8th grade Vocabulary Words Common (sb.thefreedictionary.com)

1) **Accuracy** - correctness of a measurement
2) **Affect** - to influence or impact (verb)
3) **Balance scale** - a tool used to measure mass
4) **Cause** - to make something happen or exist
5) **Centimeter** - used to measure distance, 100 centimeters equals 1 meter
6) **Characteristic** - observable quality of a person or thing
7) **Chart** - a visual display of information
8) **Classify** - arranging organisms or matter into a group within a system
9) **Compare** - to look for similarities
10) **Contrast** - to emphasize differences
11) **Controlled Variable** (kept the same) - a variable that is unchanged in an experiment
12) **Cycle** - repeated sequence of events
13) **Demonstrate** - to present by experiments, examples, or practical application
14) **Description** - a verbal or written explanation of something
15) **Design** - a plan to create something
16) **Diagram** - a chart, graph, or drawing that displays information
17) **Effect** - a change that occurs because of some action or event (noun)
18) **Evidence** - proof or facts that support data
19) **Explain** - to name, give details, and give reasons for something
20) **Function** - what something is used for or does
21) **Gram** - the base unit of mass in the metric system
22) **Graph** - a picture that shows relationships between sets of data
23) **Identify** - to name and point out
24) **Input** - matter or energy going into a system
25) **Interpret** - to explain the meaning of information, facts, and observations
26) **Investigate** - to carry out an examination or inquiry in order to find out about something
27) **Issue** - a topic to be discussed, researched or investigated
28) **Liter** - the base unit of volume in the metric system
29) **Logical** - thinking and expressing oneself in a clear and consistent manner
30) **Manipulated Variable** (changed) - the variable that is changed and tested in an experiment
31) **Meter** - the base unit of distance or length in the metric system
32) **Model** - a representation of things that cannot be observed directly
33) **Observe**- using your five senses to learn about something
34) **Opinion**- the view that someone takes about a certain issue
35) **Output**- matter or energy coming out of a system
36) **Pattern**- a regular or repeated order or arrangement
37) **Phenomena**- facts or events that can be observed
38) **Predict**- to state a testable idea based on knowledge and research
39) **Process**- series of tasks performed to bring about a result
40) **Property**- characteristic of a material that helps to identify or classify matter
41) **Rate**- the relative speed of progress or change
42) **Relationship**- a connection or similarity between two or more things
43) **Reliable**- getting the same or very similar results after multiple trials
44) **Responding Variable** (measured)- variable that is affected and measured in an experiment
45) **Result**- the outcome
46) **Solution** (as to a problem)- the answer and explanation to a problem
47) **Structure**- the way that a number of parts are held or put together in a particular way
48) **Subsystem**- a system that is a part of a larger system
49) **Summarize**- to give a shortened version that includes key information
50) **System**- a combination of parts that function together
51) **Table**- an orderly arrangement of data, containing columns and rows
52) **Temperature**- measure of how fast particles move in a substance
53) **Texture**- the appearance and feel of a surface
54) **Transfer**- to move from one place to another
55) **Unexpected**- not expected or surprising
56) **Valid**- having accurate and reliable information or results
57) **Versus** (vs)- when two things are compared to one another
58) **Volume**- the amount of space taken up
8th grade Vocabulary Words Energy Machines and Motion

1) **Circuit**- a path that electric current flows through
2) **Electrical**- form of energy that consists of a flow of electric charges through a conductor
3) **Energy**- the ability to do work
4) **Force**- a push or a pull
5) **Friction**- force that resists the motion of two surfaces that are touching each other
6) **Gravity**- force of attraction between any two objects
7) **Heat (thermal) energy**- transfer of thermal energy between substances that are different temperatures
8) **Inclined Plane**- simple machine that consists of a flat sloping surface (ie. wedge and screw)
9) **Kinetic Energy**- energy of motion
10) **Lever**- simple machine made of a long rigid bar that rests on and turns around a support called a fulcrum
11) **Leverage**- the mechanical advantage gained by being in a position to use a lever
12) **Newton (N)**- base unit of force in the metric system
13) **Potential Energy**- stored energy
14) **Pressure**- amount of force exerted on a given area by an object or substance
15) **Pulley**- simple machine consisting of one or more wheels with a rope wrapped around them
16) **Relative Position**- the place an object is in relationship to other objects around it
17) **Relative Speed**- how quickly or slowly an object is moving in relationship to objects around it
18) **Weight**- a measure of the force of gravity on an object

