

## WORLD HISTORY &amp; GEOGRAPHY

## GEOGRAPHY

## Weeks 1-3

## Weeks 4-6

## Weeks 7-9

WH-1A. Spatial Sense  
(Working with maps, globes, & other geographic tools)

## SPATIAL SENSE

- Measure distances using map scales
- Read maps and globes using longitude and latitude, coordinates, degrees
- Prime Meridian (0 degrees); Greenwich, England; 180° Line (International Date Line)
- Relief maps: elevations and depressions

Review as necessary map-reading skills and concepts, as well as geographic terms, from previous grades, including:

- Name your continent, country, state, and community.
- Understand that maps have keys or legends with symbols and their uses.
- Find directions on a map: east, west, north, south.
- Identify major oceans: Pacific, Atlantic, Indian, Arctic.
- The seven continents: Asia, Europe, Africa, North America, South America, Antarctica, Australia.
- Locate: Canada, United States, Mexico, Central America.
- Locate: the Equator, Northern Hemisphere, Southern Hemisphere, North and South Poles.
- Measure straight-line distances using a bar scale.
- Use an atlas and, if available, on-line sources to find geographic information.

WH-1B. Mountains & Mountain Ranges

## MOUNTAINS &amp; MOUNTAIN RANGES

- Major mountain ranges:
  - South America: Andes
  - North America: Rockies and Appalachians
  - Asia: Himalayas and Urals
  - Africa: Atlas Mountains
  - Europe: Alps
- High mountains of the world
  - Asia: Everest
  - North America: McKinley
  - South America: Aconcagua
  - Europe: Mont Blanc
  - Africa: Kilimanjaro
- See also Science 4: How Mountains are Formed

| EUROPE IN THE MIDDLE AGES               |  | Weeks 1-3 | Weeks 4-6 | Weeks 7-9 |
|---|--|-----------|-----------|-----------|
| WH-2A. Background                       | <p><b>BACKGROUND</b></p> <ul style="list-style-type: none"> <li>○ Beginning about A.D. 200, nomadic, warlike tribes began moving into western Europe, attacking the western Roman Empire; city of Rome sacked by Visigoths in A.D. 410 <ul style="list-style-type: none"> <li>● The Huns: Attila the Hun</li> </ul> </li> <li>○ Peoples settling in old Roman Empire included Vandals (cf. English work “vandalism”) <ul style="list-style-type: none"> <li>● Franks in Gaul (now France), Angles (in England: cf. “Angleland”) and Saxons.</li> </ul> </li> <li>○ The “Middle Ages” are generally dated from about A.D. 450 to 1400. Approximately the first three centuries after the fall of Rome (A.D. 476) are sometimes called the “Dark Ages.”</li> </ul> |           |           |           |
| WH-2B. Geography of Western Europe      | <p><b>GEOGRAPHY RELATED TO THE DEVELOPMENT OF WESTERN EUROPE</b></p> <ul style="list-style-type: none"> <li>○ Rivers: Danube, Rhine, Rhone, and Oder</li> <li>○ Mountains: Alps, Pyrenees</li> <li>○ Iberian Peninsula: Spain and Portugal, proximity to North Africa</li> <li>○ France: the region known as Normandy</li> <li>○ Mediterranean Sea, North Sea, Baltic Sea</li> <li>○ British Isles: England, Ireland, Scotland, Wales; the English Channel</li> </ul>  |           |           |           |
| WH-2C. Developments in Christian Church | <p><b>DEVELOPMENTS IN HISTORY OF THE CHRISTIAN CHURCH</b></p> <ul style="list-style-type: none"> <li>○ Growing power of the pope (Bishop of Rome)</li> <li>○ Arguments among Christians: split into Roman Catholic Church and Eastern Orthodox Church</li> <li>○ Conversion of many Germanic peoples to Christianity</li> <li>○ Rise of monasteries, preservation of classical learning</li> <li>○ Charlemagne <ul style="list-style-type: none"> <li>● Temporarily unites the western Roman Empire</li> <li>● Crowned Emperor by the pope in A.D. 800, the idea of a united “Holy Roman Empire”</li> <li>● Charlemagne’s love and encouragement of learning</li> </ul> </li> </ul>  |           |           |           |
| WH-2D. Feudalism                        | <p><b>FEUDALISM</b></p> <ul style="list-style-type: none"> <li>○ Life On a manor, castles</li> <li>○ Lords, vassals, knights, freedmen, serfs</li> <li>○ Code of chivalry</li> <li>○ Knight, squire, page</li> </ul>   |           |           |           |
| WH-2E. Normans                          | <p><b>THE NORMAN CONQUEST</b></p> <ul style="list-style-type: none"> <li>○ Locate the region called Normandy</li> <li>○ William the Conqueror: Battle of Hastings, 1066</li> </ul>   |           |           |           |
| WH-2F. Towns                            | <p><b>GROWTH OF TOWNS</b></p> <ul style="list-style-type: none"> <li>○ Towns as centers of commerce, guilds and apprentices</li> <li>○ Weakening of feudal ties</li> </ul>   |           |           |           |

