



Video Conference on Chemistry

Experiment materials to have ready during the conference

The unique aspects of video conferencing introduce new challenges when presenting science workshops and shows. Interactivity is paramount and as such we ask that your class have some materials ready for experiments during the video conference. Whilst we may not use all of the materials listed, it will provide an opportunity for your students to do experiments rather than simply just watch a presentation.

Due to the need to keep the conference running at a reasonable pace, we suggest only a couple of students demonstrate each experiment to the rest of the class. If we don't use some of the materials, just run those experiments after the conference!

It is best if you and your volunteer students are familiar with the materials prior to the conference

Experiment 1: Balloon blow up (practice before class)

You will need:

- 1 x 600mL soda drink bottle, 1 spoon and 1 balloon
- 1 funnel (large opening to fit the balloon)
- 1 teaspoon of bicarbonate soda and 50mL vinegar
- A student to demonstrate

1. Fit the funnel to the balloon.
2. Add 1 teaspoon of bicarbonate soda into the funnel
3. Add 50mL of vinegar to the soft drink bottle
4. Fit the balloon to the bottle and then pour the balloon contents in to the vinegar
5. Hold the balloon onto the bottle neck to avoid spillage



Experiment 2: Milk Rainbow

You will need per group of students:

- Full cream milk, 1 shallow plate, food colouring (up to 4 types - be sparing per
- Eyedroppers or spoons for food colouring, detergent plus
- A mess bucket and cleaning materials. Students to wear smocks wear possible

Try this experiment yourself so you know what to expect; students tend to use too much food colouring and overfill the plate with milk.

A mess bucket is essential for cleaning.



Milk Rainbow

Image: Fizzics Education

1. Pour some milk into a saucer (ignoring your cat: this is for the cause of science).
2. Drop a small amount of food colouring near the centre of the plate.
3. In the exact centre, add one drop of dishwashing detergent. Observe the results

Experiment 3: Sugar and Skittles

You will need per group of students:

- 3 different coloured Skittles™
- 1 sugar cube or a teaspoon of sugar
- Clear water and a white flat plate.
- A mess bucket and cleaning materials



Sugar and skittles

Image: Fizzics Education

1. Fill the shallow plate with water.
Arrange the skittles in a triangle near the centre of the plate.
2. Allow the colours of the skittles to spread through water.
3. The colours should form a cross in the middle of the plate
4. Once a coloured cross is formed place the sugar directly in the middle of the cross
5. Observe the results and explain.

Experiment 3: Density column

You will need:

- 50 mL vegetable oil
- 50 mL glycerol or glucose syrup
- 50 mL water, coloured with food colouring
- Clear plastic container plus different sized beads, marbles and foam



Density column

Image: Fizzics Education

1. Pour the glycerol into the bottom of the plastic container. Try not to touch the sides!
2. Carefully pour the water down the side of the container. There should be two distinct layers
3. Now carefully pour the vegetable oil down the side of the container
4. Carefully place the beads (etc) onto the surface of your layered liquid. Where do they float? Why?

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