Fifth Grade ELA Essential Facts

Reading: Understanding and Using Literary Texts

- 1. To <u>draw a conclusion</u>, use what you know and clues from the story to develop a conclusion about what will happen.
- 2. An <u>inference</u> is an idea that is not directly stated in the text and is made by combining details from the text with your personal experiences.
- 3. A <u>metaphor</u> is a comparison of two unlike things not using *like* or as.
- 4. A **simile** is a comparison of two unlike things using the words *like* or as.
- 5. **Personification** is giving human qualities to nonhuman things (e.g., the happy moon or the smiling sun).
- 6. <u>Hyperbole</u> is an exaggeration or overstatement. (e.g., I am so thirsty I could drink 12 gallons of milk.)
- 7. **Onomatopoeia** is a word such as *buzz*, *crash*, or *gush* that imitates the sound it represents.
- 8. <u>Alliteration</u> is the repetition of initial sounds in neighboring words (e.g., bigger and better; jump for joy).
- 9. **First person point of view** is when a story is told from the point of view of *l*.
- 10. <u>Limited-omniscient (third person) point of view</u> is when a story is told from the author's point of view but only tells about *one* character in the story.
- 11. <u>Omniscient (third person) point of view</u> is when a story is told from the author's point of view where the author knows everything and everybody in the story (including what they think).
- 12. <u>Direct characterization</u> is when the author makes direct statements about the character's personality and *tells* what the character is like.
- 13. <u>Indirect characterization</u> is when the author reveals details about the character by only showing the character's thoughts, words, and actions.
- 14. The **tone** is the attitude of the story, which can change throughout the story (e.g., excited to devastated).
- 15. The use of **figurative language** allows the reader to visualize what the author is describing.
- 16. By using <u>dialogue</u>, the reader can see the words that the character is using instead of the author explaining the character's thoughts.
- 17. <u>Imagery involves one of your five senses (sight, smell, touch, taste, and hearing).</u>
- 18. **Details** always support a main idea by giving minor information about a bigger subject.
- 19. <u>Fiction</u> is text with plot, character, point of view, setting, and theme (e.g., fables, tall tales, and folktales).
- 20. **Nonfiction** is text written to explain, argue about, or describe (e.g., biographies and personal essays).
- 21. A **stanza** is a verse in poetry where the lines are written together using a pattern.
- 22. A **rhyme** is a pattern of words that contain similar sounds.
- 23. **Rhyme scheme** is the regular pattern of rhyme that stays the same throughout a poem (e.g., A B A B).
- 24. **Repetition** is when a word in a poem is used more than once.
- 25. A <u>refrain</u> is a line or group of lines that is repeated throughout a poem, usually after every stanza.

Reading: Understanding and Using Informational Texts

- 26. **Supporting evidence** in informational text helps build on the central idea by helping to understand more about the central idea.
- 27. The **central idea** is the main idea or key point made in the text.
- 28. <u>Author bias</u> is often shown by giving opinions that are not supported with facts, showing that it may be the author's opinion.
- 29. The functional parts of a piece of writing help to give the reader more information about the writing, such as the <u>titles</u>, <u>print styles</u>, <u>chapter headings</u>, <u>captions</u>, <u>subheadings</u>, and <u>white space</u>.
- 30. The <u>table of contents</u> is an outline of a text that shows the page on which chapters or sections within the text are found.
- 31. The **glossary** gives meanings to words that are found within a text and is like a small dictionary.
- 32. **Indexes** are found in the end of a story and can help you find a certain idea within a text.
- 33. The <u>appendix</u> gives a variety of information that is related to the topic of a piece of writing and is found at the end of the text for readers to refer to if they need it.
- 34. A <u>cause</u> is something that makes something else happen.
- 35. An **effect** is what happens as a result of the cause.

Reading: Building Vocabulary

- 36. **Context clues** are words in a sentence that help to determine what a word means.
- 37. <u>Multiple meaning words</u> are words that have several meanings depending upon how they are used in a sentence.
- 38. <u>Base or root words</u> are words that can be added to by using prefixes or suffixes to make other words.
- 39. **Affixes** are sounds added to the beginning or end of a root or base word to make another word.
- 40. <u>Idioms</u> are expressions that cannot be understood from the meanings of their separate words but must be learned as a whole. (e.g., It is raining cats and dogs.)
- 41. **Euphemisms** are words that are substituted for other words or phrases to put what is being discussed in a more positive way (e.g., passed away instead of died).

Writing: Developing Written Communications

- 42. The first step in the writing process is where you might use a graphic organizer to organize your thoughts and is called **prewrite**.
- 43. A <u>compound sentence</u> is made up of two independent clauses or simple sentences. (e.g., I like vanilla ice cream, but I would prefer cookies and cream.)
- 44. A **complex sentence** has an independent clause joined by one or more dependant clauses. (e.g., When he handed in his homework, he forgot to turn in the last page; The students are studying because they have a test tomorrow.)
- 45. Good writers will use a combination of <u>simple</u>, <u>compound</u>, and <u>complex sentences</u> in their writing.
- 46. A paragraph should include a **central or main idea with supporting details**.
- 47. Between paragraphs, writers use **transitions** to improve the flow and organization of their writing (e.g., *then*, *next*, *in addition*, and *meanwhile*).
- 48. The word *good* has an irregular comparative and superlative adjective. **Better** is the comparative adjective, and **best** is the superlative adjective.

- 49. A <u>comparative adjective</u> compares two things. To form most comparative adjectives, add *er* to the end of the adjective or add *more* in front of the word. (e.g., The yellow flower is prettier than the red flower; The yellow flower is more beautiful than the red flower.)
- 50. A <u>superlative adjective</u> compares more than two things. To form most superlative adjectives, add *est* to the end of the adjective or add *most* before the adjective. (e.g., The prettiest flower is the yellow one; The most beautiful flower is the yellow one.)
- 51. An <u>interjection</u> is a word or phrase that shows excitement or emotion. (e.g., "*Ouch*!" "*Hey*, what are you doing?" "*Oh no*! I forgot my homework.")
- 52. The **past participle** of *ring* is *rung*.
- 53. The **past participle** of *swim* is *swum*.
- 54. **Revising** is the step in the writing process when you improve word choice, organization, and development of ideas in written works.
- 55. **Editing** is the step in the writing process when you proofread and check for the correct use of words, punctuation, spelling, and capitalization.
- 56. <u>Affect</u> means to have an influence on and is a verb. (e.g., The rain has affected our plans for the weekend.)
- 57. <u>Effect</u> means the result of some action and is a noun. (e.g., One effect of the rain was that my baseball game was cancelled.)

