# Earth Space - What does the earth look like from a space rocket?

#### Fact

- Earth looks like a great big ball from a space rocket.
- Earth doesn't seem like a ball when we are standing on it because earth is so big. This means it curves away very, very gently, so gently in fact that we don't notice it from down on the ground.
- When we're standing on flat ground and look way into the distance the earth seems to finish in a flat line this is called the horizon.
- The higher you go, like up in the Auckland Sky Tower the more of a curve the horizon seems to have.
- From a space rocket you can see all of one side of the earth at once so you can see it looks like a huge ball.

### Do you know

- Because the earth is round you can see different stars in the night sky depending in where you are on the earth. For example here in New Zealand we can see familiar stars like the Southern Cross and the Pointers. But people living in England see completely different stars like Polaris and Ursa Major that we will never see from New Zealand.
- Because the earth is round when a lunar eclipse occurs the shadow of the earth moving across the moon is a circular shape.
- When a ship goes over the horizon it's the bottom of the ship that disappears first, then the middle, then the top. This would only happen if the shape of the earth is a great big ball.
- About 2000 years ago people thought that Earth was flat and if you went too far in one direction you'd fall off it!

## Experiments you can do

Next time you're at the beach have a look at the horizon. Look out way into the distance where the sky seems to meet the sea. Does it look like a flat line? It should do.

If there are any sailing ships or ships with tall smoke stacks on the horizon see if you can borrow a pair of binoculars and watch just how a ship disappears over the horizon. The bottom will disappear first and the tip of the mast or smoke stack will disappear last.

#### Other Investigations

See if you can find someone who has one of those <u>giant</u> beach balls. Put it on the ground and then stand back from it. right over the other side of the garden. Pretend you're in a space rocket and the ball is Earth. That's what Earth looks like from space – a huge ball.

Now get up really close to the ball so that your face is almost pressed into it can you see the curve of the ball's "horizon". If you could shrink yourself down so that you were smaller than an ant the ball's horizon would look flat.