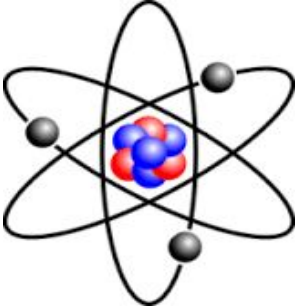

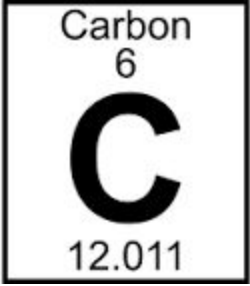
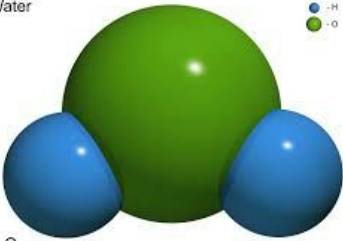



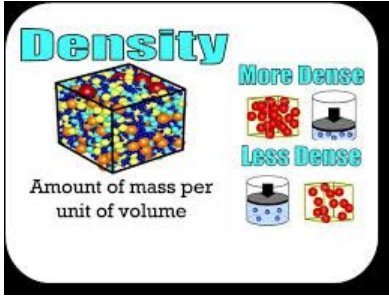



Matter Unit

8.P.1

<p>Atom</p>	<p>Smallest possible unit into which matter can be divided, while still maintaining its properties</p>	
<p>Molecule</p>	<p>The smallest particle in a chemical element or compound that has the chemical properties of that element or compound.</p>	
<p>Element</p>	<p>Simplest form of pure substance. They cannot be broken into anything else by physical or chemical means.</p>	
<p>Compound</p>	<p>Pure substances that are the unions of two or more elements. They can be broken into simpler substances by chemical means.</p>	<p>Water</p>  <p>H₂O</p>
<p>Mixture</p>	<p>Two or more substances that are not chemically combined with each other and can be separated by physical means. The substances in the mixture retain their individual properties.</p>	

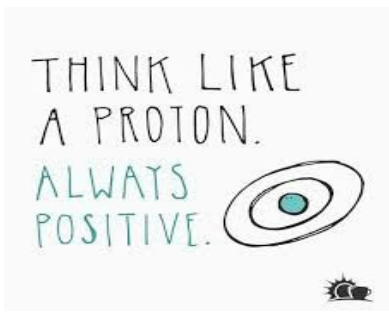
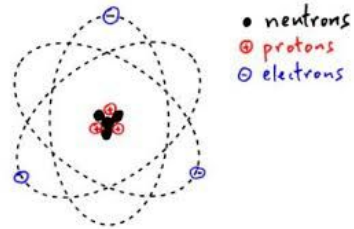
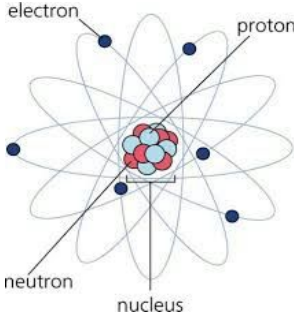
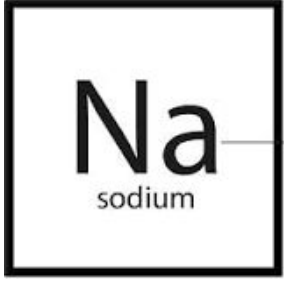

Matter Unit

8.P.1

<p>Density</p>	<p>The degree of compactness of a substance.</p>	 <p>Density Amount of mass per unit of volume</p> <p>More Dense Less Dense</p> <p>The diagram shows a large cube filled with many small colorful beads. To its right are two beakers: one with a small amount of liquid and one with a large amount. Below these are two more beakers: one with a large amount of liquid and one with a small amount. The text 'More Dense' is next to the beaker with the small amount of liquid, and 'Less Dense' is next to the beaker with the large amount of liquid.</p>
<p>Atomic Mass</p>	<p>The mass of a given atom or molecule. Number of protons and neutrons added together.</p>	 <p>Hey Uranium-238! You should lose some of that mass and become more like me!</p> <p>I want to! But it takes forever! My half-life is 4.47 billion years.</p> <p>The cartoon shows a green atom with '238' on its chest standing on a scale. A grey atom with '238' on its chest is talking to it. The scale shows a weight of 238g.</p>
<p>Atomic Number</p>	<p>The number of protons in the nucleus of an atom.</p>	<p>Atomic Number</p> <p>The number of Protons in an atom, called the Atomic Number</p> <p><i>distinguishes one type of atom from another</i></p>
<p>Homogeneous Mixture</p>	<p>A mixture that appears to be the same throughout.</p>	 <p>A photograph of a glass pitcher filled with red liquid, surrounded by fruit like strawberries and oranges, representing a homogeneous mixture.</p>
<p>Heterogeneous Mixture</p>	<p>A mixture that does not appear to be the same throughout.</p>	 <p>Two photographs of heterogeneous mixtures: one showing a pile of colorful M&M's candies, and another showing a pile of colorful gummy candies.</p>

