# Station 1: PUZZLES

### Materials:

- Matter puzzle set
- Phase change puzzle set

At this station you will complete 2 different 3x3 puzzles.

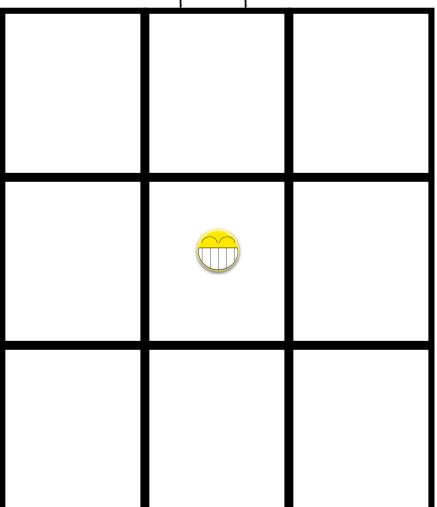
DO NOT mix up different colored puzzles.

- 1. Match Vocab word to its definition.
  - 2. Image goes in center.
  - 3. Edges will be blank.

NO NOTES! You can work together, but everyone must individually have his or her own completed puzzles.

### TEACHER MUST CHECK COMPLETED PUZZLES!

Your completed puzzles will look like this:



# Station 2: MEMORY

#### Materials:

- Matter Memory set
- Phase Change Memory set

# Remember playing the game Memory?

- There are 2 DIFFERENT sets of cards. So, you will play 2 different games.
- The whole table (4 people) will play together.
  - 1. Mix up all the cards with the same symbol on the back.
    2. Spread them out, the words are facing down and the symbol facing up. Don't look at the words while you are

symbol facing up, bon't look at the words while you ar laying them down.

- 3. Once the cards are laid out, don't mix them up again.
- Take turns flipping 2 cards at a time. You are trying to find match the vocab word with its correct definition.

   If you're wrong flip them back over but try to remember
- If you're wrong, flip them back over, but try to remember where and what you saw.
- If you are correct. You get to keep the match and go again.

Take turns going in a circle. The person with the most matches wins.

FLIP 2 CARDS A TURN, DO THEY MATCH?

Matter

Anything that has mass and volume.

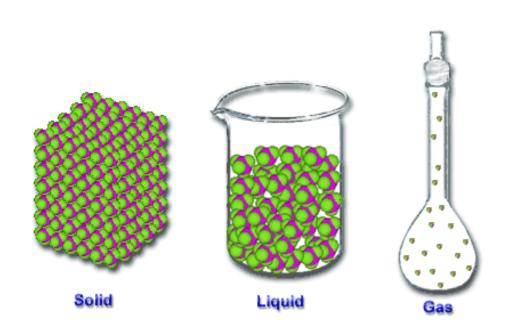
Matter exists ordinarily as a solid, liquid, or gas.

If not, flip them back over.

# Station 3: Phases Changes

#### MATERIALS:

- Objects and images (S,L,G)
- Heat arrows
- Phase change arrows
- 1. Organize the objects and images into 3 different categories: Solid, Liquid, or Gas.
- 2. Once complete, add in the heat arrows.
- 3. Which was is heat increasing or decreasing as matter changes state?



> Is heat increasing or heat deceasing? >

4. Now, add in the final arrows: freezing, melting, condensation, and evaporation/vaporization.

# Station 4: Scientific Creative Writing

MATERIALS:

Individual sheet or paper and pencil.

You will be writing a song, a poem, or a set of riddles (5) that explores the phases of matter. You can brainstorm as a group, but everyone must turn in a paper.

- You can focus on all or one phase of matter: Solid, Liquid, Gas.
- You may also choose an example of a state of matter to write about: ice, steam, helium gas, a rock, milk, etc.

  BUT you must relate it to the qualities of that state
  (solid, liquid, gas).

Examples:

Riddle: If you boil me I turn into steam what am I?

Answer: Water.

Riddle: What is the only thing on Earth that you can drink, eat, breathe, is visible and invisible, you can hold in your hand and walk on?

Answer: Water.

Riddle: My molecules are close together.

I can be as hard as a rock or as soft as a sock.

I have a fixed shape, but never a date and although you can't see, my parts are tiny. I can also change form, but it is only the norm.

What am I?

What am I? Answer: A solid.

### Stuck?

Think about how the molecules look at this state? Close? Far apart?

How much are the molecules moving? Would this state be formed at a hot or cold temperature?