Writing: Producing Written Communications in a Variety of Forms

- 58. A <u>book review</u> is an informational piece of writing that analyzes, evaluates, compares, or critiques a piece of literary work (or book) that you have read. A book review can include the author's purpose, the theme of the book, and your personal opinion about the book.
- 59. A <u>newsletter article</u> is an informational piece of writing that should include the five W's: When, Where, Who, What, and Why.
- 60. A <u>narrative</u> is a text that describes a sequence of fiction or nonfiction events and should always include a fully developed plot and a consistent point of view.
- 61. **First person point of view** is when the narrator participates in the action of a story.
- 62. <u>Third person point of view</u> is when the narrator does not participate in the action of the story_but lets us know exactly how the characters feel.
- 63. Omniscient point of view is when the narrator knows everything and tells everything about all of the characters' feelings.
- 64. <u>Limited omniscient point of view</u> is when the narrator knows and tells only one of the characters' feelings.
- 65. <u>Picture books, comic books</u>, and <u>graphic novels</u> can be written to entertain a specific audience.
- 66. Written descriptions should include **precise language** and **vivid details**.

Researching: Applying the Skills of Inquiry and Oral Communication

- 67. A <u>dictionary</u> is a reference book that explains what words mean.
- 68. An **atlas** is a collection of maps.
- 69. A **thesaurus** is a dictionary with synonyms and antonyms. When you are looking for a word to replace, you can use a thesaurus.
- 70. An **almanac** is an annual publication.
- 71. An <u>encyclopedia</u> is a book or series of books that contains general information about many topics or areas.

- 72. You can use print sources such as <u>books</u>, <u>magazines</u>, <u>charts</u>, <u>graphs</u>, <u>diagrams</u>, <u>dictionaries</u>, <u>encyclopedias</u>, <u>atlases</u>, <u>thesauri</u>, <u>newspapers</u>, and <u>almanacs</u> as well as nonprint media to research information.
- 73. To write something in your own words means to **paraphrase**. You should **paraphrase** research information accurately and meaningfully.
- 74. A **bibliography** is a list of resources used to write a nonfiction piece and properly credit and document the work of others.
- 75. The <u>author's purpose</u> is the reason that an author writes a piece and could be to entertain, inform, or persuade.
- 76. A writer's **audience** is the people who will be reading or hearing the piece of writing.
- 77. **Graphics** can be used to support written works and can be used in oral and visual presentations.

Fifth Grade Math Essential Facts

Numbers and Operations

- 1. A number that is equal to or greater than one is a **whole number**.
- 2. A number with one or more digits to the right of a decimal point is a **decimal**.
- 3. Numbers that are to be multiplied are known as **factors**.
- 4. The **product** is the answer to multiplication.
- 5. The number that is being divided is the **dividend**.
- 6. The number by which you are dividing is the **divisor**.
- 7. The answer to division is called the **quotient**.
- 8. A **prime** number has only two factors: one and itself (e.g., $3 = 3 \times 1$).
- 9. A **composite** number has factors other than one and itself (e.g., $8 = 1 \times 8$ or 2×4).
- 10. The number **one** is neither prime nor composite.
- 11. The largest number that divides two or more numbers is the GCF (Greatest Common Factor).
- 12. The smallest number that is a multiple of two or more numbers is the **LCM (Least Common Multiple)**.
- 13. A **fraction** is a way to represent part to the whole.
- 14. A **unit fraction** is a fraction with a numerator of one.
- 15. A fraction in which the numerator is larger than the denominator, resulting in a fraction greater than one, is called an **improper fraction**.
- 16. A <u>mixed number</u> is a whole number followed by a fraction.
- 17. <u>Equivalent fractions</u> show different numerators and denominators but keep the same_proportional value.
- 18. A fraction in **simplest form** cannot be reduced by any other common factors.
- 19. There are common divisibility rules that will always result in a quotient with no remainder.
 - a. 2 -If the last digit is even, the number is divisible by 2.
 - b. 3 -If the sum of the digits is divisible by 3, the number is also.
 - c. 5 -If the last digit is 5 or 0, the number is divisible by 5.
 - d. **6** If the number is divisible by both 3 and 2, it is also divisible by 6.
 - e. 9 -If the sum of the digits is divisible by 9, the number is also.
 - f. 10 If the number ends in 0, it is divisible by 10.

Algebra

- 20. PEMDAS (Parentheses, Exponents, Multiplication/Division, Addition/Subtraction) is the <u>order of operations</u> and should be used to solve expressions.
- 21. An <u>algebraic expression</u> uses letters or symbols to represent unknown numbers in a mathematical sentence.
- 22. A **variable** is a letter or symbol that stands for an unknown number.
- 23. A mathematical sentence involving an equal sign is known as an **equation**.
- 24. A **function** is a rule or pattern using an "if-then" relationship.
- 25. Functions can be organized in a **function table**.
- 26. The **Commutative Property of Addition** states that changing the order of the addends will not affect the sum.
- 27. The <u>Commutative Property of Multiplication</u> states that changing the order of the factors will not affect the product.

- 28. The <u>Associative Property of Addition</u> states that a change in the grouping of three or more addends will not affect their sum.
- 29. The <u>Associative Property of Multiplication</u> states that a change in the grouping of three or more factors will not affect their product.
- 30. The <u>Distributive Property</u> allows one operation of multiplication to be distributed across addition without changing the value of the overall expression.

