# *VOCABULARY WORDS SCIENCE*

*This is a list of words used collectively within the 6th, 7th and 8th grades. Some words are used throughout all grades, while others are specific to a particular grade.*

1. Abiotic factor – a nonliving part of an organism's habitat
2. Acceleration – the rate at which velocity changes over time; an object accelerates if its speed, direction, or both change
3. Analyze – to study using a logical process or mathematical system
4. Aquifer – an underground layer of rock or sediment that holds water
5. Astronomer – a scientist who studies the universe beyond Earth
6. Atmosphere – the thin layers of gasses that surround Earth.
7. Atom – one of the smallest particles of an element
8. Axis – an imaginary line that passes through the Earth's center and the North and South Poles, around which the Earth rotates
9. Behavior – all the actions or activities that an animal performs
10. Big Bang – the most commonly accepted theory of how the universe formed: It states that the universe expanded from a hot, dense, initial condition at a specific point in time around 13.8 billion years ago
11. Biodiversity – the total number of different species in an area
12. Biosphere – the part of Earth in which life can exist
13. Boiling – the conversion of a liquid to a vapor through increased energy and particle motion
14. Cementation – the process by which dissolved minerals crystallize and glue pieces of sediment together into one mass
15. Centi – one hundredth of a metric unit of measurement
16. Chemical Property – any property of a substance that produces a change in the composition of matter
17. Classifying - grouping items together that are alike in some way
18. Cleavage – a mineral's ability to split easily along flat surfaces
19. Colony – a group of individual organisms of the same species living together
20. Community – all the different populations that live together in an area
21. Compaction – the process by which sediments are pressed together under their own weight
22. Compare – to tell or show how two things are alike and different
23. Compound – a substance in which two or more elements are chemically joined, for example $H_2O$
24. Condensation – the change of state from a gas to a liquid through removal of energy and reduction in particle movement
25. Conduction – the direct transfer of thermal energy from one substance to another substance that is touching
26. Conservation – the practice of using less of a resource so that resources will not be used up
27. Continental Drift –the hypothesis stating that the continents slowly move across Earth's surface
28. Controlled Experiment – an experiment in which only one variable is manipulated at a time
29. Convection – the transfer of thermal energy by the movement of a fluid
30. Convergent Boundary – a plate boundary where two plates move toward each other
31. Core – the central region of an object, for example – the Earth's core

32. Crust – the layer of rock that forms Earth's outer surface
33. Crystal - a solid whose atoms are arranged in a "highly ordered" repeating pattern
34. Crystallization - the process by which atoms are arranged to form a material with a repeating solid structure
35. Density – (an object's mass divided by its volume: *Density = mass ÷ volume*), a measure of how many particles are packed together into a certain amount of space.
36. Dependent Variable – the factor that changes, or responds to a change caused by the independent variable.
37. Deposition – the process in which sediment is laid down in new locations
38. Describe – to explain or tell in detail. A written description may contain facts and other information needed to communicate your answers, which may include diagram or a graph
39. Design – to make something using specific criteria, for example designing a solution for a problem
40. Determine – to use given information and any related facts to find a value or make a decision
41. Divergent Boundary – a plate boundary where two plates move away from each other
42. Dormant – a volcano that is not currently active, but that may become active in the future
43. Earthquake – the shaking of the Earth's surface that results from the movement of rock underground cause by the release of energy
44. Eclipse – an event that happens when the shadow of an object in space falls on the surface of another object, for example a solar eclipse
45. Electromagnetic Radiation – waves that travel through space and carry energy
46. Element – a substance in which all the atoms are the same that cannot be broken down into other substances
47. Energy – the ability to do work or cause change
48. Energy Pyramid – a diagram that shows the amount of energy that moves from one feeding level to another in a food web
49. Equator – an imaginary line that circles Earth halfway between the North and South poles
50. Equinox – the two days of the year on which neither hemisphere is tilted toward or away from the sun, it happens in September and March on Earth
51. Erosion – the destructive process in which water, wind, or gravity loosens and carries away fragments of rock
52. Estimate – to find an approximate answer that is relatively close to an exact amount
53. Evaporation – the process by which molecules in liquid escape in the air as vapor/gas
54. Evolution – the process of change in structure or function of an organism or environment over time
55. Expect – using theoretical or experimental data to anticipate a certain outcome
56. Experiment – to try in several different ways to gather information
57. Explain – to give facts and details that make an idea easier to understand. Explaining can involve a written summary supported by diagram, chart, table or any combination
58. Extinct – a volcano that is no longer active and is unlikely to erupt again, or an organism that no longer lives on Earth
59. Fault – a break or crack in Earth's lithosphere along which the rocks move
60. Find – to Calculate or determine, for example- to calculate density
61. Fluid – a nonsolid state of matter in which the atoms or molecules are free to move past each other, as in a gas or liquid