8th grade Vocabulary Words Properties of Matter

19) **Acid**- compounds that produce hydrogen ions in water, and reduces its pH to below 7
20) **Atom**- the smallest particle of an element that still has all the properties of that element
21) **Attract**- when one object causes other objects to come near to it, or stay near it
22) **Charge**- positive or negative electrical force
23) **Chemical**- a substance with a distinct molecular composition that is produced by or used in a chemical process
24) **Compound**- a substance containing two or more atoms or molecules of different elements, held together by chemical bonds
25) **Density**- the amount of mass in a given volume
26) **Dissolve**- cause to go into a solution
27) **Electron** - negatively charged particle of an atom

28) **Element** - substance in which all of the atoms are the same, elements cannot be broken down to more pure substance

29) **Filter** - device that removes something from whatever passes through it

30) **Gas** - a state of matter that has no definite volume or shape

31) **Insoluble** - a substance that is not easily dissolved

32) **Liquid** - a state of matter that has no definite shape, but does have a definite volume

33) **Magnetic pole** - one of the two ends of a magnet where the magnetism seems to be concentrated

34) **Magnetism** - a force that acts between certain objects that are near one another or touching

35) **Mass** - amount of matter in an object

36) **Matter** - anything that takes up space and has mass

37) **Mixture** - a combination of two or more substances that have not combined chemically and that can be separated by physical mean

38) **Molecule** - two or more atoms attached by chemical bonds

39) **Neutron** - neutral particle in the nucleus of an atom

40) **Nucleus** - the center of the atom that contains protons and neutrons

41) **Particle** - any very small part or unit of matter, such as a molecule or atom

42) **pH** - scale ranging from 0-14 used to describe how acidic or basic a substance is

43) **Property** - characteristic of a material that helps to identify or classify matter

44) **Proton** - positively charged particle in the nucleus of an atom

45) **Reaction** - change that takes place when two or more substances interact to form new substances

46) **Repel** - when one object causes other objects to move away, or stay away from it

47) **Solid** - a state of matter that has a definite shape and volume

48) **Soluble** - a substance that is capable of being dissolved in some solvent

49) **Solution (chemical)** - mixture with one substance dissolved in another substance

50) **State (phase) of matter** - the different forms matter can take; solid, liquid, or gas

51) **Substance** - anything that is made of only one kind of material

52) **Vapor** - barely visible or cloudy diffused matter, such as mist, fumes, or smoke, suspended in the air
8th grade Vocabulary Words Light, Sound, and Heat

53) **Absorb**- to take something in
54) **Conduction**- when heat is transferred between 2 objects in physical contact
55) **Convection**- when heat is carried by a moving liquid or gas (fluid)
56) **Echo**- sound waves reflected off a surface
57) **Frequency**- the number of cycles per second
58) **Image**- a visual representation of an object
59) **Pitch**- how high or low a sound is, this is determined by the sound’s frequency
60) **Radiation**- heat traveling across a space, matter is not needed to transfer the energy
61) **Reflect**- when waves bounce back from a surface
62) **Sound**- energy that travels through matter as mechanical waves, and can be heard by the ear
63) **Transmit**- when light or energy is passed through matter
64) **Vibration**- the rapid back and forth movement of a particle
65) **Wavelength**- the length of one wave found by measuring the distance from a point on the wave to the same point on the next wave