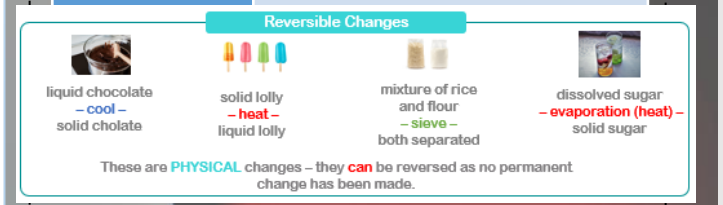
YEAR 5: SPRING 1
Big Q: What does it take to be a scientist?

Key Vocabulary

solute	A substance that can be dissolved in liquid.
solvent	A substance that can dissolve in a solute.
reaction	The process in which substances are converted into different substances.
effervescence	Fizzing or bubbling.
reversible	A change to a substance that can be undone or reversed.
combustion	An irreversible change where a fuel uses oxygen to burn and releases energy.
corrosion	The reaction of a metal with oxygen.
extinguish	To put a fire out.
enquiry	To ask questions in order to gain information.



Key Text

Frankenstein by Mary Shelley

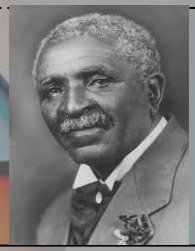
An intelligent and promising young student indulges in a moment of thoughtless scientific passion and creates life. Horrified at himself, Victor Frankenstein shuns the creature and attempts to continue his life without further thought for it. The creature, however, is lost in an unkind world and he never stops searching for his creator, with terrible and far-reaching consequences.

Key Questions:

- How can we recover water from a salt water solution?
- How can we reverse a physical change?
- What might you see when an irreversible change has taken place?
- Is controlling the spread of fire possible?
- What do scientists need to consider when creating chemical reactions?

Key Knowledge

- Know that some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution.
- Demonstrate that dissolving, mixing and changes of state are reversible changes.
- Observe chemical reactions and describe how new materials are made.
- Irreversible changes are chemical changes that cannot be reversed as a new material has been made.
- Rusting is an irreversible change and how to prevent it.
- There are three elements to the fire triangle: heat, oxygen and fuel and all three are needed for combustion to happen.
- A fair test is vital when carrying out scientific enquiries.
- Marie Curie was a French physicist and chemist who has won the noble prize in two different fields. She helped to invent the x-ray machine.
- Edward Jenner created the smallpox vaccine.
- George Washington Carver was an agricultural scientist.



Edward Jenner 1749-1823	Marie Curie 1867-1934	George W. Carver 1846-1943