Geometry

- 31. **Polygons** are many-sided figures that can be named according to their sides and angles.
- 32. There are three common types of **triangles**.
- 33. An equilateral triangle is a triangle with three congruent sides and angles.
- 34. A triangle with only two congruent sides and angles is called **isosceles**.
- 35. If a triangle has no congruent sides or angles, then it is a **scalene** triangle.
- 36. The sum of all of the angles in a triangle must equal **180 degrees**.
- 37. There are four types of **angles**.
- 38. Acute angles measure less than 90 degrees.
- 39. Angles that are exactly 90 degrees are called **right angles**.
- 40. **Obtuse angles** are greater than 90 degrees, but less than 180 degrees.
- 41. **Straight angles** are angles that are exactly 180 degrees.
- 42. There are five common **quadrilaterals** made up of four sides.
- 43. A **square** has four right angles and four congruent sides.
- 44. A **rectangle** has four right angles and opposite parallel sides.
- 45. A quadrilateral with only one pair of parallel sides is called a **trapezoid**.
- 46. **Parallelograms** have opposite parallel sides.
- 47. A **rhombus** is a parallelogram with four congruent sides.
- 48. The sum of all of the angles in a quadrilateral must equal **360 degrees**.
- 49. **Congruent** shapes are exactly the same shape and size.
- 50. Figures that are **similar** must be the same shape.
- 51. Three common **transformations** are translation (slide), reflection (flip), and rotation (turn).
- 52. When an object has <u>line symmetry</u>, it can be folded along a given line so that one-half of the image lies exactly on the other half.
- 53. <u>Rotational symmetry</u> occurs when you can rotate a figure around a point fewer than 360 degrees and the figure appears unchanged.

Measurement

- 54. Common **customary** measures of length are inch, foot, yard, and mile.
- 55. Common **metric** measures of length are based on meters.
- 56. Common **customary** measures of mass are ounce, pound, and ton.
- 57. Common **metric** measures of mass are based on grams.
- 58. Common measures of **liquid volume** are based on liters.
- 59. A **formula** is a mathematical rule written using symbols.
- 60. **Perimeter** is the distance around a polygon.
- 61. **Area** is the measure of square units enclosed by a figure.
- 62. **Surface area** is the sum of all of the areas of all of the shapes that cover an object.
- 63. The amount of space occupied by an object is its **volume**.
- 64. A **protractor** is used to measure angles from 0 to 180 degrees.

- 65. **Elapsed time** is the amount of time that passes between the starting and stopping of an event.
- 66. Temperature is measured in either **Celsius** or **Fahrenheit**.

Data Analysis and Probability

- 67. **Data** is a collection of information usually containing facts, numbers, or measurements.
- 68. **Graphs** are diagrams or drawings used to display data.
- 69. The best way to show change over time is with a **line graph**.
- 70. **Pie graphs** are used to show the relation between parts to the total.
- 71. A **bar graph** uses bars to show amounts so they can easily be compared.
- 72. Bar graphs that represent data frequency are called **histograms**.
- 73. A <u>line plot</u> displays data above a number line long enough to show all numbers in the set.
- 74. A graph that displays data arranged by place value is called a **stem and leaf plot**.
- 75. The average of different amounts is the **mean**.
- 76. The **median** is the middle number in a set of data when arranged from least to greatest.
- 77. The number that occurs most often in a set of data is the **mode**.
- 78. The difference between the highest and lowest numbers in a set of data is the **range**.
- 79. **Probability** is the likelihood of an event occurring.
- 80. The result in a probability experiment is the **outcome**.
- 81. A <u>ratio</u> is a comparison of two or more amounts.

Fifth Grade Science Essential Facts

Scientific Inquiry

- 1. An **experiment** is a test to find out something.
- 2. The <u>independent</u> (manipulated) variable in an experiment is the item you are changing or testing.
- 3. The <u>dependent</u> (responding) variable in an experiment is the result (or the response) of the item that is changed.
- 4. A **controlled** scientific investigation determines the effect of an independent variable in an experiment by keeping all other factors the same throughout the experiment.
- 5. <u>Testable questions</u> include the relationship between the independent and dependent variable, and they are used to make sure that only one variable is tested.
- 6. **Quantitative** observations are numbers that describe what happens during an experiment (e.g., weighed 10 grams).
- 7. **Qualitative** observations are words or sentences that describe what happens during an experiment.
- 8. A <u>hypothesis</u> is a statement that makes predictions about the relationship between variables. It is formed from the question and is supported or not supported through experimenting.
- 9. **Data** includes both scientific observations and inferences gathered during an experiment.
- 10. An <u>inference</u> is when you make observations and add your own knowledge to form a logical conclusion.
- 11. <u>Variables</u> are the things that have an effect on an experiment.
- 12. In the **conclusion**, results are summarized and the hypothesis will either be supported or not supported based on the data collected through the experiment.
- 13. A <u>line graph</u> can represent data that has been collected over an amount of time.

Ecosystems

- 14. A **cell** is the smallest unit of life and has major structures within it that allow it to live.
- 15. When a cell is the organism's entire body, it is called **single-celled**.
- 16. All cells contain four major <u>structures</u>: cell membrane, cytoplasm, nucleus, and vacuole(s).
- 17. The **cell membrane** is the thin, flexible outer layer that allows things in and out of the cell.
- 18. The **cytoplasm** is the jelly-like fluid in the cell where all the other structures are found.
- 19. The <u>nucleus</u> is a small structure that controls everything the cell does, like the brain controls everything a person does.
- 20. The <u>vacuoles</u> are the storage places in cells. They hold water, waste, and other material until the cell can use it or get rid of it.
- 21. An <u>ecosystem</u> includes all of the living organisms and non-living parts of the environment. (e.g., In an estuary, plants, animals, sunlight, soil, water, and more interact with one another.)
- 22. <u>Biotic factors</u> in an environment are all of the living parts (e.g., plants, animals, and microorganisms).
- 23. <u>Abiotic factors</u> in an environment are all of the non-living parts (e.g., temperature, sunlight, soil, air, and water).
- 24. All members of a specific kind of organism in a certain area are considered a **population** (e.g., all white-tailed deer in a forest).
- 25. Groups of different populations in a certain area are called **communities** (e.g., all cacti, rattlesnakes, and scorpions in a desert).

