

WHEN A CANDLE IS ALIGHT

Specification Link:
Home School Project

Highlight key points below

A chemical change, also known as a chemical reaction, is a process in which one or more substances are altered into one or more new and different substances. In other words, a chemical change is a chemical reaction involving the rearrangement of atoms

A physical change is a type of change in which the form of matter is altered but one substance is not transformed into another. The size or shape of matter may be changed, but no chemical reaction occurs.

All the light a candle makes comes from a chemical reaction known as combustion in which the wax reacts with oxygen in the air to make a colorless gas called carbon dioxide. Water is also produced in the form of steam.

The particle model states that all matter consists of very small particles that are constantly moving. The degree to which the particles move is determined by the amount of energy they have and their proximity to other particles. In solids, the particles are packed tightly in fixed positions and are all touching.

Draw a poster to explain what physical and chemical changes occur when a candle is lit.

Task:

- Draw a candle like the one above.
- Label where there is a change of state happening and where there is a chemical reaction happening.
- Write down the differences between a physical and chemical change.
- Draw particle diagrams to show the changes of state.



Done	You might have:
	<ul style="list-style-type: none">• Describe a physical change, using scientific vocabulary.• Describe a chemical change, using scientific vocabulary.• Describe one difference between a physical and a chemical change.
	<ul style="list-style-type: none">• Draw simple particle diagrams and describe the physical change.• Draw simple particle diagrams and describe the chemical change.• Explain the difference between a physical and a chemical change.• Identify the reactants and the products of the reaction.
	<ul style="list-style-type: none">• Draw accurate particle diagrams and explain the physical change.• Draw accurate particle diagrams and explain the chemical change.• Clearly name each particle, using a colour key.• Correctly write a simple word equation for the chemical reaction.
	<ul style="list-style-type: none">• Draw accurate particle diagrams and explain the physical change in terms of particle diagrams and change of state• Draw accurate particle diagrams and explain the chemical change. Try and include balanced formulae• Correctly write a word equation for the chemical reaction.• Explain both changes using a scientific model of energy.• Use correct chemical symbols and formulae.

Questions that you should ask yourself while completing this

What should I do first?

Is something confusing me?

Could I explain this to someone else?

Could I have used more scientific terms?

Where can I look for help?

Have I double checked what I need to include?

How can I do it better?