[SUMMARY SHEET]

30 MINUTE ACTIVITY

WHAT'S IN A FIRE EXTINGUISHER?

SUMMARY

Class discussion focuses on extinguishers, buckets and blankets, and their use in extinguishing fires. Children model how a fire extinguisher works by creating carbon dioxide gas from a solid – liquid mixture, to extinguish a candle flame. This activity can be recorded in a variety of ways and lead to opportunities for children to carry out and present their own research using secondary sources of information.

OBJECTIVES

- To observe the effect of mixing bicarbonate of soda and vinegar on a nearby candle flame

To be able to:

- Explain that some mixtures result in the formation of new materials and that this kind of change is not usually reversible
- Recognise when and how secondary sources might help them to answer questions that cannot be answered through practical investigation

SCIENCE VOCABULARY

Solid	Liquid	Gas
Carbon Dioxide	Air	Oxygen
Mixture	Irreversible	Change
Burn	Extinguish	

RESOURCES *(IN BRIEF)*

- Bicarbonate of soda (or baking powder)
- Vinegar
- Matches
- Tea lights
- Saucer or coffee lid
- Sand
- 2 litre ice-cream tub (or similar container)

PRIOR KNOWLEDGE/EXPERIENCE

Children should be able to identify materials, according to whether they are solids, liquids or gases and also have a simple understanding of changes that are reversible such as dissolving, mixing and changes of state.