

CPSD: Grade 4 Science and Social Studies

First Quarter	Second Quarter	Third Quarter	Fourth Quarter
<p>Social Studies: Civics/Government</p> <p>C.2.4.3 C.1.4.1 C.1.4.2 C.1.4.3 C.2.4.1 C.2.4.2 C.2.4.4 C.3.4.1 C.3.4.2 C.3.4.3</p> <p>Science: Structure, Function, and Information Processing</p> <p>4-LS1-2 4-LS1-1 4-PS4-2 4-ETS1-1 4-ETS1-2 4-ETS1-3</p>	<p>Social Studies: Economics</p> <p>E.5.4.1 E.4.4.1 E.4.4.2 E.5.4.2 E.5.4.3 E.6.4.1 E.6.4.2 E.6.4.3 E.6.4.4 E.7.4.1 E.7.4.2</p> <p>Science: Energy</p> <p>4-PS3-2 4-ETS1-1 4-ETS1-2 4-ETS1-3 4-PS3-1 4-PS3-3 4-PS3-4</p>	<p>Social Studies: History/Arkansas</p> <p>History</p> <p>H.12.4.2 H.12.4.3 H.13.4.4 H.13.4.6 H.12.4.1 H.12.4.4 H.12.4.5 H.13.4.1 H.13.4.2 H.13.4.3 H.13.4.5</p> <p>Science: Waves and Information</p> <p>4-PS4-1 4-PS4-3 4-ETS1-1 4-ETS1-2 4-ETS1-3</p>	<p>Social Studies: Geography/Environment</p> <p>G.8.4.3 G.9.4.1 G.10.4.2 G.11.4.2 G.8.4.1 G.8.4.2 G.9.4.2 G.9.4.3 G.10.4.1 G.10.4.3 G.11.4.1</p> <p>Science: Processes that shape the Earth</p> <p>4-ESS2-2 4-ESS1-1 4-ESS2-1 4-ESS3-2 4-ETS1-1 4-ETS1-2 4-ETS1-3</p>

*Power standards are highlighted.

Unit 1	Science: Structure, Function, and Information Processing Social Studies: Civics/Government	Grade Level	4th	Dates	First Quarter
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CPSD Power Standards and Learning Indicators

Science

- 4-LS1-2 *Structure, Function, and Information Processing* Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways.
 - I can explain how an animal might behave in response to its environment.
 - I can describe how an animal will respond based on memories.

Social Studies

- C.1.4.1 Explain the purpose of the founding documents including the Declaration of Independence, U.S. Constitution, and the Bill of Rights.
 - I can explain the purposes of the founding documents.
- C.2.4.3 Evaluate changes in citizens' rights and responsibilities over time.
 - I can identify how the rights of different groups of Americans have changed over time.
 - I can identify how responsibilities of different groups of Americans have changed over time.

Science

Students will know:

- Animals sense and respond to their environment, increasing chances of survival and reproduction
- Animals have sensory organs that receive information which is processed in the brain

Students will be able to:

- Analyze animal behavior and explain how the animal's senses contribute to the behavior.

Social Studies

Students will know:

- The purposes of the founding documents
 - Establish rule of law
 - Protect citizens of the United States
 - Identify limits of government
 - Ensure rights and responsibilities of U.S. citizens
 - Ensure the vision of the founding fathers
- Citizens' rights and responsibilities have changed over time.
 - Advantages and disadvantages to change
 - Some groups were initially excluded but changed over time

Students will be able to:

- Explain the purposes of the founding documents
 - Declaration of Independence

- U.S. Constitution
- Bill of Rights
- Evaluate how rights and responsibilities of various groups have changed over time.

