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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 spacehttp://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 magnethttp://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 landhttp://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 oceanhttps://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) energyhttp://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) energyhttp://www.kentchemistry.com/images/links/Kinetics/endothermic_plain.gif |
| -Along stair step-Conduct electricity under some conditionshttp://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 + nhttp://2.bp.blogspot.com/-nlJAx9ngtwI/Tb0DuOgg5LI/AAAAAAAAADo/6PWI2bNP2Ss/s1600/helium.gif | protonshttp://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 – Silverhttp://2.bp.blogspot.com/-nlJAx9ngtwI/Tb0DuOgg5LI/AAAAAAAAADo/6PWI2bNP2Ss/s1600/helium.gif |
| a chart of all known elements Arranged in rows increasing by the atomic numberhttp://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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