

WONDER ZONE CRAFTS AND EXPERIMENTS

Day 3 The Colours of the Rainbow

Experiments

1 Blowing Bubbles

Blow some bubbles to see the colours of the rainbow on the surface of each bubble.
If you don't have bubble mixture at home you can make your own.

You will need

50ml washing up liquid

300ml water

Measure the washing up liquid into a bowl or jam jar.

Slowly add the water being careful not to create too many bubbles at this stage. Gently stir the mixture together to combine – a chopstick is ideal for this.

If you can, let the bubble mixture rest before using it.

If you have glycerine at home, adding a tablespoon of this will make the bubbles last longer.

If you don't have a bubble wand you can make one with pipe cleaners, paper clips unwound and twisted into shape or even biscuit cutters.

The Scientific explanation

Sunlight is made up of lots of different colours. Most of the time they are all mixed up so we don't see them separately, but sometimes they get split up and that's when we see rainbows. Usually this happens when the light gets bent (this is called refraction) by things like water. This is how rainbows happen in the sky: the light is refracted (bent) by water droplets in the atmosphere into the colours of the rainbow

2 Cress heads

You will need

2 egg shells

an egg box cut into sections

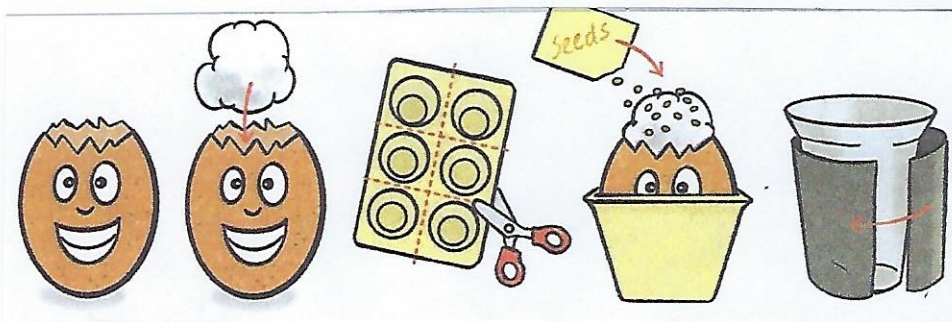
cotton wool

cress seeds

felt tip pens

a large yogurt pot (or similar)

black paper and sticky tape



Decorate your egg shells with faces, then put each in a section of the egg box.

Half fill each shell with cotton wool and dampen with water, then sow some cress seeds on to the cotton wool.

Wrap the yogurt pot in black paper and secure it with sticky tape.

Place both egg shells on a sunny window sill and place the yogurt pot upside down over one of them.

Make sure both shells are well watered every day but keep the yogurt pot on one of them.

Watch how the cress grows. The one in the sunlight should grow normally, with little green leaves.

The covered one won't be green and will grow more "stringy".

The Scientific explanation

Most plants need light to grow healthily, turning sunlight and carbon dioxide into food. Plants deprived of light will still grow, but will put all their energy into sending up shoots to reach light as soon as possible, meaning they grow tall and thin.

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Day 3 The Colours of the Rainbow (sheet 2)

Crafts

Make a RAINBOW

You will need

a large sheet of paper
collage materials or paints or coloured pens
PVA glue or glue sticks
scissors

Draw a large rainbow on the paper, with only 4 stripes. You might like to use a compass for this. Cut up coloured paper or material into squares and glue them on to your rainbow.

The collage materials used could be wool, ribbons, scraps of material or photos from magazines.

The top stripe will have red, orange and yellow.

The second will have shades of green

The third will have blue colours

The bottom stripe will be purple.

You could just use paints or coloured pens to fill in your rainbow if you don't have collage materials.

You could write a message of hope on your picture.