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| WH-2G. England                                 | <p>ENGLAND IN THE MIDDLE AGES</p> <ul style="list-style-type: none"> <li>○ Henry II           <ul style="list-style-type: none"> <li>● Beginnings of trial by jury</li> <li>● Murder of Thomas Becket in</li> <li>● Canterbury Cathedral</li> <li>● Eleanor of Aquitaine</li> </ul> </li> <li>○ Significance of the Magna Carta, King John, 1215</li> <li>○ Parliament: beginnings of representative government</li> <li>○ The Hundred Years' War           <ul style="list-style-type: none"> <li>● Joan of Arc</li> </ul> </li> <li>○ The Black Death sweeps across Europe</li> </ul>  |                  |                  |                  |
| <b>THE SPREAD OF ISLAM AND THE "HOLY WARS"</b> |  | <b>Weeks 1-3</b> | <b>Weeks 4-6</b> | <b>Weeks 7-9</b> |
| WH-3A. Islam                                   | <p>ISLAM</p> <ul style="list-style-type: none"> <li>○ Muhammad: the last prophet</li> <li>○ Allah, Qur'an (Koran), <i>jihad</i></li> <li>○ Sacred city of Makkah (Mecca), mosques</li> <li>○ "Five pillars" of Islam:           <ul style="list-style-type: none"> <li>● Declaration of faith</li> <li>● Prayer (five times daily), facing</li> <li>● toward Makkah</li> <li>● Fasting during Ramadan</li> <li>● Help the needy</li> <li>● Pilgrimage to Makkah (Mecca)</li> </ul> </li> <li>○ Arab peoples unite to spread Islam in northern Africa, through the eastern Roman empire, and as far west as Spain.</li> <li>○ Islamic Turks conquer region around Mediterranean; in 1453, Constantinople becomes Istanbul.</li> <li>○ The first Muslims were Arabs, but today diverse people around the world are Muslims.</li> </ul> |                  |                  |                  |
| WH-3B. Islamic Civilization                    | <p>DEVELOPMENT OF ISLAMIC CIVILIZATION</p> <ul style="list-style-type: none"> <li>○ Contributions to science and mathematics: Avicenna (Ibn Sina), Arabic numerals</li> <li>○ Muslim scholars translate and preserve writings of Greeks and Romans</li> <li>○ Thriving cities as centers of Islamic art and learning, such as Cordoba (Spain)</li> </ul>   |                  |                  |                  |
| WH-3C. Religious Wars                          | <p>WARS BETWEEN MUSLIMS AND CHRISTIANS</p> <ul style="list-style-type: none"> <li>○ The Holy Land, Jerusalem</li> <li>○ The Crusades</li> <li>○ Saladin and Richard the Lion-Hearted           <ul style="list-style-type: none"> <li>● Growing trade and cultural exchange between east and west</li> </ul> </li> </ul>   |                  |                  |                  |

| EARLY AND MEDIEVAL AFRICAN KINGDOMS |  | Weeks 1-3 | Weeks 4-6 | Weeks 7-9 |
|-------------------------------------|--|-----------|-----------|-----------|
| WH-4A. African Kingdoms             | <p>EARLY AFRICAN KINGDOMS</p> <ul style="list-style-type: none"> <li>○ Dush (in a region also called Nubia): once ruled by Egypt, then became rulers of Egypt</li> <li>○ Axum: a trading kingdom in what is now Ethiopia</li> </ul>  |           |           |           |
| WH-4B. Kingdoms of Sudan            | <p>MEDIEVAL KINGDOMS OF THE SUDAN</p> <ul style="list-style-type: none"> <li>○ Trans-Saharan trade led to a succession of flourishing kingdoms: Ghana, Mali, and Songhai</li> <li>○ Camel caravans <ul style="list-style-type: none"> <li>● Camel caravans</li> <li>● Trade in gold, iron salt, ivory, and slaves</li> <li>● The city of Timbuktu: center of trade and learning</li> <li>● Spread of Islam into West Africa through merchants and travelers</li> <li>● Ibn Batuta (world traveler and geographer)</li> </ul> </li> <li>○ Mali: Sundiata Keita, Mansa Musa</li> <li>○ Songhai: Askia Muhammad</li> </ul>  |           |           |           |
| WH-4C. Africa                       | <p>GEOGRAPHY OF AFRICA</p> <ul style="list-style-type: none"> <li>○ Mediterranean Sea and Red Sea, Atlantic and Indian Oceans</li> <li>○ Cape of Good Hope</li> <li>○ Madagascar</li> <li>○ Major rivers: Nile, Niger, Congo</li> <li>○ Atlas Mountains, Mt. Kilimanjaro</li> <li>○ Contrasting climate in different regions: <ul style="list-style-type: none"> <li>● Deserts: Sahara, Kalahari</li> <li>● Tropical rain forests (along lower West African coast and Congo River)</li> <li>● Savanna (grasslands)</li> <li>● The Sudan (the fertile region below the Sahara, not the modern-day country)</li> </ul> </li> </ul>   |           |           |           |
| CHINA: DYNASTIES & CONQUERORS       |  | Weeks 1-3 | Weeks 4-6 | Weeks 7-9 |
| WH-5. China                         | <ul style="list-style-type: none"> <li>● Qin Shihuangdi, first emperor, begins construction of Great Wall</li> <li>● Han dynasty: trade in silk and spices, the Silk Road, invention of paper</li> <li>● Tang and Song dynasties: highly developed civilization, extensive trade, important inventions (including compass, gunpowder, paper money)</li> <li>● Mongol invasions and rule <ul style="list-style-type: none"> <li>○ Chinggis Khan and the “Golden Horde”</li> <li>○ Kubilai Khan: establishes capital of what is now Beijing</li> <li>○ Marco Polo</li> </ul> </li> <li>○ Ming dynasty <ul style="list-style-type: none"> <li>○ The “Forbidden City”</li> <li>○ Explorations of Zheng He</li> </ul> </li> </ul> |           |           |           |

