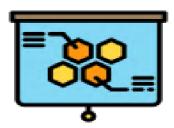
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## THE PARTICLE THEORY OF MATTER



## What is the Particle Theory of Matter?

The Particle Theory of Matter, which has 6 points, is used to help people understand matter and how matter changes and interacts with each other

- Matter contains particles.
- Particles are identical if they are of the same element (e.g., the elements of oxygen will always be identical).
- These particles continuously move. Their movement, though, depends on their state.
- Temperature also impacts how particles move. Particles move quickly when they're warmed, and slowly when they're cold.
- Each state of matter has space between the particles. This is because the particles are attracted to one another. This is also known as the force of attraction.
- The space in solids are very small. In liquids, there is a little bit more space between particles, and even more space in gases.

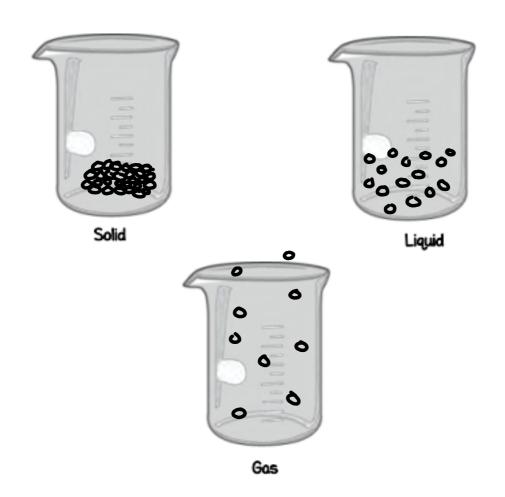
## How does this relate to density?

Since density looks at how much mass is in a valume, the particle theory can help describe density. A dense solid's particles are tightly combined, whereas a gas has a lot of space in between the particles, making it much less dense.

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## THE PARTICLE THEORY DRAWING ACTIVITY

Instructions: Use the three empty beakers below to draw what the particles look like in a solid, liquid, and gas.



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