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| **Phase of**  **Matter** | **Examples** | **Particle and Energy Description** | **Picture of Particles** |
| Solid | Pen, comb, rocks, table | Particles are closely packed together or set into specific geometric shapes. They can’t move out of place, but they vibrate. Definite shape and definite volume. | [http://ts4.mm.bing.net/th?id=I4595293545431671&pid=1.7&w=140&h=144&c=7&rs=1](http://www.bing.com/images/search?q=diagram+of+solid+liquid+and+gas&view=detail&id=FE9A2FDC1408679451D6819081B32F92A69F8720&qpvt=diagram+of+solid+liquid+and+gas)[http://ts1.mm.bing.net/th?id=I4955606938422020&pid=1.7&w=181&h=138&c=7&rs=1](http://www.bing.com/images/search?q=diagram+of+solid+liquid+and+gas&view=detail&id=EC374703042BD7AB18B4A9516D32858AFD99F711&first=72) |
| Liquid | Water, Kool-aid, gasoline | Particles still closely packed together but they have enough energy to slip around each other (flow). Indefinite shape and definite volume. | [http://ts4.mm.bing.net/th?id=I4595293545431679&pid=1.7&w=140&h=144&c=7&rs=1](http://www.bing.com/images/search?q=diagram+of+solid+liquid+and+gas&view=detail&id=FE9A2FDC1408679451D66AE54A9CE6AE38D4F7F0&qpvt=diagram+of+solid+liquid+and+gas) |
| Gas | Air, oxygen, methane, carbon dioxide | Particles far apart. Have enough energy to separate completely from each other. Free to move in all directions until evenly spread out. Indefinite shape and indefinite volume. | [http://ts2.mm.bing.net/th?id=I4869046167471313&pid=1.7&w=141&h=127&c=7&rs=1](http://www.bing.com/images/search?q=diagram+of+solid+liquid+and+gas&view=detail&id=075DBE5435A3E3988E2B7A7B2FAC1D80D5D28D69&first=37) |

Temperature and energy increase as a substance moves from solid, to liquid, and then to gas.