- 26. <u>Microorganisms</u> are living things that are too small to be seen without a magnifying device. They can be single-celled or multi-celled.
- 27. Ecosystems can be divided in two ways according to their characteristics: **aquatic** and **terrestrial**.
- 28. <u>Terrestrial</u> ecosystems are land-based (e.g., forest and grasslands).
- 29. **Aquatic** ecosystems are water-based (e.g., lakes, ponds, estuaries, and oceans).
- 30. **Forests** have many trees and grass, different types of animals, and get a lot of rain.
- 31. **Grasslands** have fertile soil and tall grass, a medium amount of rain fall, and animals such as prairie dogs, bison, and grasshoppers.
- 32. <u>Lakes</u> and <u>ponds</u> are freshwater ecosystems with animals such as fish, amphibians, ducks, and turtles.
- 33. **Oceans** are large bodies of saltwater.
- 34. Most organisms live where the ocean is **shallow** (anywhere from the shoreline to the continental shelf), where food is easy to find.
- 35. Some organisms live in the **open water**, such as plankton that drift on the surface, fish that swim for food and oxygen, and others such as tubeworms that stay alive on the deep ocean floor.
- 36. <u>Estuaries</u> are found where freshwater meets saltwater; the tides change the amount of salt in the water.
- 37. Organisms get energy from food, and all organisms need **energy** to live.
- 38. Plants are called **producers** because they produce food (sugar) from the sun, carbon dioxide, and water.
- 39. Animals that cannot produce their own food and need other plants or animals to live are called **consumers**.
- 40. Animals that eat only plants are called **herbivores**.
- 41. Animals that eat only other animals are called **carnivores**.
- 42. Animals that eat both plants and animals are called **omnivores**.
- 43. Consumers that feed on dead and decaying matter and in turn put nutrients back into the soil are called **decomposers**.
- 44. A **food chain** starts with the sun's energy, shows the energy transfer from organism to organism, and is usually only six organisms long.
- 45. More than one food chain put together is called a **food web**.
- 46. **Predators** hunt and kill other organisms for food.
- 47. **Prey** is an animal that is hunted and killed as food for another animal.
- 48. A <u>parasite</u> must live off a <u>host</u>, which it could eventually harm or kill. (e.g., A tick is a parasite that lives on a dog, which is the host.)
- 49. There is only a certain amount of shelter, space, food, and water in every environment. These resources are called <u>limiting factors</u>.
- 50. The relationship between the number of organisms and the resources is called the **balance of nature**.

Landforms

- 51. Land and oceans can be created with **constructive forces** or destroyed with **destructive forces**.
- 52. Examples of constructive forces that create new land are <u>deposition</u>, <u>landslides</u>, <u>volcanic</u> <u>eruptions</u>, and <u>floods</u>.
- 53. Examples of destructive forces that destroy land are <u>weathering</u>, <u>erosion</u>, <u>landslides</u>, <u>volcanic</u> <u>eruptions</u>, <u>earthquakes</u>, and <u>floods</u>.

- 54. **Weathering** is a destructive process that describes the breaking down of rock.
- 55. **Erosion** is a destructive process that describes the movement of sediments and soil by wind, water, or gravity.
- 56. <u>Deposition</u> is a constructive process that describes the dropping off and building up of moved sediments and soil in a new location.
- 57. <u>Landslides</u> can be destructive or constructive and are described by the mass movement of land due to gravity.
- 58. <u>Volcanic eruptions</u> can be destructive or constructive and are described as mountains with openings from which lava bursts.
- 59. <u>Earthquakes</u> are destructive processes that produce vibrations of the Earth along a fault line and can cause landslides or tsunamis.
- 60. <u>Floods</u> can be destructive or constructive and occur when large amounts of water cover land that is usually dry.
- 61. The landforms under the ocean are the <u>continental shelf</u>, <u>continental slope</u>, <u>mid-ocean</u> ridge, rift zone, trenches, and the ocean basin.
- 62. The **continental shelf** is found off the shoreline where the edges of the continents are under water.
- 63. The **continental slope** is the steep slope where the shelf drops down to the ocean floor.
- 64. On the ocean floor, there is a mountain range made of volcanic mountains that divides the ocean floor into two halves. It is called the **mid-ocean ridge**.
- 65. The <u>rift zone</u> is at the highest point of the mid-ocean ridge where the volcanic activity adds mountains to either side of the mid-ocean ridge.
- 66. Ocean <u>trenches</u> are similar to deep canyons, but they are on the ocean floor. They are the deepest part of the ocean basin.
- 67. The <u>ocean basin</u> is the bowl-like area on either side of the mid-ocean ridge where trenches, abyssal plains, and seamounts are all found.
- 68. **Abyssal plains** are wide, flat lands found on the ocean basin.
- 69. **Seamounts** are underwater volcanic mountains that are not found on the mid-ocean ridge.
- 70. A **valley** (found on land) and a rift (found in the ocean) are similar because they are both lowlands, found between hills or mountains.
- 71. A <u>canyon</u> (found on land) and a trench (found in the ocean) are similar because they are both steep-sided valleys.
- 72. A <u>volcano</u> (found on land) and a seamount (found in the ocean) are similar because they both have openings in a mountain from which lava comes.
- 73. A <u>mountain range</u> (found on land) and the mid-ocean ridge (found in the ocean) are similar because they both consist of more than one mountain.
- 74. <u>Plains</u> (found on land) and abyssal plains (found in the ocean) are similar because they are both wide, flat areas of land.
- 75. The **shoreline** is the area where the ocean meets the land. It changes constantly due to the waves, currents, and tides always hitting it.
- 76. A sandy shoreline is called a **beach**.
- 77. <u>Waves</u> are the repeated movement of water that can wear away land or deposit sand along the shore.
- 78. All waves have the same parts: the <u>crest</u>, which is the highest point in the wave; the <u>trough</u>, which is the lowest point in the wave, and the **breaker**, which is the curl of the wave.
- 79. <u>Currents</u> are flowing streams of water in a specific direction on a curved path (the equator to the poles and then back from the poles to the equator).
- 80. **Longshore currents** can move sand from one location to another on the beach.