## AMERICAN HISTORY &amp; GEOGRAPHY

## THE AMERICAN REVOLUTION

Weeks 1-3

Weeks 4-6

Weeks 7-9

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|----------------------------|--|--|--|--|
| General:                   | <p>Undertake a detailed study of the causes, major figures, and consequences of the American Revolution, with a focus on main events and figures, as well as these questions:</p> <ul style="list-style-type: none"> <li>○ What caused the colonists to break away and become an independent nation?</li> <li>○ What significant ideas and values are at the heart of the American Revolution?</li> </ul>  |  |  |  |
| AH-1A. French & Indian War | <p>BACKGROUND: THE FRENCH AND INDIAN WAR</p> <ul style="list-style-type: none"> <li>○ Also known as the Seven Years' War, part of an ongoing struggle between Britain and France for control of colonies in various regions around the world (in this case, in North America)</li> <li>○ Alliances with Native Americans</li> <li>○ The Battle of Quebec</li> <li>○ British victory gains territory but leaves Britain financially weakened.</li> </ul>  |  |  |  |
| AH-1B. Causes              | <p>CAUSES AND PROVOCATIONS</p> <ul style="list-style-type: none"> <li>○ British taxes, "No taxation without representation"</li> <li>○ Boston Massacre, Crispus Attucks</li> <li>○ Boston Tea Party</li> <li>○ The Intolerable Acts close the port of Boston and require Americans to provide quarters for British troops</li> <li>○ First Continental Congress protests to King George III</li> <li>○ Thomas Paine's <i>Common Sense</i></li> </ul>   |  |  |  |
| AH-1C. The Revolution      | <p>THE REVOLUTION</p> <ul style="list-style-type: none"> <li>○ Paul Revere's ride, "One if by land, two if by sea"</li> <li>○ Concord and Lexington <ul style="list-style-type: none"> <li>● The "shot heard 'round the world"</li> <li>● Redcoats and Minute Men</li> </ul> </li> <li>○ Bunker Hill</li> <li>○ Second Continental Congress: George Washington appointed commander in chief of Continental Army</li> <li>○ Declaration of Independence <ul style="list-style-type: none"> <li>● Primarily written by Thomas Jefferson</li> <li>● Adopted July 4, 1776</li> <li>● "We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty, and the pursuit of Happiness."</li> </ul> </li> </ul> |  |  |  |

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| AH-1C. The Revolution (cont.)             | <ul style="list-style-type: none"> <li>○ Women in the Revolution: Elizabeth Freeman, Deborah Sampson, Phillis Wheatley, Molly Pitcher</li> <li>○ Loyalists (Tories)</li> <li>○ Victory at Saratoga, alliance with France</li> <li>○ European helpers (Lafayette, the French fleet, Bernardo de Galvez, Kosciusko, von Steuben)</li> <li>○ Valley Forge</li> <li>○ Benedict Arnold</li> <li>○ John Paul Jones; “I have not yet begun to fight.”</li> <li>○ Nathan Hale: “I only regret that I have but one life to lose for my country.”</li> <li>○ Cornwallis: surrender at Yorktown</li> </ul>  |                  |                  |                  |
| <b>MAKING A CONSTITUTIONAL GOVERNMENT</b> |  | <b>Weeks 1-3</b> | <b>Weeks 4-6</b> | <b>Weeks 7-9</b> |
| General:                                  | <ul style="list-style-type: none"> <li>• Examine basic values and principles of American democracy, in both theory and practice, as defined in the Declaration of Independence and the U.S. Constitution, both in historical context and in terms of present-day practice.</li> <li>• Introduce students to significance of U.S. Constitution, the nature of the American experiment, the difficult task of establishing a democratic government, the compromises the framers of the constitution were willing to make, and the persistent threats to success.</li> <li>• Students should know that republican governments were rare at this time.</li> <li>• Discuss basic questions and issues about government, such as: <ul style="list-style-type: none"> <li>○ Why do societies need government?</li> <li>○ Why does a society need laws?</li> <li>○ Who makes the laws in the United States?</li> <li>○ What might happen in the absence of government and laws?</li> </ul> </li> </ul> |                  |                  |                  |
| AH-2A. Ideas behind Declaration           | <p>MAIN IDEAS BEHIND THE DECLARATION OF INDEPENDENCE</p> <ul style="list-style-type: none"> <li>○ The proposition that “All men are created equal”</li> <li>○ The responsibility of government to protect the unalienable rights” of the people</li> <li>○ Natural rights: “Life, liberty, and the pursuit of happiness”</li> <li>○ The “right of the people...to institute a new government</li> </ul>  |                  |                  |                  |
| AH-2B. From Declaration to Constitution   | <p>MAKING A NEW GOVERNMENT: FROM THE DECLARATION TO THE CONSTITUTION</p> <ul style="list-style-type: none"> <li>○ Definition of “republican” government: republican = government by elected representatives of the people</li> <li>○ Articles of Confederation: weak central government</li> <li>○ “Founding Fathers”: James Madison as “Father of the Constitution”</li> <li>○ Constitutional Convention <ul style="list-style-type: none"> <li>• Arguments between small and large states</li> <li>• The diverse issue of slavery, “three-fifths” compromise</li> </ul> </li> </ul>  |                  |                  |                  |

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| AH-2C. Constitution                     | <p>THE CONSTITUTION OF THE UNITED STATES</p> <ul style="list-style-type: none"> <li>○ Preamble to the Constitution: “We the people of the United States, in order to form a more perfect union, establish justice, insure domestic tranquility, provide for the common defense, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this Constitution for the United States of America.”</li> <li>○ The separation and sharing of powers in American government: three branches of government <ul style="list-style-type: none"> <li>• Legislative branch: Congress = House of Representatives and Senate, makes laws</li> <li>• Executive branch: headed by the president, carries out laws</li> <li>• Judicial branch: a court system headed by the Supreme Court (itself headed by the Chief Justice), deals with those who break laws and with disagreements about laws</li> </ul> </li> <li>○ Checks and balances, limits on government power, veto</li> <li>○ The Bill of Rights: first ten amendments to the Constitution, including: <ul style="list-style-type: none"> <li>• Freedom of religion, speech, and the press (First Amendment)</li> <li>• Protection against “unreasonable searches and seizures”</li> <li>• The right to “due process of law”</li> <li>• The right to trial by jury</li> <li>• Protection against “cruel and unusual punishments”</li> </ul> </li> </ul> |                  |                  |                  |
| AH-2D. Levels & Functions of Government | <p>LEVELS AND FUNCTIONS OF GOVERNMENT (NATIONAL, STATE, LOCAL)</p> <ul style="list-style-type: none"> <li>○ Identify current government officials, including: <ul style="list-style-type: none"> <li>• President and vice-president of the United States</li> <li>• State governor</li> </ul> </li> <li>○ State governments: established by state constitutions (which are subordinate to the U.S Constitution, the highest law in the land), like the national government, each state government has its legislative, executive, and judicial branches</li> <li>○ Local governments: purposed, functions, and officials</li> <li>○ How government services are paid for (taxes on individuals and businesses, fees, tolls, etc.)</li> <li>○ How people can participate in government</li> </ul>   |                  |                  |                  |
| <b>EARLY PRESIDENTS AND POLITICS</b>    |  | <b>Weeks 1-3</b> | <b>Weeks 4-6</b> | <b>Weeks 7-9</b> |
| AH-3. Presidents & Politics             | <ul style="list-style-type: none"> <li>○ Define: cabinet and administration</li> <li>○ George Washington as first President, Vice-President John Adams</li> <li>○ National capitol established at Washington, D.C.</li> <li>○ Growth of political parties <ul style="list-style-type: none"> <li>• Arguments between Thomas Jefferson and Alexander Hamilton: two opposed visions of America, as an agricultural or industrial society</li> <li>• Modern-day system: two main parties (Democrats and Republicans), and independents</li> </ul> </li> </ul>   |                  |                  |                  |