62. Food Chain – a series of events in which one organism eats another and obtains energy
63. Force – a push or pull exerted on an object in order to change the motion of the object; force has both amount and direction
64. Fossil – evidence that an organism once existed in an area; can be part of the organism's body or a mark or print left by the organism
65. Fossil fuel – an energy-rich substance (such as coal, oil, or natural gas) that was formed from long-dead organisms
66. Fracture – the way a mineral looks when it breaks apart in an irregular way
67. Galaxy – a huge group of single stars, star systems, star clusters, dust, and gas bound together by gravity
68. Gemstone – a hard, colorful mineral that has a brilliant or glassy luster and is valued for its appearance, for example - emerald
69. Genotype – an organism's genetic makeup, or allele combinations
70. Geologic Time Scale – a record of the geologic events and life forms over Earth's history
71. Geologist – a scientist who studies the forces that makes and shapes planet Earth
72. Global Warming – the gradual increase in the average overall temperature of Earth's atmosphere over time
73. Gradualism – the theory that evolution occurs slowly but steadily
74. Gram – the basic metric unit to measure mass
75. Gravity –the force that pulls objects toward each other. Gravity's effect depends on mass and distance
76. Hardness – the level of a mineral's ability to be scratched, often measure by Mohs Hardness Scale
77. Heat – the energy transferred between objects that are at different temperatures
78. Humidity – the amount of water vapor in a given volume of air
79. Hydrosphere- all of the water on, inside and above the Earth
80. Hypothesis – a possible explanation or a prediction for a set of observations or answer to a scientific question. Hypotheses must be testable!
81. Identify – to match a definition or a description to an object or to recognize something and be able to name it
82. Igneous Rock – a type of rock that forms from the cooling of molten rock at or below the surface
83. Illustrate – to show or present information usually as a drawing or a diagram, you can also illustrate a point using a written explanation
84. Independent Variable – the one factor that a scientist changes during an experiment
85. Indicate – to point out or show
86. Inertia – the tendency of an object to resist a change in motion
87. Inferring – an interpretation using observations, past knowledge, and experiences to explain what is happening
88. Inorganic – not formed from living things or the remains of living things, has no carbon!
89. Invertebrate – an animals that does not have back-bone
90. Justify – to support your answers with reasons or examples
91. Kilo – one thousand of a metric unit
92. Kinetic Energy – the energy an object has due to its motion
93. Latitude - the distance in degrees north or south away from the equator
94. Lava – liquid magma that reaches the surface

