

**End of year expectations for The World- working scientifically**

Children know about similarities and differences in relation to places, objects, materials and living things.

They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur and talk about changes.

**Vocabulary**

Push, pull, land, sea, sky, bus, London landmark names such as Big Ben, London eye, Buckingham Palace, Queen. Steam, hot water, trains, vehicle names/ trains, cars, lorries etc. seeds, plants, compost animals names such as chickens, lambs, etc.

Experiment words / predict, find out, measure, estimate, compare and describe.

**Suggested equipment and resources to support the world working scientifically.**

Cars for push and pull, chocolate for melting, seeds for growing, magnifying glasses to look at the seeds. Red London Bus for being naughty, beans for the bus to use.

**Key learning linked to Working Scientifically**

**Explore/observe:** look closely at/notice

**Describe:** talk about what they notice/observe: talk about changes they notice and changes over time

**Record:** draw pictures, take photographs, make models or scrapbooks.

**Questioning:** shows an interest in/ is curious about; ask questions about what notice observe or changes that occur

**Explain:** talk about why things happen/occur: talk about how things work.

**Research:** talk to people(visits/visitors/family) think of questions to ask how things work: use first hand experiences/use secondary sources (eg books, photographs, internet)

**Equipment and measures:** use sense / use simple equipment to make observations, (eg magnifiers, pipettes, egg timers, digital microscopes, etc.)

The Naughty Bus and Easter Term Two Second half.

Talk about land, sea and sky and what can you see. Place pictures in the right place.

Do experiments to see which vehicles move the fastest on pieces of wood.

Talk about trains and Robert Stephenson. Link to talking about steam from kettles.

Talk about Easter and new life/ Link to the Easter story of Jesus and his death and resurrection. Sow some seeds in the gardens outside.

Melt some chocolate for Easter nests. Talk about how materials change from a solid to a liquid and back again.

Talk about new life spring animals etc.

Links to people

Robert Louis Stephenson

## Questioning and provocations

### **Describe**

How does it look?

How does: look, taste, feel sound, smell

Can you show me?

Can you tell me/

Can you tell me which

Can you describe?

### **What's happening?**

What's happening here?

What happens when you?

Can you tell me what?

How does that work?

What did you notice when?

### **Compare and Contrast**

What is the same about?

What is different Which ones?

### **Why?**

Why it happened?

Why did?

Why do you think?

Why do you think?

Can you tell me why?

Tell me why?

### **I wonder**

What could we do next?

I wonder if?

What will happen if we?

How can you show?

How can we found out if?

Can you find another that will?

Can you think of another way?

How could we make it better?

How could we improve?