

The Bubble Monster

(A Change In State Of Matter Experiment)



Time

5 min per demo

Plus 5 mins clean-up

WHAT YOU'LL NEED

(Provided in Primary Science Pack)

- ✓ Black Bucket
- ✓ Bubble Solution
- ✓ Plastic Scoop/cup
- ✓ Dry Ice



Always replace lid on dry ice box immediately after use.

You will also need:

- ✓ Hot Tap Water
- ✓ Paper Towels or similar

BACKGROUND

This experiment covers part of the statutory requirement for children to observe that some materials change state when they are heated.

This demonstration is great fun and really messy. For this reason it should be done on a surface that is easy to wipe clean. It follows on from the Big Fog Effect demonstration. The difference is that in this case you add bubble solution as soon as the fog effect starts which creates foam and joy.



What To Do



Unlike the Big Fog Effect you will be using hot tap water, and the bubbles will contain the fog and so you may decide to allow the class to get nearer to the action.

1. Start by placing a towel/ paper on a prominent desk at the front of the class. (the towel will soak up bubble mixture that will pour over the side of the bucket!)
2. Open the classroom door and we also recommend opening the window to provide plenty of fresh air.
3. Place the plastic bucket on the towel and remove the red lid.
4. Pour two full scoops of ice into the bucket and then add a full kettle containing hot (not warm) tap water. Immediately pour a good squirt of bubble mixture into the bucket.

What's Happening?



As before the hot water and dry ice is creating lots of fog. This gas/water mixture inflates the bubble mixture creating a foamy bubble structure.

The dry ice is changing from solid to gas

Make this an experiment



To turn this demonstration into a true experiment ask the junior scientists to answer these questions:

- **How are the bubbles formed?**
- **Where has the ice gone as it warmed up?** (change in state)
- **What are the bubbles made of?** (Gas from the ice, the change in state and large increase in volume)

