| Name: | Section: |
|----------------------------|----------|
| States of Matter Analogies | |

<u>Directions</u> - As we have been discussing the five states of matter, I have tried to provide you with analogies to help you remember how the particles are behaving. For this activity, you should draw how the particles are behaving according to the description, and you should create your own analogy describing the particles.

| State of Matter | <u>My</u> Analogy | Drawing | <u>Your</u> Analogy |
|--|--|---------|---------------------|
| Bose-Einstein Condensate Particles are super unexcited and super cold Particles are so cold that they lock or "clump" together so firmly that they move as a single unit | Students during a lockdown drill - pretty much motionless, grouped together | | |
| Solid Particles are tightly compact Particles vibrate without the ability to move freely | Students not allowed to leave their desks - fairly close to each other; cannot move freely, but can still move in their seats | | |

| Liquio • | Particles are tightly compact but able to move around close to each other | Students in a typical classroom - fairly close to each other; can move around the classroom if necessary (go to bathroom, pencil sharpener, etc.) | |
|-------------|--|--|--|
| Gas • | Particles can easily spread out or move close together Particles move freely and with a lot of energy | Students playing "tag" during gym - spread out and occasionally close to each other; moving freely and fast | |
| Plasm • | a Particles are broken apart Particles move freely and with extremely high energy | Students playing "dodge ball" during gym - spread out and occasionally close to each other; moving freely and with a significant amount of energy; dodge balls released and flying | |