CSI

In this topic, we are learning about Material and their properties

This half term the we will become scientists and detectives. Sadly, there has been a crime in school and the police are certain that one of the Year 5 teachers is responsible. We will be collecting the evidence from the crime scene and analysing it through a variety of different science experiments. We will use this evidence to determine which of the Year 5 teachers is guilty!

What I already know...

I can compare and group together opaque/ transparent materials (Y1) and I can recognise that shadows are formed when the light from a light source is blocked by an opaque object (y3)

I can observe how magnets attract some materials and not others . (y4)

I can recognise and associate metals with being good conductors of electricity (Y4)

The skills I already

Concluding – *Report on findings using a chosen form of presentation*

Predict – *I can make a prediction using **because** and accurate scientific evidence learned from the topic.*

Observing – *take accurate measurements using standard unit*

I will learn ...

-to compare and group together everyday materials on the basis of their properties (solubility, transparency, conductivity and their response to magnets)

-that some materials will dissolve in liquid to form a solution.

-to use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering and sieving.

-to demonstrate that mixing and changes of state are reversible changes.

-to explain that some changes result in the formation of new materials, and this kind of change is usually irreversible (including changes associated with burning).

The skills I will learn are...

Predicting – *I can make a prediction using **because** and accurate scientific evidence learned from current and previous topics.*

Measuring and recording – *take measurements, using a range of scientific equipment, and taking repeat readings when appropriate*

Recording of results – *record data using scientific diagrams and labels, tables, scatter graphs, bar and line graphs*

Key Vocabulary

Separate

Dissolve

Mixture

Solution

Filter

Sieve

Reversible

Irreversible

Year Group half termly topic overview—Autumn 1.2

Topic: CSI Shirley

One of the Year 5 Teachers has stolen something valuable to the school—can you use the clues found at the crime scene to discover which teacher is guilty?

HOOK: Classroom set up as crime scene

OUTCOME: Results to be presented in a Crime watch style presentation.

Driving Subject(s): Science.

-compare and group together everyday materials on the basis of their properties (solubility, transparency, conductivity and their response to magnets

-know that some materials will dissolve in liquid to form a solution.

-use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering and sieving.

-demonstrate that mixing and changes of state are reversible changes.

-explain that some changes result in the formation of new materials, and this kind of change is usually irreversible (including changes associated with burning).

-understand how to make scientific prediction which draw from previous knowledge.

-understand how to measure and record results on tables , using the information to come up with conclusions.

Curriculum Links: N/A- see driving subject

Applied Literacy:

Newspaper report- a news article about the incident.

Summary in science learning after each experiment.

Applied Mathematics:

Measure- weighing out food to eliminate suspects.

-Timing with a stopwatch

-Statistics- graphs and tables

SMSC:

Learning about the work the police do- thinking about moral stance

Community links/Enterprise/ Experiences:

PSCO to come in to talk to the children.

Organising the presentation of science experiment.