95. Learning – the process that leads to changes in behavior based on practice or experience
96. Light Year – the distance that light travels in one year, used by astronomers to measure distance
97. Liter – the basic metric unit to measure capacity in metric
98. Lithosphere- the part of Earth that is composed mostly of rock which makes up of the Earth's crust and outer mantle
99. Longitude – the distance in degrees east or west of the prime meridian
100. Luster – the way a mineral reflects light from its surface
101. Machine – a device that helps do work by either overcoming a force or change the direction of the applied force
102. Magma – the molten mixture of rock-forming substances, gasses, and water from the mantle
103. Mantle – the layer of material between Earth's crust and core
104. Mass – the amount of matter in an object, measures in grams
105. Metamorphic Rock – a type of rock that forms from an existing rock that has been changed by (or any combination of) heat, pressure, or chemical reactions
106. Meteorologist – scientists who study the causes and effects of weather and tries to predict it
107. Meter – the basic metric unit to measure distance
108. Milli – one thousandth of a metric unit of measurement
109. Mineral – a naturally occurring, inorganic solid that has a crystal structure and a definite chemical composition
110. Model – to represent a situation using pictures, diagrams, or number sentences
111. Niche – the role of an organism in its habitat
112. Observing – the process of using one or more of your senses to gather information, can be direct or indirect
113. Orbit – the path of an object as it revolves around another object in space
114. Pangaea – the name of the single landmass, or supercontinent that broke apart over 200 million years ago and gave rise to today's continents
115. Petrified Fossil- remains of a living specimen in which minerals replace all or part of the organism
116. Physical Property – any characteristic of a substance that can be observed or measured without changing the composition of the substance
117. Population – all the members of one species in a particular area
118. Potential Energy – energy that is stored and available to be used later
119. Predicting – the process of forecasting what will happen in the future based on past experience or evidence
120. Reason – to think through using facts and information
121. Recall – to remember a fact quickly
122. Relate – to find a connection between two different things
123. Represent – to stand for or take the place of something else, symbols, symbols, equations, charts and tables are often used to represent particular situations
124. Revolution – the movement of an object around another object
125. Rock Cycle – the process during which rocks are formed, change, wear down, and are formed again over long periods of time
126. Rotation – the spinning motion of a planet on its axis
127. Science – A way of learning and thinking about the natural world
128. Scientific Method – a plan of inquiry that uses science process skills as tools to gather, organize,

analyze, and communicate information

129. Sedimentary Rock – a type of rock that forms when particles from other rocks or the remains of plants and animals are deposited, compacted, and cemented together
130. Sketch – to draw a rough outline of something. When a sketch is asked for, it means that a drawing needs to be included in your response
131. Society – a group of closely related animals of the same species that work together in a highly organized way
132. Solid – the state of matter in which the volume and shape of a substance are fixed, has very low energy
133. Solstice – the two days of the year in which the sun reaches its greatest distance north or south of the equator, it happens in December and June every year
134. Streak – the color of a mineral's powder
135. Summarize – to go over or review the most important points
136. Taxonomy – the scientific study of how living things are classified
137. Technology – how people modify the world around them to meet their needs or to solve practical problems
138. Temperature – a measure of how warm (or cool) something is; specifically, a measure of the average kinetic energy of the particles in an object
139. Transform Boundary – a plate boundary where two plates move past each other in opposite directions
140. Trace Fossil-a type of evidence that provides a record of the activities of an ancient organism but not the organism itself such as a footprint
141. Universe – all of space and everything in it
142. Use – to draw upon given information to help you determine something else
143. Variable – a factor that can change in an experiment
144. Vertebrate – an animal that has a backbone
145. Viscosity – the resistance of a fluid to flow, viscosity is why syrup pours slower than water
146. Volcano – a weak spot in the crust where magma has come to the surface
147. Volume – the amount of space an object takes up, measured in $cm^3$ or liters
148. Water Cycle – The continual movement of water among Earth's atmosphere, oceans, and land surface through evaporation, condensation, and precipitation
149. Weather – the condition of Earth's atmosphere at a particular time and place for the next 12 – 24 hours
150. Weight – a measure of the gravitational force exerted on an object; its value can change with the location of the object in the universe (You will weigh more on Jupiter and less on the Moon!)

This a list of words that students will use for all science classes and will show up on multiple testing formats. These words will be used in all future science classes throughout their career in middle school, high school, and beyond. We understand that this is a lot of words, but modifications will be made as necessary and where needed.

Thank you, DRMS Science Department Faculty