Hook: Science fair for parents
Question/statement:

LET'S

INVESTIGATE!

KNOWLEDGE SCIENCE:

Materials can be solids, liquids or gases.

Investigation – different objects in different states of matter. Chn to group according to the properties that THEY can see. Teachers to then introduce solid, liquid and gas and chn to see if they can group items accordingly

Skills SCIENCE:

- Compare, group and classify materials, according to whether they are solids, liquids or gases

Vocabulary in Reading lessons:

Week 1: Compare, results, investigate, predict, method, observe, aim, apparatus, hypothesis, conclusion

Week 2: Volume, definite, particle, flow, vibrate

Week 3:

STATES OF MATTER

Knowledge Science:
Materials can be solids, liquids or gases and some can change their state: solids hold their shape; liquids form a pool not a pile; gases escape from an unsealed container.

Skills Science:
Compare, group and classify materials, according to whether they are solids, liquids or gases

RE
Use the correct terminology when talking or writing about special days, places, rituals and objects

Linking Project

artwork - Mixed media

PCSHE
SMSC

English – Explanation genre

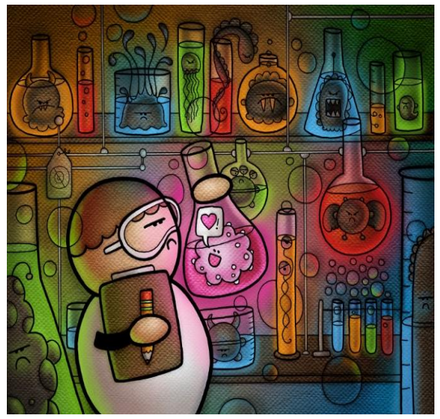
S&L: explaining.
Clarify the differences between instructions and explanations.

Scientific explanations
Water cycle

Reading
Reading explanation texts
Retrieval, inference & deduction

Writing –
A variety of sentences (writing partners, check and self-evaluate).
Understanding the nature of a sentence and different types of sentences.
Explanations

Reading
Start with Stig lessons to recap story so far (questions to recall story, reading around (back and forward) key word to find relevant information)
Scientific vocabulary
Using topic books to practice reading skills (retrieval, moving to NF inference)



CHANGING STATES OF MATTER

Knowledge SCIENCE:

Know that some materials change state when they are heated or cooled.

Investigations:

Heat water and observe what happens in a sealed system or an open system (bottles/cups on radiator)

Measure temp and observe physical changes in water over time – heating and cooling of water (begin with hot water, measure temp and observe physical properties, cool water in classroom then in freezer, measure temp in increments of time) (links to Statistics)

Skills SCIENCE:

- Make decisions on how to set up appropriate, fair tests
- Make well-reasoned predictions and begin to offer evidence to support their idea
- Observe changes to water through the states as it is heated or cooled
- Observe and record evaporation over a period of time
-Take accurate measurements with thermometers using standard units
-Gather, record and present data in a suitable way, creating accurate charts
- Report findings and conclusions in different ways and communicate using scientific language
- Begin to suggest improvements to chosen scientific methods.

Concepts:
Some materials can be changed as they are heated or cooled (evaporation/condensation) but others cannot.

MATHEMATICAL EXPLANATIONS
Children to develop their skills of explanation in Mathematics.

Reading and recording data.

Use of data to explain patterns.

PLANNING AND PREPARATION OF SCIENCE FAIR
Written explanations from English
Different ways of presenting results in Science
Water cycle diagrams from Geography

Different ways of presenting knowledge (different temps of water)
Photographs of different examples of these happening in the home (can parents explain?)
Preparation of rice crispy buns for parents – chn can explain how they were made using relevant vocab

THE WATER CYCLE
KNOWLEDGE SCIENCE:
We know how materials change state in the water cycle: evaporation and
condensation

CONCEPTS SCIENCE:
Materials change as part of the water cycle.
KNOWLEDGE GEOGRAPHY:
Describe the water cycle

Vocab in Reading lessons:
evaporate/evaporation, condense/condensation, vapour, liquify, solidify, precipitate/precipitation, collect/collection, vice versa