.Math.Content.4.NF.A.2](#)


Build fractions from unit fractions.

-  Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$. [CCSS.Math.Content.4.NF.B.3](#)
-  Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. [CCSS.Math.Content.4.NF.B.3.a](#)
-  Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. *Examples:* $3/8 = 1/8 + 1/8 + 1/8$; $3/8 = 1/8 + 2/8$; $2 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8$. [CCSS.Math.Content.4.NF.B.3.b](#)
-  Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction. [CCSS.Math.Content.4.NF.B.3.c](#)

Apply and extend previous understandings of multiplication and division.







-  Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem. [CCSS.Math.Content.5.NF.B.6](#)

Solve problems involving measurement and conversion of measurements.

-  Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. [CCSS.Math.Content.4.MD.A.2](#)







Next Generation Science Standards

Performance Expectation Grade: 3-5

-  Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction. [4-LS1-1 From Molecules to Organisms: Structures and Processes](#)
-  Develop a model to describe that matter is made of particles too small to be seen. [5-PS1-1 Matter and Its Interactions](#)
-  Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved. [5-PS1-2 Matter and Its Interactions](#)
-  Make observations and measurements to identify materials based on their properties. [5-PS1-3 Matter and Its Interactions](#)
-  Conduct an investigation to determine whether the mixing of two or more substances results in new substances. [5-PS1-4 Matter and Its Interactions](#)
-  Support an argument that plants get the materials they need for growth chiefly from air and water. [5-LS1-1 From Molecules to Organisms: Structures and Processes](#)

Next Generation Science Standards

Performance Expectation Grade: Middle School

-  Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred. [MS-PS1-2 Matter and its Interactions](#)
-  Develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed. [MS-PS1-4 Matter and its Interactions](#)
-  Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved. [MS-PS1-5 Matter and its Interactions](#)
-  Undertake a design project to construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes. [MS-PS1-6 Matter and its Interactions](#)
-  Conduct an investigation to provide evidence that living things are made of cells; either one cell or many different numbers and types of cells. [MS-LS1-1 From Molecules to Organisms: Structures and Processes](#)
-  Develop a model to describe how food is rearranged through chemical reactions forming new molecules that support growth and/or release energy as this matter moves through an organism. [MS-LS1-7 From Molecules to Organisms: Structures and Processes](#)