January: WEEK TWO

LOOKING FOR A JOB

THE AGENDA:

Discussion:
Which career paths/jobs interest you? How might you go about looking for one of these jobs? Have you ever been on a job interview? What types of questions do you think you might be asked? If you were an employer, what would you look for in an employee?

- ◊ Take turns role-playing job interview questions. Use your Mentee's sample resume to ask questions.
- ◊ Search for jobs in your area that interest your Mentee. Discuss how he or she would go about applying for that job.

- ◊ Conduct a science experiment or two then check out our instructions on how to build your own erupting volcano!

PLACES TO LOOK FOR JOBS:

Internet Job Banks:

Service Canada: (includes Student Job Postings)	www.jobbank.gc.ca
Monster Canada	www.monster.ca
All Star Jobs Canada:	www.allstarjobs.ca

The Local Newspaper's *Classified* Section:

An excellent resource to find local jobs that are looking for students, including fast food restaurants, gas stations, and bookstores.

Examples: *The Abbotsford News* or *The Abbotsford Times*

Jobs featured in our local papers are also posted online:

BC Job Network:	www.bcjobnetwork.com
Van Net Classifieds:	http://classified.van.net/classified/classified.nsf/index

Youth Employment Centres:

Career Tracks Youth Employment Centre (Fraser Valley):
www.careertracks.ca/

YMCA Career Zone (Vancouver):
www.vancouveryouth.ca

Youth Employment Centre (Calgary):
www.yec.nextsteps.ca

YES – Youth Employment Service (Toronto):
www.yes.on.ca

Your school might also have a career centre or a guidance counsellor who helps students find jobs!

ACTIVITY: Combine baking soda and vinegar in a dish to create a reaction.

HOW DOES IT WORK?

This science experiment is one of the most popular ones out there. However, it is deceptively simple: what appears to be one reaction is actually two, happening in quick succession. This reaction is an example of a multi-step reaction.

What actually happens is this: the acetic acid (that's what makes vinegar sour) reacts with sodium bicarbonate (a compound that's in baking soda) to form carbonic acid. It's really a double replacement reaction. Carbonic acid is unstable, and it immediately falls apart into carbon dioxide and water (it's a decomposition reaction). The bubbles you see from the reaction come from the carbon dioxide escaping the solution that is left. Carbon dioxide is heavier than air, so, it flows almost like water when it overflows the container. It is a gas that you exhale (though in small amounts), because it is a product of the reactions that keep your body going. What's left is a dilute solution of sodium acetate in water.

ALTERNATIVE ACTIVITY:

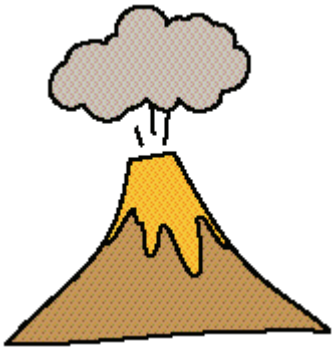
Is Carbon Dioxide Visible? I'll show you a way we can see it!

Materials:
1 .5 L (16.9 oz) clean, empty, plastic soda bottle
1 balloon
1 tsp baking soda (4g sodium bicarbonate)
2 tbsp vinegar (30 ml of 3% acetic acid)
2 spoons
Paper towels (for cleanup)

Procedure:
◊ Place the bottle on the table and remove the lid. Carefully pour or spoon 2 tablespoons of vinegar into the bottle.
◊ Open up the mouth of the balloon (put the first two fingers, not the thumb, on each hand inside the mouth of the balloon and stretch). Have a friend put 1 teaspoon of baking soda into the balloon with the spoon you have *not* used.
◊ Without spilling any of the baking soda, stretch the mouth of the balloon over the mouth of the bottle.
◊ Turn the balloon completely upright so that the baking soda inside the balloon pours into the bottle with the vinegar. Watch!

What is happening inside the bottle?
What is happening to the balloon? Why? How do you know?

Build a real working volcano



Materials:

- **6 cups flour**
- **2 cups salt**
- **4 tablespoons cooking oil**
- **2 cups water**
- **empty 1.5 Litre soda bottle**
- **baking pan and large bowl**
- **red food colouring (optional)**
- **liquid detergent**
- **vinegar**

Now we're going to get a little messy. In this experiment we build a real working volcano. After mixing just the right amount of ingredients together, we'll add the final item to make our volcano 'blow its top' spewing red lava down the sides.

1. **First we need to create the 'salt dough'. Mix 6 cups flour, 2 cups salt, 4 tablespoons cooking oil, and 2 cups of water in a large bowl. Work the ingredients with your hands until smooth and firm. Add more water to the mixture if needed.**
2. **Stand the soda bottle in the baking pan. Mold the salt dough around the bottle making sure you don't cover up the bottle mouth or drop any dough into the bottle. Take your time on this step and build your volcano with as much detail as you like.**
3. **Fill the bottle most of the way with warm water mixed with a little of the red food coloring.**
4. **Put 6 drops of the liquid detergent into the bottle.**
5. **Add 2 tablespoons of baking soda.**

Slowly pour vinegar into the bottle and jump back quick!

Notice the red 'lava' that flows out of your volcano. This happens because of the baking soda and vinegar mixture. Mixing baking soda and vinegar produces a chemical reaction (a chemical reaction is a process in which one substance is chemically converted to another - all chemical reactions involve the formation or destruction of bonds between atoms) in which carbon dioxide gas is created - the same gas that bubbles in a real volcano. The gas bubbles build in the bottle, forcing the liquid 'lava' mixture of the bottle and down the sides of your volcano.