- 81. <u>Tides</u> are the regular rise and fall of ocean waters due to the moon's gravity, which can bring sand in at high tide (twice a day) and leave it behind when the tide falls at low tide (also twice a day).
- 82. Islands with sandy beaches that serve as a protector to the mainland are called **barrier islands**.
- 83. The place where a freshwater river meets a saltwater ocean is called an **estuary**.
- 84. **Inlets** are water-filled gaps between the mainland and barrier island where the amount of water changes due to the tides.

Properties of Matter

- 85. <u>Matter</u> is anything that has mass and takes up space. Matter is made up of very small particles that are too small to be seen.
- 86. **Solids** have a definite shape and volume. The particles are very close to one another (vibrating in place).
- 87. <u>Liquids</u> have a definite volume, but their shape changes depending on the shape of their containers. Their particles are close to one another but able to move apart.
- 88. <u>Gases</u> have no definite shape or volume and fill up all available space. Their particles move freely and spread out.
- 89. The two main factors that make the states of matter different are the **movement** and **spacing** of the particles.
- 90. The <u>volume of a solid</u> can be found by calculating height x width x length in a regular solid. The volume of an irregular shaped solid can be found by water displacement in a graduated cylinder.
- 91. The **volume of a liquid** can be measured using a graduated cylinder or graduated syringe.
- 92. <u>Mixtures</u> are made of two or more substances that are mixed together but keep their separate properties so they can easily be separated.
- 93. A **solution** is a type of mixture that mixes so completely that it looks the same everywhere, even under a microscope, and is difficult to separate.
- 94. The part of a solution in the smaller amount that is dissolved is called the **solute**.
- 95. The part of the solution in the larger amount that dissolves the other substance is called the **solvent**.
- 96. There are six main ways to separate mixtures: <u>filtering</u>, <u>sifting</u>, <u>evaporating</u>, and <u>floating</u>, as well as **magnetic attracting** and **using chromatography**.
- 97. <u>Filtration</u> is used to separate solid particles from a liquid by means of filter paper in a funnel. This will trap the solid particles, and the liquid will pass through.
- 98. <u>Sifting</u> is used to separate smaller solid particles from larger solid particles by means of a screen. This will trap larger particles, and smaller particles will pass through.
- 99. <u>Magnetic attraction</u> is used to separate magnetic material from a mixture of non-magnetic materials.
- 100. **Evaporation** is used to separate a solid that has dissolved in a liquid solution by allowing the liquid portion to evaporate out, leaving the solid part behind.
- 101. <u>Chromatography</u> is used to separate and analyze the types of solutes in a solution by filtering out the solutes. (The substances in the solution that dissolve the easiest travel the furthest and the ones that do not dissolve easily do not travel very far.)
- 102. **Floatation** is used to separate solids that float from the remaining liquid in a mixture.
- 103. The relationship of the amount of solute to solvent determines the concentration of a solution; the more solute in a solution, the more concentrated it is said to be.
- 104. The more solvent is added to a solution, the more dilute (or less concentrated) it will be.

- 105. The rate of dissolving can be sped up by several factors: <u>increased temperature</u>, <u>smaller</u> <u>particles</u>, and <u>faster stirring</u>.
- 106. <u>Chemical changes</u> occur when substances mix and new substances are formed so they cannot easily be separated into their original components.

Human Impact

- 107. <u>Natural resources</u> are the materials people can take and use from the Earth (e.g., air, water, minerals, coal, trees, and oil).
- 108. To **conserve** natural resources is to use them wisely by recycling, reusing, and reducing the materials people use.
- 109. **Pollution** is anything that can harm our natural environment (e.g., when foreign substances mix and dissolve in water, air, and soil).
- 110. **Foreign substances** are often produced as a result of industries, agriculture, the burning of fossil fuels, and other human activities.

Force and Motion

- 111. Magnets are materials that create a force that acts at a distance but cannot be seen called **magnetism**.
- 112. When two magnets with opposite poles (e.g., south pole and north pole) are brought together, they **attract**.
- 113. When two like ends of a magnet (e.g., south pole and south pole) are brought together, they repel.
- 114. The needle of a compass moves because of Earth's **magnetism**.
- 115. The closer magnetic objects get to one another, the greater the magnetic force.
- 116. A pull that attracts objects to each other is called **gravity**, and it is not noticeable unless one of the objects is very large.
- 117. As the moon moves around Earth, its gravity pulls on Earth causing water in the oceans to move toward the **Moon**.
- 118. Earth's gravity pulls on the Moon; this force keeps the **Moon** moving around the **Earth**.
- 119. The pull of the Sun's gravity keeps Earth moving around the **Sun**.
- 120. The force that allows objects to slide across a surface and slow down is called **friction**.
- 121. The two factors that will increase friction are <u>rougher surfaces</u> and <u>more pressure</u> on those surfaces.
- 122. **Lubrication** (e.g., motor oil, wax, or grease) can reduce friction by making surfaces smoother.
- 123. Friction occurs between all three states of matter.
- 124. The amount of <u>surface area</u> affects the friction between liquid and gases but usually does not affect friction between two solids.
- 125. The **position** of an object is its location relative to another object or a reference point. It is described with words such as *above*, *below*, *beside*, *behind*, or *ahead of*.
- 126. <u>Direction</u> of motion is the path in which an object is moving. It is described with words such as *north*, *south*, *east*, or *west*, as well as *right*, *left*, *up*, or *down*.
- 127. **Speed** describes how fast an object is moving.
- 128. <u>Unbalanced forces</u> change the rate and direction of the motion of objects because they are unequal in strength and opposite in direction
- 129. **Balanced forces** do not change the motion of objects because they are equal in all directions and there is not another force to offset it.

- 130. The speed of an object or how fast or slow an object is moving is called its **rate of motion**.
- 131. An **object at rest** will move in the direction of the force, if the force is unbalanced.
- 132. If an object is moving and a force is applied in the same direction as the object is moving, it will **speed up**.
- 133. If an object is moving and a force is applied in the opposite direction, it will **slow down or stop**.
- 134. If an object is moving and a force is applied to the side of the moving object, the object will **turn**.
- 135. In a distance-time graph, the time is located on the <u>x-axis</u> and the distance is located on the <u>y-axis</u>.
- 136. If an object is **stationary**, the line on a distance-time graph would be flat.
- 137. If an object is **speeding up**, the line on a distance-time graph would slope upward.
- 138. If an object is **slowing down**, the line on a distance-time graph would slope down.
- 139. If two objects with the same <u>mass</u> are acted on by a force with a greater force than the other, the one acted on with the greater force will have the greatest change in speed.
- 140. If there are two objects, one with a greater mass than the other, and the same amount of force is applied to each, the object with the lesser mass will have the **greater change in speed**.

