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| Matter | State |
| Weight | Mass |
| Volume | Density |
| Magnetism | Conduction |
| Atom | Nucleus |

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| **form of matter (solid, liquid, or gas)**  States of Matter | anything that has mass and takes up space  http://school.point2educate.com/wp-content/uploads/2014/03/Book-Red.png |
| amount of mass in an object (measured in grams)  http://www.physics.smu.edu/~scalise/apparatus/triplebeam/triplebeam.jpg | amount of gravity pulling on an object  https://encrypted-tbn1.gstatic.com/images?q=tbn:ANd9GcQMaDAo3fisbvijiGqq1cCM0VvbxEUogHbp4FLt9iNgZdpXdYEQOgm3Z-Hr |
| mass divided by volume (grams/liters)  http://www.chemprofessor.com/gas_laws_files/image033.jpghttp://www.nyu.edu/pages/mathmol/textbook/density_box.gif | amount of space an object takes up (measured in liters)  http://www.hometrainingtools.com/images/265/CE-CYG1000.jpg |
| ability to carry heat, electricity, and sound (opposite of insulation)  http://d1jqu7g1y74ds1.cloudfront.net/wp-content/uploads/2011/01/Conduction.jpg | ability to be pulled to a magnet  http://www.stmary.ws/highschool/physics/home/notes/electricity/magnetism/johnny_automatic_magnet.jpg |
| **central part of an atom**  nucleus.jpg | **smallest part of an element**  http://d1jqu7g1y74ds1.cloudfront.net/wp-content/uploads/2010/02/c-atom_e1.gif |
| Proton | Neutron |
| Electron | Sea Breeze |
| Land Breeze | Law of Conservation of Mass |
| Physical Change | Chemical Change |
| Chemical Equation | Exothermic Reaction |

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| **no charge**  https://encrypted-tbn2.gstatic.com/images?q=tbn:ANd9GcSzOjcYxuUY7c-ZI33SuYJzSCjfRjlpY8Y3Y9bc8Q63-vDhhEewQzsy1aAF | **+ charge**  https://encrypted-tbn2.gstatic.com/images?q=tbn:ANd9GcSzOjcYxuUY7c-ZI33SuYJzSCjfRjlpY8Y3Y9bc8Q63-vDhhEewQzsy1aAF |
| daytime wind from ocean to land  http://3.bp.blogspot.com/-87m-dFT3wCo/Uf2xn_IUjOI/AAAAAAAASKs/osxlXAeprPk/s1600/seabreeze.gif | * **charge; located outside the nucleus**   https://encrypted-tbn2.gstatic.com/images?q=tbn:ANd9GcSzOjcYxuUY7c-ZI33SuYJzSCjfRjlpY8Y3Y9bc8Q63-vDhhEewQzsy1aAF |
| mass is not created or destroyed in an ordinary chemical reaction (total mass or reactants = total mass of products)  https://encrypted-tbn2.gstatic.com/images?q=tbn:ANd9GcS1cgyiwrkh6wGzQdvYlw1l-zQrDqHyHn487hr0KyOpxpNyUCz0uUsPqDGf | nighttime wind from land to ocean  https://www.islandnet.com/~see/weather/graphics/photos/landbrz.gif |
| **new substances are made when bonds between atoms are made/broken; often see color change, temperature change, gas or precipitate is formed example-rust forming**  http://classconnection.s3.amazonaws.com/118821/flashcards/859180/jpg/chemj.jpg | **change in size, shape, or state; still same substance. example-tearing paper, steam an ice are both water**  http://classconnection.s3.amazonaws.com/118821/flashcards/859180/jpg/chemj.jpg |
| produces (gives off) energy  http://www.kentchemistry.com/images/links/Kinetics/exothermic_plain.gif | **gives the number & kind of substances in a reaction; number & type of atoms remain the same (balanced). Example - 2Na + Cl2 🡪 2NaCl (balanced) 2 atoms of Na and 2 atoms of chlorine on each side of equation**  http://www.mikeblaber.org/oldwine/chm1045/notes/Stoich/Equation/coeff.gif |
| Endothermic Reaction | Metals |
| Nonmetals | Metalloids |
| Atomic Number | Atomic Mass |
| Symbol | Formula |
| Subscript | Periodic Table |

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| **-Left side of periodic table**  **-Shiny**  **-Can be bent or pulled**  **-Good conductors of heat & electricity**  **-Most are solids at room temperature**  http://www.ndt-ed.org/EducationResources/CommunityCollege/Materials/Graphics/MixedMetals(mayFranInt.).jpe | absorbs (takes in) energy  http://www.kentchemistry.com/images/links/Kinetics/endothermic_plain.gif |
| -Along stair step  -Conduct electricity under some conditions  http://upload.wikimedia.org/wikipedia/commons/1/19/Boron_R105.jpg | **-Right side of periodic table**  **-Mostly dull**  **-Brittle**  **-Poor conductors of heat & electricity**  **-Most are gases at room temperature**  https://encrypted-tbn2.gstatic.com/images?q=tbn:ANd9GcSqI7civfiesnbj1d6whCDViKQqgYHYrTFDcg_PQ5vDY85dEoeGXT8X27l1 |
| p + n  http://2.bp.blogspot.com/-nlJAx9ngtwI/Tb0DuOgg5LI/AAAAAAAAADo/6PWI2bNP2Ss/s1600/helium.gif | protons  http://2.bp.blogspot.com/-nlJAx9ngtwI/Tb0DuOgg5LI/AAAAAAAAADo/6PWI2bNP2Ss/s1600/helium.gif |
| abbreviation of a substance (Example – H2O – water; NaCl – salt)  http://www.ereleases.com/pic/Quercetin.jpg | abbreviation of an element;  First letter is capitalized, 2nd letter is lowercase  (Examples – H – hydrogen; Ag – Silver  http://2.bp.blogspot.com/-nlJAx9ngtwI/Tb0DuOgg5LI/AAAAAAAAADo/6PWI2bNP2Ss/s1600/helium.gif |
| a chart of all known elements  Arranged in rows increasing by the atomic number  http://0.tqn.com/d/chemistry/1/0/D/d/1/PeriodicTableWallpaper.jpg | # at the lower right of symbol;  shows number of atoms  (H2O has 2 hydrogen atoms and one oxygen atom)  http://balancingequations.info/Images/coefficient-subscript.jpg |
| Solid | Liquid |
| Gas |  |
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| -atomic movement (larger distances)  -Energy (medium)  -Shape (shape of container)  https://encrypted-tbn3.gstatic.com/images?q=tbn:ANd9GcTvZx-RXDOJTbm4rK5h-6kunhfdPSSRzgUEtlXET6zP5tQpUTq46B7QVow | -atomic movement (small distances)  -energy (low)  -Shape (Fixed)  https://encrypted-tbn3.gstatic.com/images?q=tbn:ANd9GcTvZx-RXDOJTbm4rK5h-6kunhfdPSSRzgUEtlXET6zP5tQpUTq46B7QVow |
|  | -atomic movement (Great distance)  -Energy (High)  -Shape (Fills space)  https://encrypted-tbn3.gstatic.com/images?q=tbn:ANd9GcTvZx-RXDOJTbm4rK5h-6kunhfdPSSRzgUEtlXET6zP5tQpUTq46B7QVow |
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