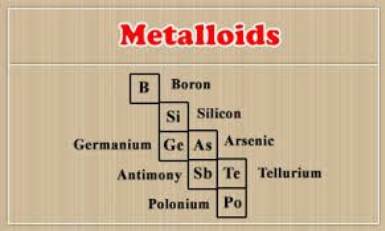

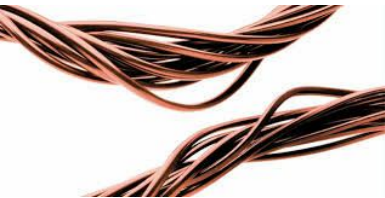


Matter Unit

8.P.1

<p>Protons</p>	<p>Positively charged particles that help make up the nucleus of the atom. They are equal to the electrons and atomic number of the atom.</p>	 <p>THINK LIKE A PROTON. ALWAYS POSITIVE.</p>
<p>Neutrons</p>	<p>Neutral particles; have no electric charge and help make up the nucleus of the atom. They contribute to the atomic mass.</p>	 <p>● neutrons ⊕ protons ⊖ electrons</p>
<p>Electrons</p>	<p>Negatively charged particles found outside the nucleus in electron orbits/levels and are equal to the number of protons. They are involved in the formation of chemical bonds.</p>	 <p>electron proton neutron nucleus</p>
<p>Chemical Symbol</p>	<p>One or two letter abbreviation derived from the element's English or Latin name.</p>	 <p>Na — symbol sodium</p>
<p>Metals</p>	<p>Any number of chemical elements, such as iron or copper, that are often ductile solids and good conductors of heat and electricity.</p>	


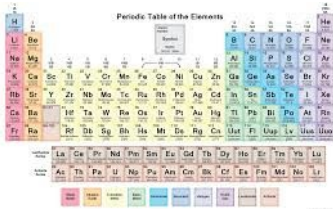
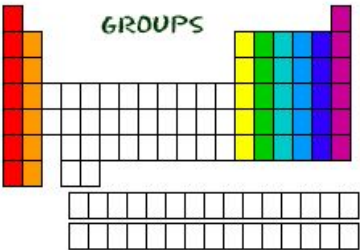


Matter Unit

8.P.1

<p>Metalloids</p>	<p>Have properties of both metals and nonmetals.</p>	 <p>Metalloids</p> <p>B Boron Si Silicon Germanium Ge As Arsenic Antimony Sb Te Tellurium Polonium Po</p>
<p>Nonmetals</p>	<p>Not able to conduct electricity or heat very well.</p>	
<p>Ductile</p>	<p>Metal capable of being drawn out into thin threads.</p>	
<p>Malleable</p>	<p>Metal capable of being shaped by hammering or by pressure from rollers.</p>	
<p>Insulator</p>	<p>Having extremely high resistance to the flow of charge through them.</p>	

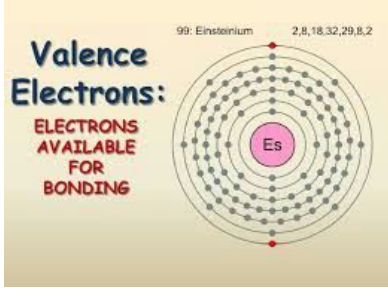
Matter Unit

8.P.1

<p>Conductor</p>	<p>Material or device that conducts or transmits heat, electricity, or sound, especially when regarded in terms of its capacity to do this.</p>	
<p>Periodic Table</p>	<p>An organizational system for elements.</p>	
<p>Groups</p>	<p>Columns from top to bottom in the periodic table</p>	
<p>Periods</p>	<p>Each row in the periodic table.</p>	
<p>Noble Gases</p>	<p>Happy/Inert Elements (Full Outer Shells)</p>	

Matter Unit

8.P.1

<p>Valence Electrons</p>	<p>The outer shell of an atom involved in forming bonds to adjacent atoms. Determines the number of bonds an atom can form.</p>	 <p>The diagram illustrates the electron configuration of Einsteinium (Es), atomic number 99. It shows a central nucleus labeled 'Es' surrounded by seven concentric electron shells. The number of electrons in each shell is listed as 2, 8, 18, 32, 29, 8, and 2 from the innermost to the outermost shell. The two electrons in the outermost shell are highlighted with red dots and labeled as 'Valence Electrons'. Text on the left side of the diagram reads 'Valence Electrons: ELECTRONS AVAILABLE FOR BONDING'.</p>
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