Fifth Grade Social Studies Essential Facts

Reconstruction

- 1. **Reconstruction** was the rebuilding and healing of the country after the Civil War.
- 2.
- The 13th amendment abolished slavery in 1865.
 The 14th amendment, ratified in 1868, gave African Americans citizenship and said no 3. state could deny the equal protection of the law to citizens.
- The 15" amendment gave all male citizens, including African Americans, the right to vote. 4.
- The Freedman's Bureau was created to help four million freedmen, or former slaves, after 5. the war. It built hospitals and schools for blacks in the South.
- 6. Under Johnson's plan, Southern states were free to pass the **black codes**, which were laws that denied African Americans certain rights such as owning land and taking certain jobs.
- Laws that enforced segregation in the South after Reconstruction were called **Jim Crow Laws**. 7.
- 8. After slaves were set free, many of them began sharecropping. They rented land from landowners and paid their rent with a portion of their crops.
- The deltas of sharecropping were that the cost of sharecropping was higher than the 9. income they received, and the former slaves usually ended up in debt.

Westward Expansion

- 10. The varied geography of the West discouraged many railroad builders and made travel to the West difficult. The railroad would have to cross the vast Great Plains, the snow-covered Rocky Mountains, the deserts of the Great Basin, and the rugged Sierra Nevada Mountains.
- In 1862, the Union Pacific and Central Pacific Railroads began building a transcontinental 11. railroad to link the Eastern and Western United States.
- 12. The transcontinental railroad affected development of the West because it was easier and less expensive to travel, it increased trade from the East to the West, and it encouraged more people to move west.
- Former Civil War soldiers, free African Americans, and Irish, German, and Chinese 13. immigrants worked on the transcontinental railroad.
- 14. Coolies, or Chinese immigrants who worked on the railroad, were often treated unfairly and were paid less than other works.
- The railroad changed the Native Americans' way of life by bringing more settlers to 15. their homelands and destroying their game.
- The government decided to resettle Native Americans on reservations in hopes that the Native 16. Americans would give up hunting and become farmers.
- In 1868, the Lakota leaders signed a treaty with the United States to create the Great 17. Lakota Reservation. This promised the Lakota land on the **Black Hills** forever.
- The Seventh Calvary's mission, led by Colonel George Custer, was to defeat the Lakota 18. and force them onto a new reservation.
- Crazy Horse helped lead the Lakota to victory at the Battle of Little Bighorn, which was the 19. biggest victory Native Americans ever won against United States forces; it led to the end of freedom for Native Americans.
- 20. The Homestead Act gave 160 acres of land on the Great Plains to any adult man or widow who would pay a small fee and farm the land for five years. This encouraged settlement in the West.
- The people who bought land under the Homestead Act were called **homesteaders**. 21.

- 22. Homesteaders on the Great Plains also became known as **sodbusters** because they had to work hard to make the thick soil suitable for planting their crops.
- 23. Technology such as <u>windmills</u>, <u>steel plows</u>, and <u>barbed wire</u> made life for sodbusters a little easier.
- 24. African American pioneers who moved to the Great Plains were called **exodusters**.
- 25. Exodusters started new lives in communities on the Great Plains, such as **Nicodemus, Kansas**.
- 26. On cattle drives, **cowboys** guided huge herds of cattle north to new railroad lines.
- 27. After the Civil War, ranchers made large profits by selling their cattle in the **growing cities in the East**.
- 28. <u>Cattle drives</u> came to an end because of conflicts between ranchers and farmers on the Great Plains and expanding railroad lines.
- 29. During the **gold rush**, thousands of people went to California to search for gold.

Industrial Revolution and Immigration

- 30. <u>Samuel Morse</u> helped develop a way to send telegraph messages using the Morse Code.
- 31. The **Industrial Revolution** was a time period of new inventions and technologies.
- 32. <u>Alexander Graham Bell</u> invented the telephone.
- 33. <u>Thomas Edison</u> invented more than 1,000 new inventions, including the electric light bulb, the phonograph, and the electric power station.
- 34. In 1903, Orville and Wilbur Wright made the first airplane flight at Kitty Hawk, North Carolina.
- 35. <u>Henry Ford</u> invented the <u>assembly line</u>, which is a method of mass production that lowered the cost of automobiles.
- 36. Albert Einstein invented the atomic bomb.
- 37. Inventors in the 1800's created new machines to make farming easier. Using machines to do work is called **mechanization**.
- 38. Most immigrants who came to the United States between 1880 and 1920 were from **Europe**. They contributed to the growth of **big cities**.
- 39. Many immigrants came from countries such as <u>Ireland</u>, <u>Great Britain</u>, <u>Germany</u>, <u>Sweden</u>, <u>Italy</u>, Austria-Hungary, and Russia.
- 40. Immigrants were examined in places such as <u>Ellis Island</u> in New York City and <u>Angel Island</u> in San Francisco before being allowed into the country.
- 41. Immigrants often lived in <u>tenements</u>, which are run-down and unsafe buildings divided into apartments.
- 42. Tenements were often located in **slums**, which are unsafe and run-down sections of a city.
- 43. Immigrants found jobs in our country's <u>railroads</u>, <u>factories</u>, and <u>mines</u>. Some sold goods from push carts.
- 44. Many immigrants worked in hot, cramped, dangerous workshops known as **sweatshops**.
- 45. Many immigrants faced **prejudice**, which is an unfair negative opinion about a group of people.
- 46. Immigrants contributed to the **diversity**, or variety, of the American population.
- 47. <u>Jane Addams</u> founded the country's first <u>settlement house</u>, or community center. Settlement_houses offered food, clothing, and basic needs for poor people.
- 48. An entrepreneur named **Andrew Carnegie** began using the Bessemer process to make steel in Pittsburgh, Pennsylvania.
- 49. <u>John D. Rockefeller</u> was a business leader who started the Standard Oil Company, one of the largest monopolies in the United States.
- 50. A **monopoly** is a company that controls an entire industry.
- 51. A **corporation** is a business owned by investors, and it sells shares of the company.