Additional Arkansas Standards

Science: 4-LS1-1, 4-PS4-2, 4-ETS1-1, 4-ETS1-2, 4-ETS1-3

Social Studies: C.1.4.2, C.1.4.3, C.2.4.1, C.2.4.2, C.2.4.4, C.3.4.1, C.3.4.2, C.3.4.3

Unit 2	Science: Energy Social Studies: Economics	Grade Level	4th	Dates	Second Quarter
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CPSD Power Standards and Learning Indicators

- Science**
- 4-PS3-2 *Energy* Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric current.
 - I can model how energy is transferred from place to place.
 - I can identify what type of energy an object will transfer.
- Social Studies**
- E.5.4.1 Examine ways human capital impacts productivity and future incomes.
 - I can explain what human capital is.
 - I can explain what productivity is.
 - I can explain how human capital improves productivity.

- Science**
- Students will know**
- Energy exists when there are moving objects, sound, light, or heat.
 - Energy can be transferred from place to place (object to object).
 - When objects collide, energy can be transferred.
 - Heat is transferred when two objects have different temperatures.
 - Energy from the sun is transferred to Earth as light.
 - Energy can be transferred by electricity.
- Students will be able to:**
- Recognize energy
 - Track the flow of energy
- Social Studies**
- Students will know:**
- What human capital is
 - What productivity means
 - Increase in human capital (training workers, education, etc.) improves productivity (how much workers produce in a given time).
- Students will be able to:**
- Identify examples of human capital.
 - Explain the relationship between human capital and productivity.

Additional Arkansas Standards

Science: 4-ETS1-1, 4-ETS1-2, 4-ETS1-3, 4-PS3-1, 4-PS3-3, 4-PS3-4

Social Studies: E.4.4.1, E.4.4.2, E.5.4.2, E.5.4.3, E.6.4.1, E.6.4.2, E.6.4.3, E.6.4.4, E.7.4.1, E.7.4.2

Unit 3	Science: Waves and Information Social Studies: Arkansas History/History	Grade Level	4th	Dates	Third Quarter
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CPSD Power Standards and Learning Indicators

Science

- 4-PS4-1 *Waves and Information* Develop a model of waves to describe patterns in terms of amplitude and wavelength and that waves can cause objects to move.
 - I can use a model to describe how waves begin, behave, and end.
 - I can identify and describe the relevant relationships between components of the model.
 - I can describe waves in terms of patterns of repeating amplitude and wavelength.

Social Studies

- H.12.4.2 Interpret timelines that show relationships among people, events, and movements at the local, state, regional, or national level.
 - I can answer questions using information from a timeline.
- H.12.4.3 Compare specific regions of the United States in the past with those regions today noting changes over time.
 - I can describe how regions of the United States have changed over time.
 - I can describe different ways Arkansas has changed over time.
- H.13.4.4 Discuss why historians use a variety of primary and secondary sources.
 - I can explain the difference between a primary and secondary source.
 - I can identify sources as either primary or secondary.
 - I can describe why historians use different primary and secondary sources.
- H.13.4.6 Examine current or historical events in Arkansas, the United States, or the world in terms of cause and effect.
 - I can explain the causes and effects of a historical event in Arkansas or the United States.
 - I can explain the causes and possible effects of a current event in Arkansas or the United States.

Science

Students will know:

- Waves, which are regular patterns of motion, can be made in water by disturbing the surface.
- When waves move across the surface of deep water, the water goes up and down in place; there is no net motion in the direction of the wave except when the water meets a beach.
- Waves of the same type can differ in amplitude (height of the wave) and wavelength (spacing between wave peaks).

Students will be able to:

- Develop a model (e.g., diagrams, analogies, examples, abstract representations, physical models) to make sense of a phenomenon that involves wave behavior. In the model, students identify the relevant components, including: waves, wave amplitude, wavelength, and motion of objects.
- Identify and describe the relevant relationships between components of the model, including: waves can be described in terms of patterns of repeating amplitude and wavelength (e.g., in a water wave there is a repeating pattern of water being higher and then lower than the baseline level of the water), waves can cause an object to move, and the motion of objects varies with the amplitude and wavelength of the wave carrying it.

Social Studies

Students will know:

- Timelines can be used to show relationships among people, events, or movements
- Timelines are organized in chronological order
- The different regions of the United States (in the past and present).
- Places change over time.
- The difference between primary and secondary sources
- Why historians use primary and secondary sources
- Current events are those events that are occurring now (or in the present time).
- Historical events are those events that occurred in the past.
- Events have causes and effects.

