Topic-Superheroes (Term 2)

Science Knowledge Organiser

Learning Lens: Knowledge and Understanding of the World- Changing State

Class: EYFS

Previous Knowledge

Can talk about some of the things they have observed, such as plants, animals, natural and found objects. Talk about why things happen and how things work. (Development Matters statements 30-50 months)

Project Hook or 'Wow' memory

Ice cubes on tuff tray with a range of tools such as spoons, paintbrushes and paint etc... Children to explore the ice cubes and observe what happens.

Learning Step	Planned Activities (Key Knowledge)
How do you make ice?	Begin by showing the children the ice cube trays and the water. Explain that they are going to make some ice cubes. Ask the children if they have seen ice cubes before. Do they know how they are made. Explain that to make water into ice, it needs to be made very, very cold, usually in a freezer. Make ice cubes with children.
What happens to ice when it is melted?	Look at the ice cubes the children made. Give each child an ice cube to hold. Encourage them to talk about what happens to the ice cubes as they are held and why they think the changes are happening. The heat from their hand is melting the ice. Discuss melting.
Investigation	Trapped superheroes need to be rescued. Challenge children to think about places where the superhero ice cubes would not melt or may melt more slowly or quickly. Place the bowls of trapped superheroes into different places around the classroom to see what happens. Encourage the children to talk about what they found out and what happened to the water and ice cubes. The melted ice cubes could be refrozen to see what happens when they are placed back into the freezer.
Child Initiated Activities during unit	 Some children took ice outside in the outdoor area independently during play and watched it melt. Teacher led discussion on why it melted quicker in the sun than the shade. Some children decided to see who could melt the ice the quickest in their hands. They got sand timers to see how long it took. Teacher led discussion on warmth of hands etc

The key skills we want pupils to use during this topic:

Observational skills: experimenting and observing what happens when ice turns to water.

Recording Skills: verbal discussion about what they observe or drawings of what they observe.

Interpreting: orally explain to the class what happens when ice melts.

Key vocabulary	
Water	A liquid that has no colour or smell.
Ice	Frozen water.
Cold	Low temperature.
Hot	High temperature.
Melt/Melting	Where a solid turns into a liquid.
Change	Make different.

Statutory Requirements

Looks closely at similarities, differences, patterns and change. (Development Matters Statement 40-60 months)

Children know about similarities and differences in relation to places, objects, materials and living things. (Early Learning Goal)