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| AH-3. Presidents & Politics (continued) | <ul style="list-style-type: none"> <li>○ Thomas Jefferson, third president               <ul style="list-style-type: none"> <li>● Correspondence between Jefferson and Benjamin Banneker</li> <li>● Jefferson as multifaceted leader (architect, inventor, musician, etc.)</li> <li>● The Louisiana Purchase (review from grade 1) doubles the nation's size and gains control of Mississippi River.</li> </ul> </li> <li>○ James Madison, fourth president               <ul style="list-style-type: none"> <li>● War of 1812 (briefly review from grade 2)</li> </ul> </li> <li>○ James Monroe, fifth president, the Monroe Doctrine</li> <li>○ John Quincy Adams, sixth president</li> <li>○ Andrew Jackson, seventh president               <ul style="list-style-type: none"> <li>● Popular military hero, Battle of New Orleans in War of 1812</li> <li>● Presidency of "the common man"</li> <li>● Indian removal policies</li> </ul> </li> </ul> |           |           |           |
| <b>REFORMERS</b>                        |  | Weeks 1-3 | Weeks 4-6 | Weeks 7-9 |
| AH-4. Reformers                         | <ul style="list-style-type: none"> <li>○ Abolitionists</li> <li>○ Dorothea Dix and the treatment of the insane</li> <li>○ Horace Mann and public schools</li> <li>○ Women's rights               <ul style="list-style-type: none"> <li>● Seneca Falls convention</li> <li>● Elizabeth Cady Stanton</li> <li>● Lucretia Mott</li> <li>● Amelia Bloomer</li> <li>● Sojourner Truth</li> </ul> </li> </ul>   |           |           |           |
| <b>SYMBOLS &amp; FIGURES</b>            |  | Weeks 1-3 | Weeks 4-6 | Weeks 7-9 |
| AH-5. Symbols & Figures                 | <p>Recognize and become familiar with the significance of:</p> <ul style="list-style-type: none"> <li>○ <i>Spirit of '76</i> (painting)</li> <li>○ White House and Capitol Building</li> <li>○ Great Seal of the United States</li> </ul>  |           |           |           |

| CONVENTIONS OF STANDARD ENGLISH   |  | Weeks 1-3 | Weeks 4-6 | Weeks 7-9 |
|---|--|-----------|-----------|-----------|
| <p><b>Language Standard 1:</b><br/>                     Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p>  | <p>Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ol style="list-style-type: none"> <li>Use relative pronouns (<i>who, whose, whom, which, that</i>) and relative adverbs (<i>where, when, why</i>)</li> <li>Form and use the progressive (e.g., <i>I was walking; I am walking; I will be walking</i>) verb tenses.</li> <li>Use modal auxiliaries (e.g., <i>can, may, must</i>) to convey various conditions.</li> <li>Order adjectives within sentences according to conventional patterns (e.g., <i>a small red bag</i> rather than <i>a red small bag</i>).</li> <li>Form and use prepositional phrases.</li> <li>Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.*</li> <li>Correctly use frequently confused words (e.g., <i>to, too, two; there, their</i>).*</li> </ol> |           |           |           |
| <p><b>Language Standard 2:</b><br/>                     Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p>  | <p>Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <ol style="list-style-type: none"> <li>Use correct capitalization.</li> <li>Use commas and quotation marks to mark direct speech and quotations from a text.</li> <li>Use a comma before a coordinating conjunction in a compound sentence.</li> <li>Spell grade-appropriate words correctly, consulting references as needed.</li> </ol>  |           |           |           |
| KNOWLEDGE OF LANGUAGE   |  | Weeks 1-3 | Weeks 4-6 | Weeks 7-9 |
| <p><b>Language Standard 3:</b><br/>                     Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.</p> | <p>Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p> <ol style="list-style-type: none"> <li>Choose words and phrase to convey ideas precisely.*</li> <li>Choose punctuation for effect.*</li> <li>Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion).</li> </ol>  |           |           |           |

| VOCABULARY ACQUISITION AND USE  |   | Weeks 1-3 | Weeks 4-6 | Weeks 7-9 |
|---|---|-----------|-----------|-----------|
| <p><b>Language Standard 4:</b><br/>Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.</p>  | <p>Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 4 reading and content</i>, choosing flexibly from a range of strategies.</p> <ol style="list-style-type: none"> <li>Use context (e.g., definitions, examples or restatements in text) as a clue to the meaning of a word or phrase.</li> <li>Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., <i>telegraph</i>, <i>photograph</i>, <i>autograph</i>).</li> <li>Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.</li> </ol> |           |           |           |
| <p><b>Language Standard 5:</b><br/>Demonstrate understanding of word relationships and nuances in word meanings.</p>  | <p>Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <ol style="list-style-type: none"> <li>Explain the meaning of simple similes and metaphors (e.g., <i>as pretty as a picture</i>) in context.</li> <li>Recognize and explain the meaning of common idioms, adages, and proverbs.</li> <li>Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms).</li> </ol>   |           |           |           |
| <p><b>Language Standard 6:</b><br/>Acquire &amp; use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, &amp; listening at the college/career readiness level; demonstrate independence in gathering vocab knowledge when encountering an unknown term important to comprehension or expression.</p> | <p>Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., <i>quizzed</i>, <i>whined</i>, <i>stammered</i>) and that are basic to a particular topic (e.g., <i>wildlife</i>, <i>conservation</i>, and <i>endangered</i> when discussing animal preservation).</p>  |           |           |           |

