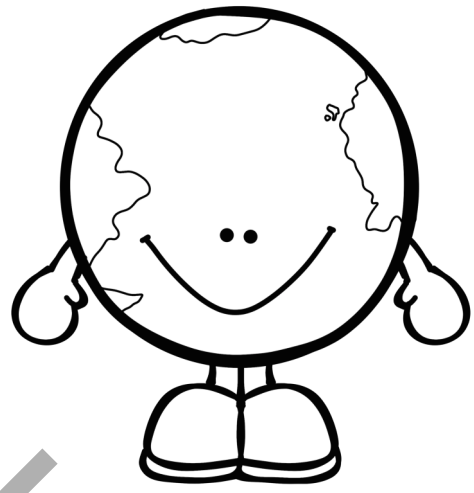
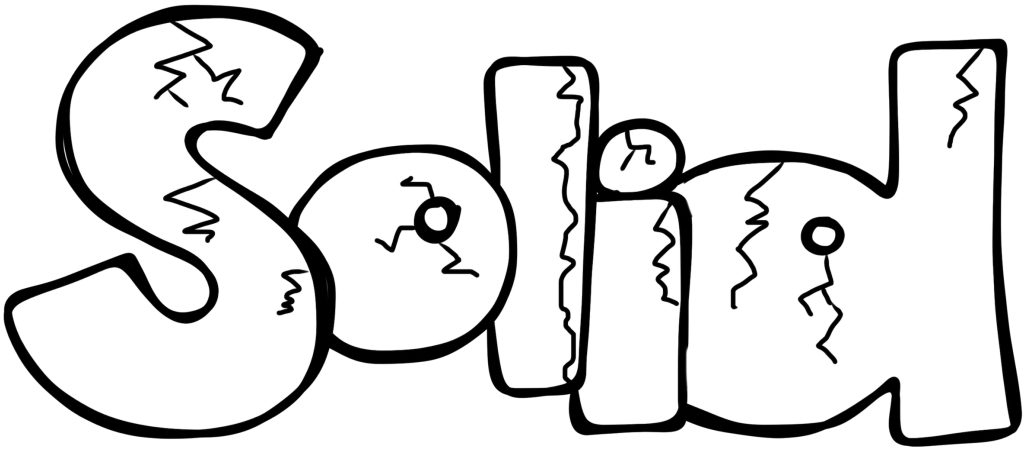
Exploring States of Matter

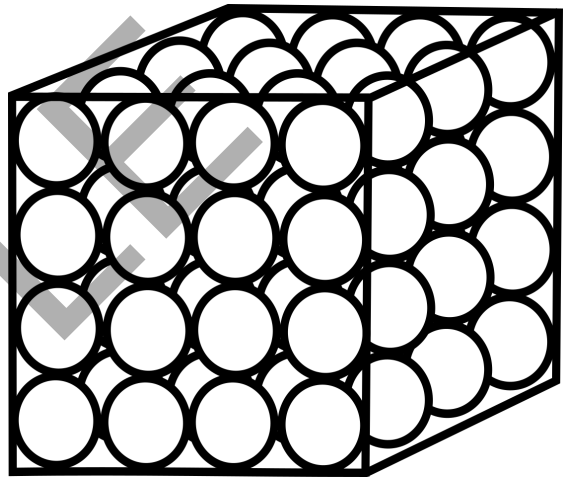
We're going to learn about the three states of **matter**. But what exactly *is* matter? Matter is what everything in the world is made of. Everything we can see, and even some things that we can't see like air, is made up of matter. A piece of paper is made of matter. The milk you drank with lunch is made of matter. *You* are made of matter. Anything in the physical world that takes up space and has weight is made of matter.



Matter

Now that we know what matter is, let's learn about the three states of matter. No, we aren't talking about states like Alabama or Wisconsin. A state of matter is the form the matter exists in. Think about the things we've already mentioned—a piece of paper, air, milk, and you. All of those are made of matter, but they are very different. What makes them different? One thing is what state they are in.



