

Title - *Introduction to gas, liquid and solid*

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Primary Subject - Science

Grade Level - 3-8

This activity is a great way to introduce students to the differences between gas, liquid and solids.

If you are in a science lab or classroom where you cannot make space, go outside or into a space that can fit all your students comfortably but not too large.

Ask all students to spread out, at least arm distance away from each other (best if the teacher participates too). Your students are each a molecule and as such move around the space comfortably. Explain that you (the molecules) have formed a gas and ask students to explain features of the gas:

What is happening to the molecules?

Describe the space.

How do we know we are a gas?

Next ask the students to move into a tighter group but remain slightly apart (you may find you are bumping into each other now). Continue moving around. Your class is now a liquid. Ask students to describe what is happening to them and why they are a liquid.

Now move your class into a tight group in which no one can move around. Explain that someone has put you into a freezer and the molecules have been pushed together. Students may bob up and down on the spot but can not move around. Ask students to explain what has happened to them. Why are they a solid?

Ext: Once back in the classroom, get students to draw what they did in each phase. Can they compare this experience to air, water and ice? In groups students can make posters to demonstrate the phases of gas, liquid and solid.

I am a graduate teacher in Melbourne, Australia and heard about this activity when a guest speaker spoke to us at University. I love this activity because it allows the students to draw their own conclusions and see first-hand how molecules, atoms and ions work.

For a great reference on gas, liquid, solid see:

<http://www.chem.purdue.edu/gchelp/liquids/character.html>

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