| OPERATIONS & ALGEBRAIC THINKING (4.OA)                                     |    | Weeks 1-3   | Weeks 4-6 | Weeks 7-9 |  |
|--|----|---|-----------|-----------|--|
| Use the four operations with whole numbers to solve problems.              | 1. | Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.  |           |           |  |
|  | 2. | Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.  |           |           |  |
|  | 3. | Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.                                   |           |           |  |
| Gain familiarity with factors and multiples.                               | 4. | Find all factor pairs for a whole number in the range 1-100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1-100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1-100 is prime or composite.  |           |           |  |
| Generate and analyze patterns.   | 5. | Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. <i>For example, given the rule "Add 3" and the starting number 1, generate terms in resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.</i> |           |           |  |
| NUMBERS & OPERATIONS IN BASE TEN (4.NBT)<br>Whole numbers up to 1, 000,000 |    | Weeks 1-3   | Weeks 4-6 | Weeks 7-9 |  |
| Generalize place value understanding for multi-digit whole numbers.        | 1. | Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. <i>For example, recognize that <math>700 \div 70 = 10</math> by applying concepts of place value and division.</i>  |           |           |  |
|  | 2. | Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$ , $=$ , and $<$ symbols to record the results of comparisons.   |           |           |  |
|  | 3. | Use place value understanding to round multi-digit whole numbers to any place.  |           |           |  |

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|--|-----|---|------------------|------------------|------------------|
| Use place value understanding and properties of operations to perform multi-digit arithmetic.                      | 4.  | Fluently add and subtract multi-digit whole numbers using the standard algorithm.   |                  |                  |                  |
|  | 5.  | Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.  |                  |                  |                  |
|  | 6.  | Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or are models.  |                  |                  |                  |
| <b>NUMBERS &amp; OPERATIONS: FRACTIONS (4.NF)</b>  |     |   | <b>Weeks 1-3</b> | <b>Weeks 4-6</b> | <b>Weeks 7-9</b> |
| <b>Denominators: 2, 3, 4, 6, 8, 10, 12, 100</b>  |     |   |                  |                  |                  |
| Extend understanding of fraction equivalence and ordering.   | 1.  | 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.  |                  |                  |                  |
|  | 2.  | 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 conclusions, e.g., by using a visual fraction model. |                  |                  |                  |
| Build fraction from unit fraction by applying and extending previous understandings of operations on whole number. | 3.  | Understand a fraction $a/b$ with $a > 1$ as the sum of fractions $1/b$ .  |                  |                  |                  |
|  | 3a. | Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.   |                  |                  |                  |
|  | 3b. | 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. <i>Examples: <math>3/8 = 1/8 + 1/8 + 1/8</math>; <math>3/8 = 1/8 + 2/8</math>; <math>2 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8</math>.</i>  |                  |                  |                  |
|  | 3c. | 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.  |                  |                  |                  |

|  |     |   |  |  |  |
|--|-----|---|--|--|--|
| Build fraction from unit fraction by applying and extending previous understandings of operations on whole number (continued). | 3d. | Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the population.  |  |  |  |
|  | 4.  | Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.  |  |  |  |
|  | 4a. | Understand a fraction $a/b$ as a multiple of $1/b$ . For example, use a visual fraction model to represent $5/4$ as the product $5 \times (1/4)$ , recording the conclusion by the equation $5/4 = 5 \times (1/4)$ .  |  |  |  |
|  | 4b. | Understand a multiple of $a/b$ as a multiple of $1/b$ , and use this understanding to multiply a fraction by a whole number. For example, use a visual fraction model to express $3 \times (2/5)$ as $6 \times (1/5)$ , recognizing this product as $6/5$ . (In general, $n \times (a/b) = (n \times a)/b$ .)   |  |  |  |
|  | 4c. | Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. For example, if each person at a party will eat $3/8$ of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie? |  |  |  |
| Understand decimal notations for fractions, and compare decimal fractions.   | 5.  | Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. For example, express $3/10$ as $30/100$ , and add $3/10 + 4/100 = 34/100$ .   |  |  |  |
|  | 6.  | Use decimal notation for fractions with denominators 10 or 100; For example, rewrite 0.62 as $62/100$ ; describe a length as 0.62 meters; locate 0.62 on a number line diagram.   |  |  |  |
|  | 7.  | Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$ , $=$ , or $<$ , and justify the conclusions, e.g., by using a visual model.  |  |  |  |

| MEASUREMENT & DATA (4.MD)   |     | Weeks 1-3  | Weeks 4-6 | Weeks 7-9 |  |
|---|-----|--|-----------|-----------|--|
| Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit. | 1.  | Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in two-column table. <i>For example, know that 1 ft is 12 times as long as 1 in. Express length of a 4 ft snake as 48 in. Generate conversion table for feet &amp; inches listing the number pairs (1,12), (2, 24), (3, 36), ...</i> |           |           |  |
|   | 2.  | 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.  |           |           |  |
|   | 3.  | Apply the area and perimeter formulas for rectangles in real world and mathematical problems. <i>For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.</i>   |           |           |  |
| Represent and interpret data.   | 4.  | Make a line plot to display a data set of measurements in fractions of a unit ( $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{1}{8}$ ). Solve problems involving addition and subtraction of fractions by using information presented in line plots. <i>For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.</i>   |           |           |  |
| Geometric measurement: understand concepts of angle and measures angles.                                  | 5.  | Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement:  |           |           |  |
|   | 5a. | An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through $\frac{1}{360}$ of a circle is called a “one-degree angle,” and can be used to measure angles.   |           |           |  |
|   | 5b. | An angle that turns through $n$ one-degree angles is said to have an angle measure of $n$ degrees.   |           |           |  |
|   | 6.  | Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.   |           |           |  |
|   | 7.  | Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.   |           |           |  |

|                     |  |  |
|---------------------|--|--|
| <b>Math Cluster</b> | <b>Grade 4 MATH: Content Map</b><br>Quarter 1 2 3 4 Teacher: _____ | Content<br><i>(Specific text, chapter, lesson, activity, etc.)</i> |
|---------------------|--|--|

| GEOMETRY (4.G)  |    | Weeks 1-3   | Weeks 4-6 | Weeks 7-9 |
|---|----|---|-----------|-----------|
| <b>Draw and identify lines and angles, and classify shapes by properties of their lines and angles.</b> | 1. | 1. Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.   |           |           |
|   | 2. | 2. Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles. |           |           |
|   | 3. | Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.                  |           |           |

