## **Design a New Dragon Species**

You will need:

- sample dragon pictures
- Pencil and paper
- Clay (optional)
- Construction paper

If using clay, cover your workspace with old newspaper, or work outside to limit mess and cleanup.

Imagine a new species of dragon, then draw or model them. Do not forget to give your new species a name!

## **Dragon's Egg**

What you need:

- Vinegar
- jar(s) with lid
- Raw uncracked egg(s)
- Spoon

Note: It takes about **two days** for the full effect of this experiment to take place. You may want to experiment with two or more eggs and jars in case an egg breaks.

## What you do:

- 1. Carefully place the egg in the jar, cover it with vinegar, and screw the lid on to avoid accidental spills. Bubbles will begin to form as the chemical reaction occurs. (The acetic acid reacts with the calcium carbonate in the eggshell and releases carbon dioxide gas that you see as the bubbles).
- 3. After 12 to 24 hours, check to see if the shell has dissolved.
- 4. Pour the liquid out of the jar and carefully remove the egg with the spoon or simply pour it into your hand. The membrane is delicate and may break! Gently rub off the powdery eggshell.
- 6. Refill the jar with vinegar and put the egg in the vinegar for another 24 hours. After this time, the egg is ready for some grossness! It becomes very rubbery.
- 7. You may want to try a few experiments outside: dropping the rubbery egg from different distances, soak it in food-colored water, or leave an egg out for about a week.

## What's happening? Chemical Reactions

The vinegar causes a chemical reaction to break down the calcium carbonate of the eggshell, eroding it down to the egg membrane.