

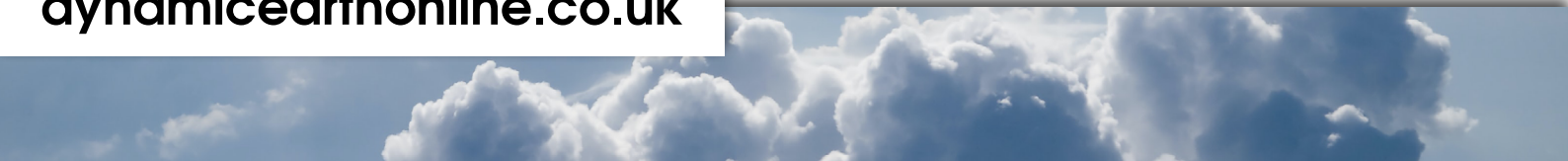
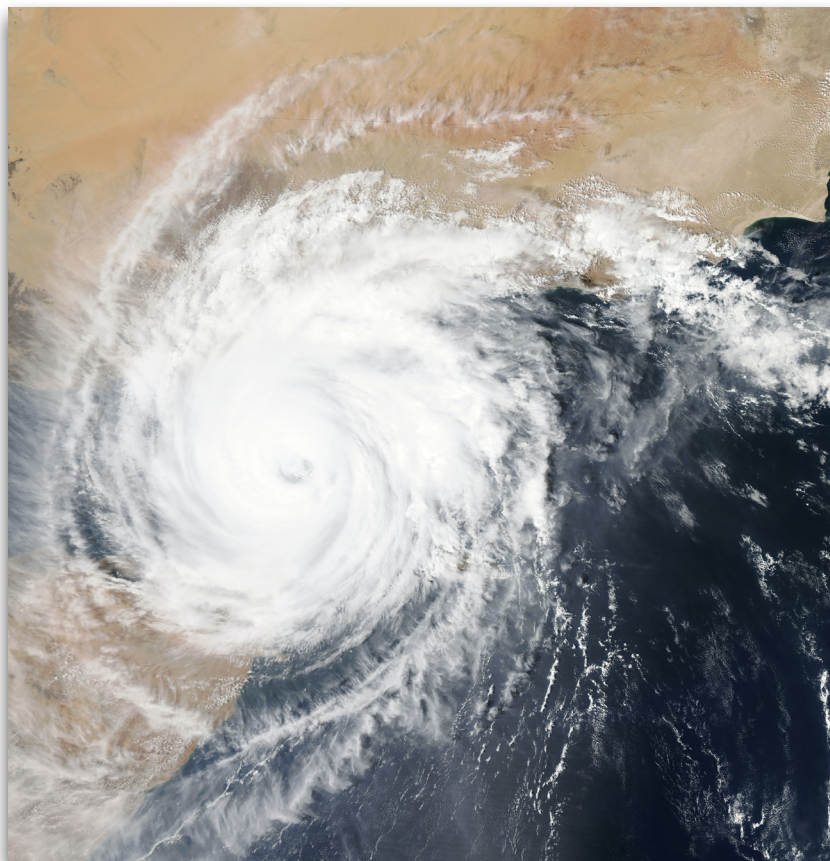
Tornado in a Bottle!

Ever wondered how a tornado is formed?



Tornadoes are extreme weather phenomena created during thunderstorms when warm, moist air at the Earth's surface meets cold, dry air above it. The warm air naturally moves upwards into the atmosphere and meets the cold air which moves at a higher speed, causing a rotating column of air to form. If the conditions are right, the column of air reaches the ground and a tornado forms.

Tornadoes can reach incredibly high wind speeds of over 300 miles per hour! They can be very powerful and destructive forces, that tear up buildings and cars and destroy crops. Because of this, people that live in areas prone to tornadoes build underground bunkers to shelter in during storms, such as in Tornado Alley in the central states of America.



Activity

To see the swirling vortex shape of a tornado for yourself, follow the simple instructions below to make your own 'tornado' in a bottle!

Equipment:

- A clear empty plastic bottle with lid
- Water
- Food colouring
- Something to sprinkle into the water, such as dried herbs or tea leaves

What to do:

1. Fill your bottle 2/3 full with water
2. Add 2-3 drops of food colouring
3. Add a pinch of dried herbs (or something equivalent that will float in the water)
4. Screw the lid tightly onto the bottle
5. Shake the bottle around in a circular motion, with a roll of your wrist for 10 seconds and you should start to see the water moving in a vortex motion! All the bits of dried herbs will start swirling around, similar to the debris picked up by a tornado in real life.

Tip!

Have you ever seen this swirling movement of water in your home before? Perhaps you have spotted it when water rushes down your plughole after doing the washing up, or having a bath!

For more information about how tornadoes form, check out [this video](#) of scientists chasing storms in Colorado!