**NOTES related to strategies/activities to support mathematical practices:**

|   |  |  |  |  |
|---|--|--|--|--|
| <b>Mathematical Practices</b><br><i>Applicable to Math K-12</i> | <ol style="list-style-type: none"> <li>1. Make sense of problems and persevere in solving them.</li> <li>2. Reason abstractly and quantitatively.</li> <li>3. Construct viable arguments and critique the reasoning of others.</li> <li>4. Model with mathematics.</li> <li>5. Use appropriate tools strategically.</li> <li>6. Attend to precision.</li> <li>7. Look for and make use of structure.</li> <li>8. Look for and express regularity in repeated reasoning.</li> </ol> |  |  |  |
|---|--|--|--|--|

| KEY IDEAS & DETAILS   |               | Weeks 1-3  | Weeks 4-6 | Weeks 7-9 |
|---|---------------|--|-----------|-----------|
| <b>Reading Standard 1:</b><br>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. | Literature    | Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.   |           |           |
|   | Informational | Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.   |           |           |
| <b>Reading Standard 2:</b><br>Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.  | Literature    | Determine a theme of a story, drama, or poem from details in the text; summarize the text.   |           |           |
|   | Informational | Determine the main idea of a text and explain how it is supported by key details; summarize the text.  |           |           |
| <b>Reading Standard 3:</b><br>Analyze how and why individuals, events, and ideas develop and interact over the course of a text.  | Literature    | Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).           |           |           |
|   | Informational | Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text. |           |           |

| CRAFT & STRUCTURE  |               | Weeks 1-3 | Weeks 4-6 | Weeks 7-9 |
|--|---------------|-----------|-----------|-----------|
| <p><b>Reading Standard 4:</b><br/>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.</p>    | Literature    |           |           |           |
|  | Informational |           |           |           |
| <p><b>Reading Standard 5:</b><br/>Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.</p> | Literature    |           |           |           |
|  | Informational |           |           |           |
| <p><b>Reading Standard 6:</b><br/>Assess how point of view or purpose shapes the content and style of a text.</p>  | Literature    |           |           |           |
|  | Informational |           |           |           |

| Integration of Knowledge and Ideas   |   | Weeks 1-3 | Weeks 4-6 | Weeks 7-9 |
|--|---|-----------|-----------|-----------|
| <b>Reading Standard 7:</b><br>Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.*                                  | <b>Literature</b><br>Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.   |           |           |           |
|  | <b>Informational</b><br>Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animation, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears. |           |           |           |
| <b>Reading Standard 8:</b><br>Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence. | <b>Lit</b><br>(Not applicable to literature)  |           |           |           |
|  | <b>Informational</b><br>Explain how an author uses reasons and evidence to support particular points in a text.   |           |           |           |
| <b>Reading Standard 9:</b><br>Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.                            | <b>Literature</b><br>Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures.  |           |           |           |
|  | <b>Informational</b><br>Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.  |           |           |           |

| Range of Reading and Level of Text Complexity   |  | Weeks 1-3 | Weeks 4-6 | Weeks 7-9 |
|---|--|-----------|-----------|-----------|
| <b>Reading Standard 10:</b><br>Read and comprehend complex literary and informational texts independently and proficiently. | <b>Literature</b><br>By the end of the year, read and comprehend literature, including stories, dramas, and poetry, in the grades 4-5 text complexity band proficiently, with scaffolding as needed at the high end of the range.                                |           |           |           |
|   | <b>Informational</b><br>By the end of year, read and comprehend information texts, including history/social studies, science, and technical texts, in the grades 4-5 text complexity band proficiently, with scaffolding as needed at the high end of the range. |           |           |           |
| FOUNDATIONAL SKILLS   |  | Weeks 1-3 | Weeks 4-6 | Weeks 7-9 |
| <b>Phonics &amp; Word Recognition</b>   | <b>3.</b> Know and apply grade-level phonics and word analysis skills in decoding words.   |           |           |           |
|   | <b>3a.</b> Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.   |           |           |           |
| <b>Fluency</b>  | <b>4.</b> Read with sufficient accuracy and fluency to support comprehension.  |           |           |           |
|   | <b>4a.</b> Read on-level text with purpose and understanding   |           |           |           |
|   | <b>4b.</b> Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings.   |           |           |           |
|   | <b>4c.</b> Use context to confirm or self-correct word recognition and understanding, rereading as necessary.  |           |           |           |

