



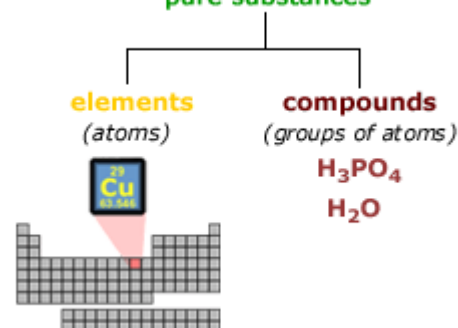


States of Matter

key concepts:

- **Matter** can be categorized in three **phases**: **solid**, **liquid**, and **gas**.
- **Mixtures** are made of more than one component.
- All **pure substances** are either **elements** or **compounds**.

<p>solid</p>  <p>a pint glass a bar spoon table salt a straw</p> <p>liquid</p>  <p>gas</p> 	<p>Matter can be categorized in three phases: solid, liquid, and gas.</p> <p>A solid is a substance with a fixed volume and shape.</p> <p>A liquid is a substance with a fixed volume, but not a fixed shape.</p> <p>A gas has no fixed volume or shape.</p>
<p>mixtures</p> <ul style="list-style-type: none"> homogeneous heterogeneous 	<p>Mixtures are made of more than one component.</p> <p>Homogeneous mixtures are uniform throughout. Examples of homogeneous mixtures include cranberry juice (sugars, vitamin C, water, etc.), beer (carbohydrates, carbon dioxide, water), and bar salt (sodium chloride and yellow prussiate of soda).</p> <p>Heterogeneous mixtures are composed of distinguishable components. An example of a heterogeneous mixture is a granola bar.</p>
<p>pure substances</p> <ul style="list-style-type: none"> elements (atoms) compounds (groups of atoms) 	<p>Pure substances are made of only one component. All pure substances are either elements or compounds.</p> <p>Elements are composed of only one type of atom. Copper and oxygen are examples of elements.</p> <p>Compounds are composed of atoms connected by chemical bonds. Phosphoric acid (H_3PO_4) and water (H_2O) are examples of compounds.</p>