Animating Science Project

The Science behind it!

The ink in a dry erase marker is *insoluble*, this means it does not dissolve in water. When you pour water onto a dry erase drawing (e.g. stick figure), the dry erase marker leaves behind a mixture of *pigments* and a type of *alcohol* mixed together. The alcohol dissolves and the pigments are left behind as a solid. Glass is so smooth that the solid slides right off when it gets wet and it will magically float on the water!

The term *animation* means images which are manipulated to appear as moving images. This experiment is going to demonstrate how to create a moving image with three basic items we have in our home.

Research the words in italics to check out their meaning, use your dictionary or use www.dictionary.com

Check out the following video: https://happyhooligans.ca/dry-erase-and-water-floating-ink/

Now, we are going to experiment!

Experiment: Investigating the Chemistry of a Dry Erase Marker

Equipment:

Glass Plate	Dry Erase Markers	Jug of Water
		

Method

1. Gather all of your equipment

2. Draw a simple picture on the glass plate. A stick figure is a good one to start with

3. Pour water onto the plate or into the bowl. The water will slowly lift up the drawing

4. Swirl the water around to make the drawing dance and/or move

5. Discuss your findings of the experiment. Consider the following: Is there a colour of ink that worked best? Do solid shapes float better than stick shapes? Would it work on different surfaces?