- 52. Shares of a company are called **stocks**.
- 53. <u>Free enterprise</u> is an economic system in which people are free to start their own businesses and own their own property.
- 54. The rise of big business changed the United States, because by the early 1900's more people worked in **industries** than on farms.
- 55. **New industries** and the **increasing number of immigrants** contributed to the increase of population in the cities.
- 56. **<u>Urbanization</u>** is the movement of people from rural areas to cities.
- 57. Workers formed organizations called <u>labor unions</u> to fight for better wages and working conditions. They also worked to end child labor.
- 58. In a **strike**, workers refuse to work to try to force business owners to meet their demands.
- 59. The <u>Great Migration</u> was the movement of millions of African Americans to the northern United States between 1915 and the 1940's in search of work and fair treatment.
- 60. **Progressives** were reformers who worked to stop unfair business practices and to improve the way in which the government worked.
- 61. Writers known as <u>muckrakers</u> helped to focus the country's attention on unfair business practices.
- 62. Theodore Roosevelt signed two reform acts: the **Meat Inspection Act** and the **Pure Food and Drug Act**.
- 63. These reforms, created to protect Americans, often overlooked <u>immigrants</u> and <u>African</u> Americans.
- 64. Progressives worked to pass **Blue Laws**, or laws designed to solve some social problems of the day.
- 65. **John Muir** was one of the first conservationists who worked to preserve the wilderness.

U.S. Expansion

- 66. In 1867, the United States purchased <u>Alaska</u> from Russia. Alaska became the 49th state in 1958.
- 67. In 1898, <u>Hawaii</u> was annexed to the <u>United</u> States, and it became the 50th state in 1958.
- 68. After the sinking of the **Maine**, the U.S. declared war against Spain and attacked Spain in the Philippines and in Cuba.
- 69. After the **Spanish-American War** of 1898, the U.S. gained Puerto Rico, Guam, and the Philippines.
- 70. Theodore Roosevelt organized a group of volunteer soldiers called **Rough Riders**.
- 71. African American soldiers who fought in the Spanish-American War were known as **Buffalo Soldiers**.
- 72. In 1903, Theodore Roosevelt oversaw the building of the **Panama Canal**, a human-made waterway across the Isthmus of Panama that connects the Atlantic and Pacific Oceans.

World War I

- 73. <u>Militarism, nationalism, competition for new land (imperialism)</u>, and <u>alliances</u> caused WWI.
- 74. The spark that started WWI was the assassination of <u>Archduke Franz Ferdinand</u> of Austria-Hungary on June 28, 1914.
- 75. Britain, France, Italy, Belgium, and Russia made up the alliance called the Allied Powers.
- 76. Germany, Austria-Hungary, Bulgaria, and Turkey made up the alliance called the **Central Powers**.

- 77. The United States entered WWI joining the Allied Powers after the Germans sank the <u>Lusitania</u> and were <u>attacking American ships</u>. <u>President Woodrow Wilson</u> asked Congress to declare war.
- 78. The new technologies used during WWI were **poison gas**, **airplanes**, and **tanks**.
- 79. On the home front, women and African Americans worked in the factories, and governments rationed food supplies to make sure troops were fed.
- 80. The <u>Treaty of Versailles</u> officially ended WWI and demanded that Germany pay heavy fines and not rebuild its army.
- 81. President Wilson helped create the <u>League of Nations</u> after the war, which was supposed to prevent future wars.

Roaring Twenties and the Great Depression

- 82. The increasing number of automobiles, the invention of radios and "talkies," jazz music, and the media explosion all define the **Roaring Twenties**.
- 83. Mass media is public forms of communication, such as the radio, that reach large audiences.
- 84. Some reformers called for **Prohibition**, a complete ban on the sale of alcohol.
- 85. The 18th amendment outlawed the manufacturing, sale, and transportation of alcoholic beverages.
- 86. The 21st amendment ended Prohibition.
- 87. **Duke Ellington** and **Louis Armstrong** were famous jazz composers in the 1920's.
- 88. The <u>Harlem Renaissance</u> was an artistic movement that reflected African American life in the 1920's and involved people such as Langston Hughes and Bessie Smith.
- 89. The <u>causes of the Great Depression</u> were farms and factories producing more goods than they could sell; many people borrowing money from the bank and unable to repay their loans; and unemployment.
- 90. **Unemployment** is the condition of being out of work.
- 91. The **stock market crash** of 1929 signaled the beginning of the Great Depression.
- 92. The <u>effects of the Great Depression</u> were that banks and businesses failed and many people lost their homes and farms.
- 93. Years of drought during the 1930's turned more than 150,000 square miles of the Great Plains into dust. This area was called the **Dust Bowl**.
- 94. <u>Franklin D. Roosevelt</u> was elected President in 1932. He created the <u>New Deal</u>, programs to help end the Great Depression.
- 95. The **Social Security Act** provided monthly payments to the elderly, disabled, and unemployed.
- 96. The <u>Federal Deposit Insurance Corporation</u>, or FDIC, was a New Deal program designed to prevent another Depression by protecting banks.
- 97. The <u>Civilian Conservation Corps</u> was a New Deal program that set up work camps for more than two million unemployed young men between the ages of 18 and 25.

World War II

- 98. A <u>dictator</u> is a leader who gains complete control over a country's government.
- 99. Adolf Hitler was the dictator of Germany, and his political party, the Nazis, believed in fascism.
- 100. **Fascism** is a form of government in which individual freedoms are denied and complete power is given to the government.
- 101. Benito Mussolini was the dictator of Italy during WWII and also believed in fascism.
- 102. The dictator of the Soviet Union during WWII was **Josef Stalin**.

