Congratulations on your purchase of a science kit from your school! This kit contains three separate experiments that you can complete with the addition of a few items you already have around your house. You'll need a small saucer, some warm water from your household faucet (don't use a microwave or heat this water on the stove, it should be just warm enough that you can hold a glass of it with your hand) and a roll of scotch or masking tape.

Materials needed:

Tape, saucer and glass of warm water

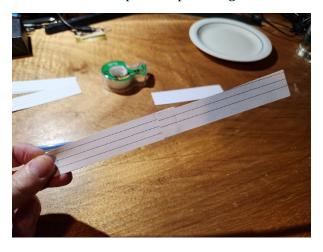


First experiment - Ring airplane

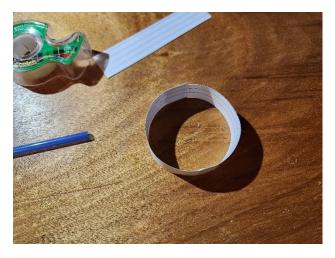
Gather the tape you got from home and the three strips of index card and the straw from your science kit.



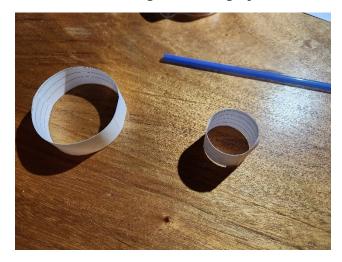
Take two of the strips and tape the together to make a long strip.



Bend this strip around to make a circle and tape. You should end up with a ring as shown below.



Now make another ring with the single piece of index card. You should end up with two rings as shown below.



Now tape those rings to the straw. Be careful to keep them oriented in the same direction with the straw at the bottom and inside the ring. Your "ring glider" should look like this:



Try throwing the glider with the small wring facing forward. What happens? Come up with an "educated guess" or hypothesis about what would happen if the large ring was facing forward when you threw it. What happened?

Second experiment. Saucer and Skittles

Gather your saucer and glass of warm (not hot!) water and your small bag of skittles. Place a ring of 10 skittles around the outside edge of the saucer. Try to alternate colors. Your saucer should look like this:



The skittles have a thing coating of colored sugar on them. Slowly pour the warm water in the middle of the saucer until most of the skittles are covered. What is shown is the movement of the sugar from an area where it is concentrated to one of lower concentration. You should have about 5 skittles left over. Come up with a hypothesis about what would happen if you cleaned off your saucer above and removed the skittles and added the extra skittles to the middle of the saucer and added water? What happened? Was your hypothesis right?

Third experiment..... magnets on a straw.

Your science kit will have one straw left and two ring magnets. Magnets have a north and a south pole. When two magnets come together and the poles are different they are attracted to each other. Assemble your magnets on the straw as shown below:



Now pull the magnets apart and rotate one of them to face in the opposite direction. Based on the information about polarity of magnets above what is your hypothesis about what will happen?

I hope you had fun! Go back to school and share with your teacher and class about what you learned!