

CSI Shirley

What I already know...

- how to group together **opaque/transparent** materials (Y1) and that **shadows** are formed when the light from a **light source** is blocked by an **opaque** object (y3—Let it Shine)
- some metals are good **conductors of electricity** (Y3—Let it Shine)

The skills I already have are...

Predict – using **because** and **accurate scientific evidence** learned from the topic.

Concluding – use **scientific language** to explain patterns.

Observing – take **accurate measurements** using **standard units**.

Properties and changes of materials

In this **Science** led project, you will be taking on the role of a **crime scene investigator**—*working scientifically* to systematically process evidence of a crime that has been committed in school. Collect evidence, draw a list of suspects and test your evidence to find your culprit. Be ready to report your findings and bring **justice** to Shirley Junior School.



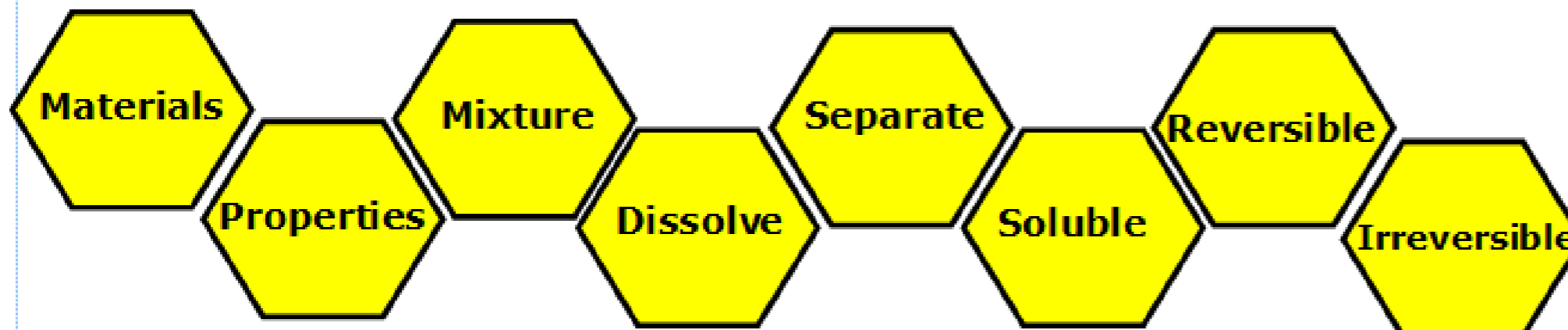
I will learn ...

- ⇒ how magnets **attract** some materials and **repel** others.
- ⇒ 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**.
- ⇒ to demonstrate that some changes to states are **reversible**.
- ⇒ to explain that some changes to states are **irreversible** and can form new materials.

The skills I will learn are...

- Predicting – I can make a prediction using **accurate scientific evidence** learned from current and previous topics.
- Measuring and recording – learn to take **take repeat readings** when appropriate for accuracy
- Concluding—explain **causal relationships** in my results.
- Evaluating – I can make suggestions on how to improve my working methods.

Key Vocabulary



Year 5 CSI Shirley – Autumn 1 Project

Topic: CSI Shirley

Year 5 must develop their scientific skills as Crime Scene Investigators when a crime scene takes place within the school day.

After collecting evidence from the crime scene, children need to analyse their evidence scientifically to work through a list of suspects and ultimately find the culprit who committed the crime!

HOOK: Crime Scene Evidence Collection Day

OUTCOME: Official Crime Report

Driving Subject: Science—Properties of Materials

Science Knowledge:

- compare and group **materials** on the basis of their **properties**, including their **solubility**, transparency and response to magnets.
- know that some materials will **dissolve** in liquid to form a **solution**, and describe how to recover a substance from a solution
- use knowledge of solids, liquids and gases to decide how **mixtures** might be **separated**
- Demonstrate and explain **irreversible** and **reversible**.

Working Scientifically:

- Know how to set up a **fair test** using more than one **variable**.
- Make **predictions** using **because** and **accurate scientific evidence** learned from current and previous topics.

Applied Literacy:

Report writing- an initial forensic police report about an incident

Final Police report of findings.

Science experiment write up

Criminal Profile

Applied Mathematics:

Measure- weighing out food to eliminate suspects.

Pupil Premium Enrichment

CSI- PSCO- pre group teaching about analysing crime scenes. Children chosen to be the extra 'CSI team' and collect some key evidence in evidence bags.

Curriculum Links:

PSHE—Fair—compassion towards others.

P4C—The Naughtyometer

What makes a bad choice? How do you choose a punishment that first to crime? Can a person be all bad?

SMSC/British Values:

Moral— Understand the rule of law and understand consequences.

Community—resolve conflict and engage with democracy across the school.

Rule of Law - explore the justice system in the UK and how evidence works within it.

Community links/Enterprise/

Experiences:

PSCO to come in to talk to the children.

Rversible change—Krispy cake making.

Recording of final crime reports for school website.