

Weekly Project Orange Class: Week beginning 13.07.20

Hello Orange Class, I hope you all had a lovely weekend 😊 I cannot believe it is your last week in year 1! For the project this week, as I know you all love science and doing experiments, I have found lots of different experiments you can try at home. You can complete 1 or as many as you wish. I hope you have fun with these, and I cannot wait to see your pictures from what you discover during your experiments. You can send them to: orange@margaretroper.croydon.sch.uk . Enjoy your experimenting 😊.

Lava Lamp

Materials:

- ★ A clean plastic bottle, try to use one with smooth sides
- ★ water
- ★ Vegetable Oil (or you could use Mineral or Baby Oil instead)
- ★ Fizzing tablets (such as Alka Seltzer)
- ★ Food Coloring

Watch Scientist Joe as he makes the Lava Lamp Experiment here!

Instructions:

1. Fill the bottle up about 1/4th (1 quarter) with water.
2. Pour the vegetable oil in the bottle until it is almost full. You may want to use a measuring cup with a spout or a funnel. You may have to wait a couple of minutes for the oil and water to separate.
3. Add a few drops of your favorite food coloring. Watch as the color sinks through the oil. Did your drops of color mix with the water immediately or float in between for a few minutes?
4. Break your fizzy tablet in half and drop part of it into the bottle. Get ready ... here come the bubbly blobs!
5. You can even get a flashlight, turn off the lights and drop in another half tablet. This time shine the flashlight through the lava lamp while the blobs are bubbling!

Link:

<https://www.sciencefun.org/kidszone/experiments/lava-lamp/>



Paper Hovercrafts

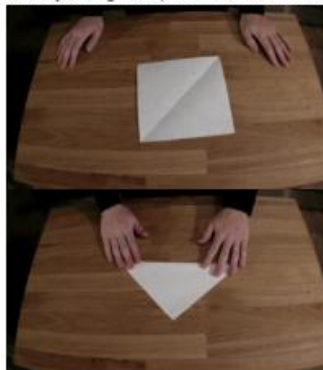
WATCH SCIENTIST JOE PERFORM THIS EXPERIMENT HERE!

Materials:

- ★ Square Paper

Instructions:

1. Start by folding the square in half corner to corner to make a triangle.



2. Fold that triangle in half corner to corner to form a smaller triangle.



3. Unfold the previous fold to get the larger triangle. Fold the edges of the triangle to the newly-made crease to form a kite shape.



4. Fold the inside edges of the kite shape toward the outside edges as shown.



5. Turn the paper upside down and blow gently into the open end. Your hovercraft should zoom away!



Link:

<https://www.sciencefun.org/kidszone/experiments/paper-hovercrafts/>



Water Fireworks

Materials:

- ★ Water
- ★ Oil
- ★ Food Coloring (Any color of your choosing)
- ★ 16 oz clear glass
- ★ Another 16 oz clear glass
- ★ A Fork



Instructions:

1. Fill the tall glass almost to the top with room-temperature water.
2. Pour 2 tablespoons of oil into the other glass.
3. Add 2 drops of food coloring to the glass with the oil.
4. Stir the oil into the food coloring using a fork. Stop once you break the food coloring into smaller drops.
5. Pour the oil and coloring mixture into the tall glass.
6. Now watch! The food coloring will slowly sink in the glass, with each droplet expanding outwards as it falls. Looks like fireworks! Right?

Link:

<https://www.sciencefun.org/kidszone/experiments/water-fireworks/>

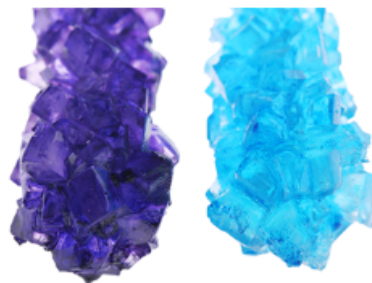
If you are looking for other science experiments to do this week or over summer, here is a good website with a variety of different ones:

<https://www.sciencefun.org/kidszone/experiments/>

Crystal Candy

Materials:

- ★ Piece of string, about 6 inches (kite string works great)
- ★ A pencil or popsicle stick
- ★ A paper clip (or large plastic bead)
- ★ 1 cup of water
- ★ 2 cups of sugar
- ★ A glass jar (mason jars works good)



Instructions:

1. Tie one end of the string to the middle of the popsicle stick or pencil.
2. Tie the other end around bead or paper clip.
3. Next, lay the popsicle stick or pencil across the top of a jar so that the string hangs down the middle of the jar. You want to make sure that it is not touching the bottom of the jar, but you do want it close. Also make sure that it is not touching the sides of the jar either. If it hangs down too far, just roll the string around the pencil a few times to shorten the string. The string will act as a seed for the crystal. Now that the string and pencil are ready remove them from the jar and set them aside.
4. This next part requires hot water so please get an adult's help.
5. Pour the water into a pan and bring it to boil.
6. Add 1/4 cup of sugar to the boiling water, stir it until it dissolves.
7. Repeat this step until all of the sugar has been dissolved. This will take time and patience and it will take longer for the sugar to dissolve each time. Be sure you don't give up too soon. You are making a "supersaturated solution!"
8. Have your adult helper carefully pour the hot sugar solution into the jar and fill it almost all of the way to the top. Go ahead and put your pencil or popsicle back in top and lower the bead or paperclip back inside of the jar, just like you practiced before. Allow the jar to cool and put it someplace where it will not be disturbed.
9. Next comes the waiting part. Check on it everyday to see the crystals start to grow, but be very careful not to disturb it. The longer you wait the bigger it will get. You can also place a coffee filter or paper towel over the jar so nothing falls in.

Link:

<https://www.sciencefun.org/kidszone/experiments/crystal-candy/>

The Rising Rainbow

Materials:

- Paper Towel
- Washable Markers
- Water
- 2 Small Glasses

Instructions:

1. Cut the kitchen roll into the shape of a rainbow.
2. At each end, use the felt-tip pens to colour a rainbow about 2cm up from the bottom. Remember the order of the colours: red, orange, yellow, green, blue, indigo, violet.
3. Attach the paperclip to the top of the rainbow and tie a piece of thread to it. This will allow you to hold your rainbow.
4. Add water to the two bowls.
5. Hold the rainbow with both ends slightly submerged into each bowl of water and watch your rainbow grow.

