Solids, Liquids, and Gases Comparison

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| --- | --- | --- | --- |
|  | Solids | Liquids | Gases |
| Shape | Definite shape | No definite shape | No definite shape |
| Volume | Definite volume | Definite volume | No definite volume |
| Compressibility | Slightly compressible | Slightly compressible | Very compressible |
| Structure | Molecules are closely packed and highly attracted to each other. The molecules vibrate. | Molecules not closely packed but are attracted. Molecules move past one another but not too far from each other. | Molecules are spread out and move past each other nearly freely. |
| Flowing | Do not flow | flow | flow |

Definitions:

SOLID – a substance that has a definite shape and definite volume; slightly compressible and has close packed molecules that prevent it from flowing.

LIQUID – a substance that has no definite shape but has a definite volume; is slightly compressible and has close molecules that can move past each other allowing the substance to flow.

GAS – a substance that has no definite shape and no definite volume; very compressible and has molecules spread out which allows it to flow.