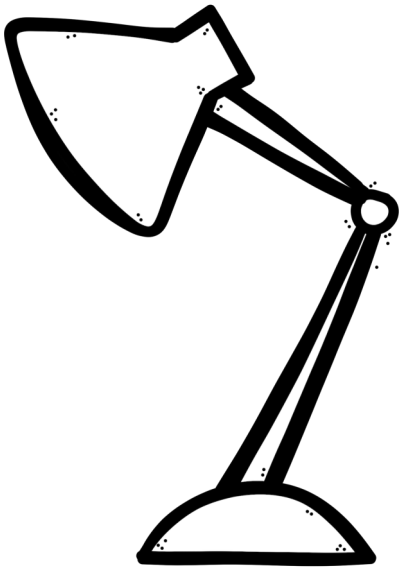


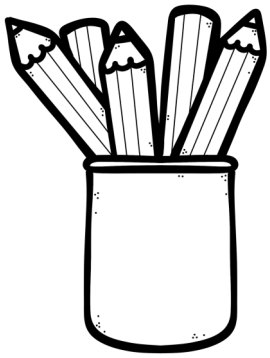
If everything in the physical world is made of matter, what is matter made of? Matter is made of tiny particles that are too small to see without a microscope, but these particles are very important. How they act and what they do determines a lot about the matter we can see and touch.

In a **solid**, these particles are packed very tightly together. They can't really move around; they are locked in place. This is why a solid object, like a wall, keeps its shape. A wall wouldn't do us much good if it could bend and fold whenever it got warm or cold or whenever someone touched it, would it?

A solid object always takes the same amount of space and stays the same shape unless you damage it. You could cut a hole in the wall, but the wall didn't change. You made a hole. And whatever you cut out of the wall is still a solid.

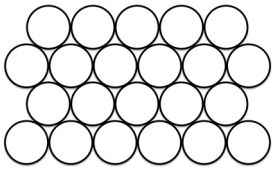
What are some solids in the room you are in right now?



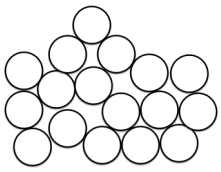


Review

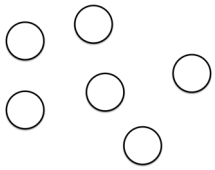
Which state of matter has particles that are packed together but still move past each other? Draw a circle around it.



Solid

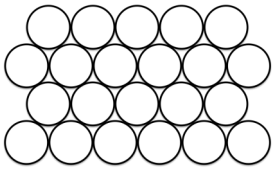


Liquid

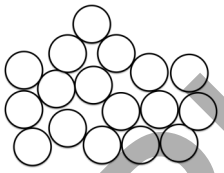


Gas

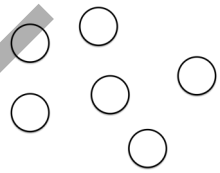
Which state of matter has particles that are packed together very tightly? Draw a circle around it.



Solid

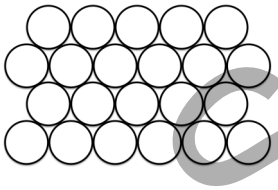


Liquid

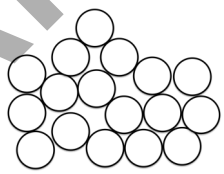


Gas

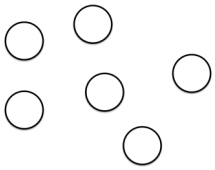
Which state of matter has particles that are free to move around? Draw a circle around it.



Solid

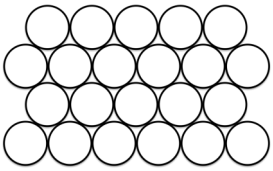


Liquid

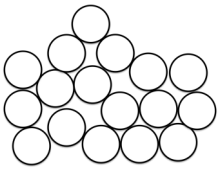


Gas

What state of matter cannot change its shape? Draw an X through it.



