

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

Weather words, cold, ice, snow, freezing, melts, frost.

Animals, penguins, whales, foxes and fish
Arctic / polar bears, arctic foxes, reindeers.

Waterproof, paper, wood, fur, plastic, paint
sugar, oil.

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

Suggested equipment and resources to support the world working scientifically.

Magnifying glasses, pipettes, magnets,
tweezers, mirrors, binoculars, torches,
camera video, talking pegs, postcards.

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.)

Compare/sort/group/ identify/classify: notice similarities, notice differences: talk about similarities and or differences

Test: make suggestions, show resilience, work with others.

Vocabulary: use simple vocabulary to name and describe objects, materials, living things and habitats

Antarctica and Arctic Second half term

Children to look closely at pictures of the Antarctic and Arctic.

Talk about the environments which the animals live in.

Discuss the animals that live there

Do some experiments with Ice, make predictions which ice will melt the fastest etc.

Look at different materials and predict which are waterproof/ not waterproof. _Do tests to see which are waterproof or not.

Links to people

Scott of the Antarctic / talk about the Inuit people.

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?