- 103. Winston Churchill was the Prime Minister of Great Britain during WWII.
- 104. Germany, Italy, and Japan became known as the **Axis Powers**.
- 105. The <u>Allied Powers</u> were Great Britain, Canada, the Soviet Union, and eventually the United States.
- 106. WWII began when <u>Hitler (Germany) invaded Poland</u>.
- 107. On December 7, 1941, <u>Japan</u> bombed <u>Pearl Harbor</u>, which caused the U.S. to join WWII on the Allied side.
- 108. On June 5, 1944, **General Dwight D. Eisenhower** led the Allied invasion of several hundred thousand troops at **Normandy, France**. This was called **D-Day**.
- 109. President Harry Truman decided that the U.S. should drop the atomic bomb on <u>Hiroshima</u> and <u>Nagasaki</u> to force Japan into surrendering.
- 110. Women worked as <u>nurses</u>, <u>airplane pilots</u>, <u>radio operators</u>, and <u>mechanics</u> during WWII.
- 111. <u>Relocation camps</u> were prison camps in which Japanese Americans were held in the Western United States during WWII after the bombing of Pearl Harbor.
- 112. The **Manhattan Project** was a code name given to the effort to build an atomic bomb.
- 113. Radar was used in WWII to determine the location of ships and airplanes.
- 114. Factories quit making consumer products and began making <u>war supplies</u>. This caused factories to expand, which created millions of jobs and caused the <u>Great Depression to end</u>.
- 115. The United States provided funds, food, and materials to help countries rebuild in Europe. This was called the **Marshall Plan**.
- 116. The <u>United Nations</u>, an international organization which works to preserve world peace, was founded at the end of WWII.

Post World War II (1950's)

- 117. After WWII, the U.S. and the Soviet Union became **superpowers** of the world.
- 118. In the 1950's, many families moved away from the cities to **<u>suburbs</u>**, or communities near the edge of a city.
- 119. **Consumers** began buying new goods such as televisions, barbecue grills, and new toys during the 1950's. This helped the U.S. economy grow.
- 120. **Consumer credit** is a credit used to buy goods that are consumed, or used up, such as food and clothing, rather than for investments such as farm equipment. This became popular in the 1950's.
- 121. Rock 'n' roll, television, and hula hoops are all symbols of the **1950's**.

Civil Rights Movement

- 122. Martin Luther King, Jr. was a major civil rights leader who led the march on Washington in 1963.
- 123. Rosa Parks was arrested for not giving up her seat in the white section of a Montgomery, Alabama bus. To support her, African Americans boycotted the buses. This led to the Montgomery Bus Boycott.
- 124. The <u>Brown v. Board of Education</u> court decision of 1954 ruled it was illegal to have segregated schools.
- 125. **Malcolm X** was a very passionate defender of African American civil rights.

Cold War

- 126. The <u>Cold War</u> was a conflict between the U.S. and the Soviet Union, fought with ideas, words, and money.
- 127. The Soviet Union believed in **communism**, which is a political and economic system in which the government owns all of the businesses and land.
- 128. The <u>Iron Curtain</u> was an imaginary line dividing Europe into communist and noncommunist countries.
- 129. **NATO**, or the **North Atlantic Treaty Organization**, was a military alliance with the nations of Western Europe to promise to help each other if there was an attack against the Soviet Union.
- 130. During the Korean War, the U.S. and United Nations supported South Korea and China, and the Soviet Union supported North Korea.
- 131. The cause of the Korean War was that North Korea wanted South Korea to be communist.
- 132. A United States senator named <u>Joseph McCarthy</u> started a campaign to rid the U.S. of communists. This was called **McCarthyism**.
- 133. The <u>Cuban Missile Crisis</u> happened when the Soviet Union placed nuclear missiles in Cuba aimed at the United States. The Soviet Union eventually removed the missiles from Cuba.
- 134. The competition of space exploration between the United States and the Soviet Union was called the **space race**.
- 135. The competition between the United States and the Soviet Union to have the most powerful weapons was called the **arms race**.
- 136. The barrier that separated West Berlin from East Berlin because of communist beliefs was known as the **Berlin Wall**.
- 137. The <u>Vietnam War</u> was a conflict between North Vietnam and South Vietnam. It was fought because North Vietnam wanted South Vietnam to become communist.
- 138. **Doves** believed the United States should not be involved in the Vietnam War.
- 139. <u>Hawks</u> believed the United States should be involved in the Vietnam War to stop the spread of communism.
- 140. **Sputnik** was the first satellite launched into space by the Soviet Union.
- 141. **Neil Armstrong** was the first American man to walk on the moon.
- 142. The <u>Organization of Petroleum Exporting Countries</u>, or <u>OPEC</u>, was created for the purpose of negotiating with oil companies on matters of oil production, prices, and future concession rights.

The Fall of Communism to the Present

- 143. The United States has been involved in regions such as the <u>Middle East</u>, <u>Central America</u>, the <u>Caribbean, Africa</u>, the <u>Balkans</u>, and <u>Asia</u> since the fall of communism.
- 144. The United States' commitment to helping free people resist communist takeover is referred to as the <u>Truman Policy or Doctrine</u>.
- 145. The **Persian Gulf War** was a conflict between Kuwait and Iraq, known in the U.S. as **Operation Desert Storm**.
- 146. **Saddam Hussein** was the former dictator of Irag.
- 147. Natural resources are things found in nature that are valuable to humans.
- 148. The increase of Earth's average temperature is referred to as **global warming**, which scientists believe relates to pollution.
- 149. Air travel, tunnels, highways, railways, and subways are all forms of transportation systems.
- 150. **Technology** is the use of advanced devices, especially in electronics or computers.

- 151. Objects placed into orbit around a planet are called **satellites**.
- 152. The world-wide computer network for communication is known as the **Internet**.
- 153. **Free trade** is trade between nations without high taxes.
- 154. Goods sent to other countries for buying/selling are called **exports**.
- 155. Goods received from other countries for buying/selling are called **imports**.
- 156. On <u>September 11, 2001</u>, the United States became the target of a series of terrorist attacks led by al-Qaeda.
- 157. In response to those attacks and to prevent future attacks, President George W. Bush declared a **War on Terrorism (or War on Terror)**.
- 158. The purpose of the <u>Patriot Act</u> is to allow greater communication between intelligence and law enforcement agencies in the United States.