| THE HUMAN BODY                    |   | Weeks 1-3 | Weeks 4-6 | Weeks 7-9 |
|-----------------------------------|---|-----------|-----------|-----------|
| 1A. Circulatory System            | Pioneering work of William Harvey   |           |           |           |
|                                   | Heart: four chambers (auricles and ventricles), aorta   |           |           |           |
|                                   | Blood <ul style="list-style-type: none"> <li>○ Red blood cells (corpuscles), white blood cells (corpuscles), platelets, hemoglobin, plasma, antibodies</li> <li>○ Blood vessels: arteries, veins, capillaries</li> <li>○ Blood pressure, pulse</li> <li>○ Coagulation (clotting)</li> </ul>                                 |           |           |           |
|                                   | Filtering function of liver and spleen  |           |           |           |
|                                   | Fatty deposits can clog blood vessels and cause a heart attack.   |           |           |           |
|                                   | Blood types (four basic types: A, B, AB, O) and transfusions  |           |           |           |
|                                   |   |           |           |           |
| 1B. Respiratory System            | Process of taking in oxygen and getting rid of carbon dioxide   |           |           |           |
|                                   | Nose, throat, voice box, trachea (windpipe)   |           |           |           |
|                                   | Lungs, bronchi, bronchial tubes, diaphragm, ribs, alveoli (air sacs)  |           |           |           |
|                                   | Smoking: damage to lung tissue, lung cancer   |           |           |           |
| CHEMISTRY: BASIC TERMS & CONCEPTS |   | Weeks 1-3 | Weeks 4-6 | Weeks 7-9 |
| 2A. Atoms                         | All matter is made up of particles too small for the eye to see, called atoms.  |           |           |           |
|                                   | Scientists have developed models of atoms; while these models have changed over time as scientist make new discoveries, the models help us imagine what we cannot see.  |           |           |           |
|                                   | Atoms are made up of even tinier particles: protons, neutrons, electrons.   |           |           |           |
|                                   | The concept of electrical charge <ul style="list-style-type: none"> <li>○ Positive charge (+): proton</li> <li>○ Negative charge (-): electron</li> <li>○ Neutral (neither positive nor negative): neutron</li> <li>○ "Unlike charges attract, like charges repel" (relate to magnetic attraction and repulsion)</li> </ul> |           |           |           |
| 2B. Properties of Matter          | Mass: the amount of matter in an object, similar to weight  |           |           |           |
|                                   | Volume: the amount of space a thing fills   |           |           |           |
|                                   | Density: how much matter is packed into the space an object fills   |           |           |           |
|                                   | Vacuum: the absence of matter   |           |           |           |

|  |   |           |           |           |
|--|---|-----------|-----------|-----------|
| 2C. Elements   | <p>Elements are the basic kinds of matter, of which there are a little more than one-hundred.</p> <ul style="list-style-type: none"> <li>○ There are many different kinds of atoms, but an element has only one kind of atom.</li> <li>○ Familiar elements, such as gold, copper, aluminum, oxygen, iron.</li> <li>○ Most things are made up of a combination of elements.</li> </ul> |           |           |           |
| 2D. Solutions  | <p>A solution is formed when a substance (the solute) is dissolved in another substance (the solvent), such as when sugar or salt is dissolved in water; the dissolved substance is present in the solution even though you cannot see it.</p> <p>Concentration and saturation (as demonstrated through simple experiments with crystallization).</p>                                 |           |           |           |
| <b>ELECTRICITY</b>   |   | Weeks 1-3 | Weeks 4-6 | Weeks 7-9 |
| Through reading, observation, and experimentation, examine the following:            |   |           |           |           |
| 3. Electricity   | Electricity as the flow of electrons  |           |           |           |
|  | Static electricity  |           |           |           |
|  | Electric current  |           |           |           |
|  | Electric circuits, and experiments with simple circuits (battery, wire, light bulb, filament, switch, fuse)   |           |           |           |
|  | <ul style="list-style-type: none"> <li>○ Closed circuit, open circuit, short circuit</li> </ul>   |           |           |           |
|  | Conductors and insulators   |           |           |           |
|  | Electromagnets: how they work and common uses   |           |           |           |
| Using electricity safely   |   |           |           |           |
| <b>GEOLOGY: THE EARTH AND ITS CHANGES</b>  |   | Weeks 1-3 | Weeks 4-6 | Weeks 7-9 |
| 4A. Earth's Layers   | Crust, mantle, core (outer core and inner core)   |           |           |           |
|  | Movement of crustal plates  |           |           |           |
|  | Earthquakes   |           |           |           |
|  | <ul style="list-style-type: none"> <li>○ Faults, San Andreas fault</li> <li>○ Measuring intensity: seismograph and Richter Scale</li> <li>○ Tsunamis (also called tidal waves)</li> </ul>   |           |           |           |
|  | Volcanoes   |           |           |           |
|  | <ul style="list-style-type: none"> <li>○ Magma</li> <li>○ Lava and lava flow</li> <li>○ Active, dormant, or extinct</li> <li>○ Famous volcanoes: Vesuvius, Krakatoa, Mount St. Helens</li> </ul>  |           |           |           |
|  | Hot springs and geysers: Old Faithful (in Yellowstone National Park)  |           |           |           |
| Theories of how the continents and oceans were formed: Pangaea and continental drift |   |           |           |           |

|                              |  |                  |                  |                  |
|------------------------------|--|------------------|------------------|------------------|
| 4B. How Mountains are Formed | Volcanic mountains, folded mountains, fault-block mountains, dome-shaped mountains   |                  |                  |                  |
|                              | Undersea mountain peaks and trenches   |                  |                  |                  |
| 4C. Rocks                    | Formation and characteristics of metamorphic, igneous, and sedimentary rock  |                  |                  |                  |
| 4D. Weathering & Erosion     | Physical and chemical weathering   |                  |                  |                  |
|                              | Weathering and erosion by water, wind, and glaciers  |                  |                  |                  |
|                              | The formation of soil: topsoil, subsoil, bedrock   |                  |                  |                  |
| <b>METEOROLOGY</b>           |  | <b>Weeks 1-3</b> | <b>Weeks 4-6</b> | <b>Weeks 7-9</b> |
| 5. Meteorology               | The water cycle (review from grade 2): evaporation, condensation, precipitation  |                  |                  |                  |
|                              | Clouds: cirrus, stratus, cumulus (review from grade 2)   |                  |                  |                  |
|                              | The atmosphere <ul style="list-style-type: none"> <li>o Troposphere, stratosphere, mesosphere, ionosphere</li> <li>o How the sun and the earth heat the atmosphere</li> </ul>              |                  |                  |                  |
|                              | Air movement: wind direction & speed, prevailing winds, air pressure, low & high pressure, air masses  |                  |                  |                  |
|                              | Cold and warm front: thunderheads, lightning and electric charge, thunder, tornadoes, hurricanes   |                  |                  |                  |
|                              | Forecasting the weather: barometers (relation between changes in atmospheric pressure and weather), weather maps, weather satellites   |                  |                  |                  |
|                              | Weather and climate: "weather" refers to daily changes in temperature, rainfall, sunshine, etc., while "climate" refers to weather trends that are longer than the cycle of the seasons.   |                  |                  |                  |
| <b>SCIENCE BIOGRAPHIES</b>   |  | <b>Weeks 1-3</b> | <b>Weeks 4-6</b> | <b>Weeks 7-9</b> |
| 6. Biographies               | <ul style="list-style-type: none"> <li>o Benjamin Banneker</li> <li>o Elizabeth Blackwell</li> <li>o Charles Drew (Circulatory System)</li> <li>o Michael Faraday (Electricity)</li> </ul> |                  |                  |                  |

