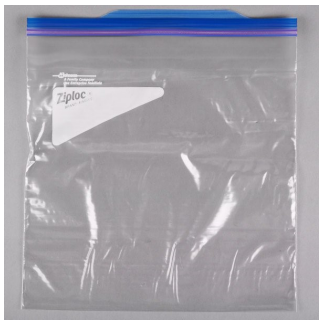
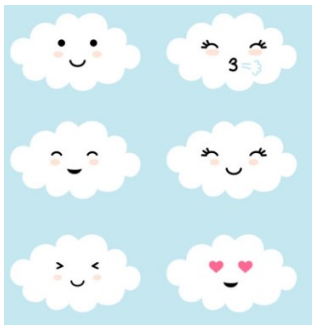
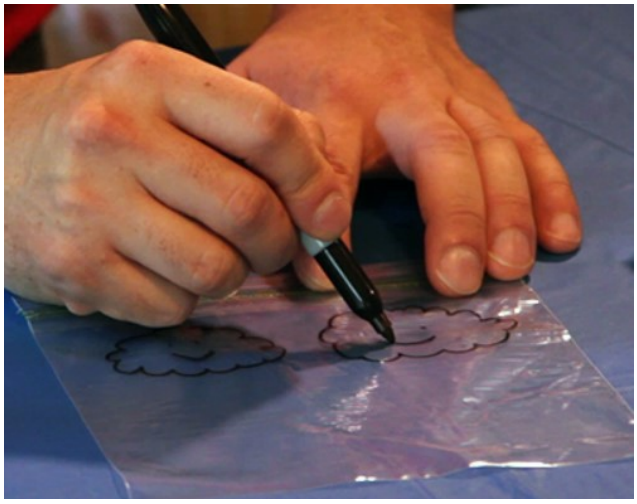
Make your own water cycle experiment

For this little experiment you won't need much equipment. The most important part is a clear plastic bag. A Ziploc style bag is best, but any kind of clear plastic would work, in fact, even a clear plastic drinks bottle would produce a similar effect.





First, decorate your bag by drawing some little clouds in the top half. It seems that cartoon clouds are a bit of a thing now (they weren't in 1998), so have some fun.



Here's the science. Pour a small amount of water into the bottom of your Ziploc bag. You could even add some blue food coloring to add to the effect but this is just an optional extra.

Seal the top of the bag, using tape if you have to, and then attach it to a window in your house. This works better if you use a window that gets a lot of sun.

Wait a couple of hours and check on your experiment. You should see a change in your bag between two hours and 1 day (depending on the amount of sun and the time of day you started).

Eventually, you will begin to see droplets of water sticking to the side of the bag. Some of these will be up high (in the clouds) while other droplets will be on their way back down (like rain).

Why is this happening? It's because the water in the bag is being heated up against the sunny window. That water turns into a gas through the process called evaporation. In nature, evaporated water vapor goes into the atmosphere, but in our bag, it has nowhere to go, so it ends up sticking to the sides of the bag, turning back into a liquid as condensation. That condensed water then slides back into the pool of water below as "rain".

And that's it!

Don't forget to take a photo of your experiment and show me your results.

If you want to extend this more, try making multiple experiments and arranging them on different windows.

Do you notice different effects? Which areas of the planet might they represent?