Students will be able to:

- Interpret information from a timeline.
- Answer questions using information from a timeline.
- Compare how regions in the United States change over time.
- Explain the difference between a primary and secondary source
- Describe why historians use primary and secondary sources
- Describe the causes and effects of a historical events in Arkansas and the United States.
- Describe the causes and possible effects of current events in Arkansas and the United States

Additional Arkansas Standards

Science: 4-PS4-3, 4-ETS1-1, 4-ETS1-2, 4-ETS1-3

Social Studies: H.12.4.1, H.12.4.4, H.12.4.5, H.13.4.1, H.13.4.2, H.13.4.3, H.13.4.5

Unit 4	Science: Processes that shape the Earth Social Studies: Geography	Grade Level	4th	Dates	Fourth Quarter
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CPSD Power Standards and Learning Indicators

<p>Science</p> <ul style="list-style-type: none"> ● 4-ESS2-2 <i>Processes that shape the Earth</i> Analyze and interpret data from maps to describe patterns of Earth’s features. <ul style="list-style-type: none"> ○ I can recognize different land features on a map. ○ I can find and describe patterns among features on a map. <p>Social Studies</p> <ul style="list-style-type: none"> ● G.8.4.3 Construct maps and other graphic representations of Arkansas and the United States, including physical and human characteristics, title, legend, compass rose. <ul style="list-style-type: none"> ○ I can create a map of Arkansas to show information correctly. ○ I can create a map of the United States to show information correctly. ● G.9.4.1 Analyze effects over time of human-generated changes in the physical environment (e.g., deforestation, dams, pollution). <ul style="list-style-type: none"> ○ I can explain ways people can harm or help the environment. ● G.10.4.2 Determine effects of movement and distribution of people, goods, and ideas on various places using a variety of print and digital sources. <ul style="list-style-type: none"> ○ I can describe how the movement and distribution of people, goods, and ideas affect places. ● G.11.4.2 Analyze ways communities cooperate in providing relief efforts during and after natural and human-made disasters. <ul style="list-style-type: none"> ○ I can explain ways communities can work together to help people during and after disasters.
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<p>Science</p> <p>Students will know:</p> <ul style="list-style-type: none"> ● Maps can help locate different land and water features where people live and in other areas of Earth ● How various land features are represented on topographic maps <p>Students will be able to:</p> <ul style="list-style-type: none"> ● Describe different land features on a map. ● Find and describe patterns among features on a map. <p>Social Studies</p> <p>Students will know:</p> <ul style="list-style-type: none"> ● The features of a map including title, legend, and compass rose ● Maps can be used to represent different types of information visually (e.g.; human population, movement, landforms, weather/climate, etc.) ● Changes to the environment have intended and unintended consequences ● People can harm or help the environment in different ways (e.g., deforestation, pollution, etc.) ● Effects of movement and distribution on various places (People, Goods, Ideas) ● Print and digital sources used to learn about the effects of movement and distribution ● Disasters (Natural vs. Human-made) ● Relief efforts

- Communities cooperate to accomplish tasks

Students will be able to:

- Construct a map of Arkansas
 - Label the map with an appropriate title
 - Create a legend
 - Use a compass rose to show directions accurately
- Construct a map of the United States
 - Label the map with an appropriate title
 - Create a legend
 - Use a compass rose to show directions accurately
- Explain ways people harm or help the environment over time.
- Explain the effects of movement and distribution on various places.
- Describe natural and human-made disasters.
- Analyze ways communities can work together to provide relief during or after disasters.

Additional Arkansas Standards

Science: 4-ESS1-1, 4-ESS2-1, 4-ESS3-2, 4-ETS1-1, 4-ETS1-2, 4-ETS1-3

Social Studies: G.8.4.1, G.8.4.2, G.9.4.2, G.9.4.3, G.10.4.1, G.10.4.3, G.11.4.1