| COMPREHENSION AND COLLABORATION   |   | Weeks 1-3 | Weeks 4-6 | Weeks 7-9 |
|---|---|-----------|-----------|-----------|
| <p><b>Standard 1:</b><br/>Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.</p>        | <p>Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grade 4 topics and texts</i>, building on others' ideas and expressing their own clearly.</p> <ol style="list-style-type: none"> <li>Come to discussions prepared, having read and studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.</li> <li>Follow agreed-upon rules for discussions and carry out assigned roles.</li> <li>Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.</li> <li>Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.</li> </ol> |           |           |           |
| <p><b>Standard 2:</b><br/>Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.</p>  | <p>Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.</p>  |           |           |           |
| <p><b>Standard 3:</b><br/>Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.</p>  | <p>Identify the reasons and evidence a speaker provides to support particular points.</p>   |           |           |           |
| PRESENTATION OF KNOWLEDGE AND IDEAS   |   | Weeks 1-3 | Weeks 4-6 | Weeks 7-9 |
| <p><b>Standard 4:</b><br/>Present information, findings, and supporting evidence so listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.</p> | <p>Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.</p>  |           |           |           |
| <p><b>Standard 5:</b><br/>Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.</p>  | <p>Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.</p>   |           |           |           |
| <p><b>Standard 6:</b><br/>Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.</p>   | <p>Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task a situation. (See grade 4 Language standard 1 for specific expectations.)</p>  |           |           |           |

| TEXT TYPES AND PURPOSES   |   | Weeks 1-3 | Weeks 4-6 | Weeks 7-9 |
|---|---|-----------|-----------|-----------|
| <p><b>Writing Standard 1:</b><br/>                     Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</p>   | Write <b>opinion pieces</b> on topics or texts, supporting a point of view with reasons and information.  |           |           |           |
|   | Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose.                             |           |           |           |
|   | Provide reasons that are supported by facts and details.  |           |           |           |
|   | Link opinion and reasons using words and phrases (e.g., for instance, in order to, in addition).  |           |           |           |
|   | Provide a concluding statement or section related to the opinion presented.   |           |           |           |
| <p><b>Writing Standard 2:</b><br/>                     Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.</p> | Write <b>informative/explanatory texts</b> to examine a topic and convey ideas and information clearly.   |           |           |           |
|   | Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. |           |           |           |
|   | Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.  |           |           |           |
|   | Link ideas within categories of information using words and phrases (e.g., another, for example, also, because).  |           |           |           |
|   | Use precise language and domain-specific vocabulary to inform about or explain the topic.   |           |           |           |
|   | Provide a concluding statement or section related to the information or explanation presented.  |           |           |           |

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| <p><b>Writing Standard 3:</b><br/>                 Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.</p> | Write <b>narratives</b> to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.   |                  |                  |                  |
|  | Orient the reader by establishing a situation and introducing a narrator and/or character; organize an event sequence that unfolds naturally.  |                  |                  |                  |
|  | Use dialogue and description to develop experiences and events or show the responses of characters to situations   |                  |                  |                  |
|  | Use a variety of transitional words and phrases to manage the sequence of events.  |                  |                  |                  |
|  | Use concrete words and phrases and sensory details to convey experiences and events precisely.   |                  |                  |                  |
|  | Provide a conclusion that follows from the narrated experiences or events.   |                  |                  |                  |
| <b>PRODUCTION AND DISTRIBUTION OF WRITING</b>  |  | <b>Weeks 1-3</b> | <b>Weeks 4-6</b> | <b>Weeks 7-9</b> |
| <p><b>Writing Standard 4:</b><br/>                 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>                    | Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.)   |                  |                  |                  |
| <p><b>Writing Standard 5:</b><br/>                 Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.</p>   | With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing, (Editing for conventions should demonstrate command of Language standards 1-3 up to and including grade 4.)                                      |                  |                  |                  |
| <p><b>Writing Standard 6:</b><br/>                 Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.</p>                                     | With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of one page in a single sitting. |                  |                  |                  |

| RESEARCH TO BUILD AND PRESENT KNOWLEDGE   |   | Weeks 1-3 | Weeks 4-6 | Weeks 7-9 |
|---|---|-----------|-----------|-----------|
| <p><b>Writing Standard 7:</b><br/>                     Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.</p>  | <p>Conduct short research projects that build knowledge through investigation of different aspects of a topic.</p>  |           |           |           |
| <p><b>Writing Standard 8:</b><br/>                     Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.</p>                  | <p>Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.</p>  |           |           |           |
| <p><b>Writing Standard 9:</b><br/>                     Draw evidence from literary or informational texts to support analysis, reflection, and research.</p>  | <p>Draw evidence from literary or informational texts to support analysis, reflection, and research.</p>  |           |           |           |
|   | <p>Apply grade 4 Reading standards to literature (e.g., “Describe in depth a character, setting or event in a story or drama, drawing on specific details in the text [e.g., a character’s thoughts, words, or actions].”).</p> |           |           |           |
|   | <p>Apply grade 4 Reading standards to informational texts (e.g., “Explain how an author uses reasons and evidence to support particular points in a text”).</p>   |           |           |           |
| RESEARCH TO BUILD AND PRESENT KNOWLEDGE   |   | Weeks 1-3 | Weeks 4-6 | Weeks 7-9 |
| <p><b>Writing Standard 10:</b><br/>                     Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.</p> | <p>Write routinely over extended time frames (time for research reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.</p>     |           |           |           |