Solid



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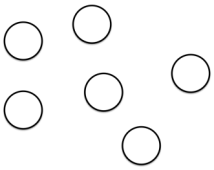
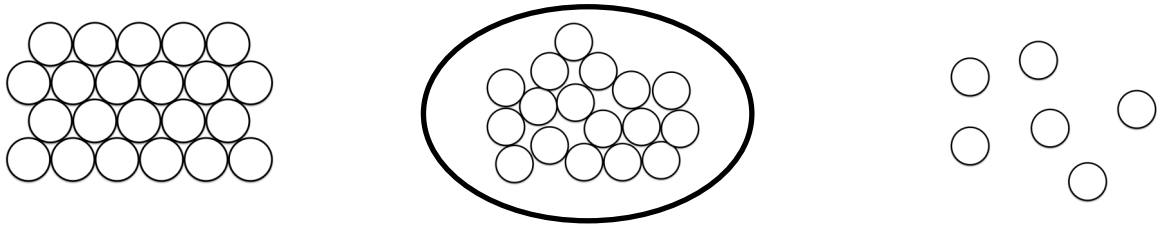


Gas

Review Answer Key

Which state of matter has particles that are packed together but still move past each other? Draw a circle around it.



Solid Liquid Gas

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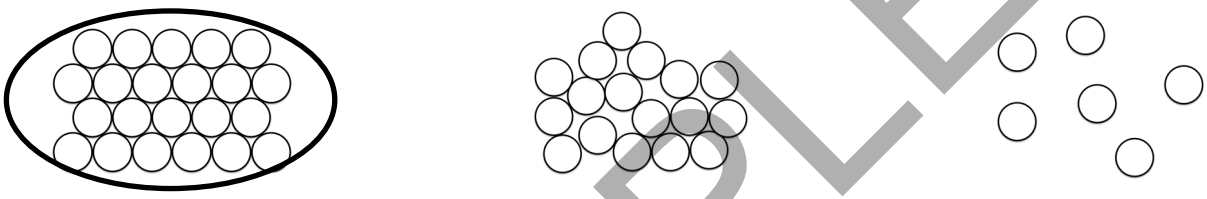

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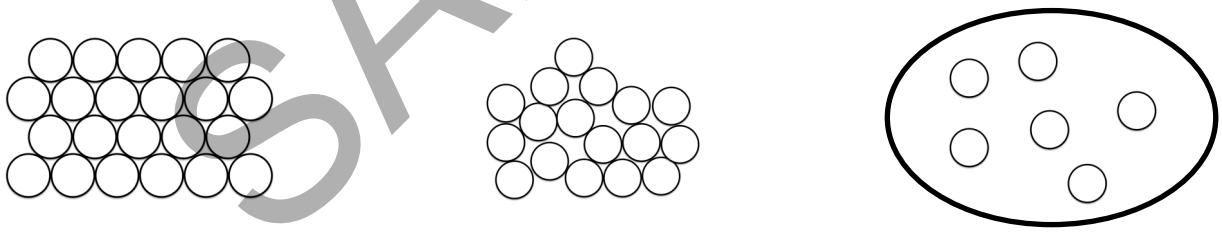

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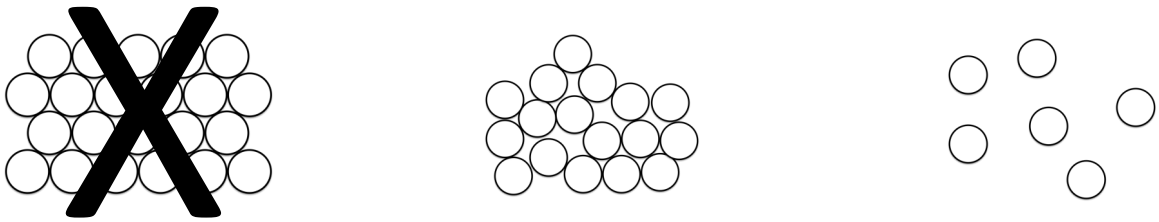

Solid Liquid Gas