



Years 3 & 4 - What responsibilities come with making changes, and how can we investigate whether those changes are reversible or irreversible?

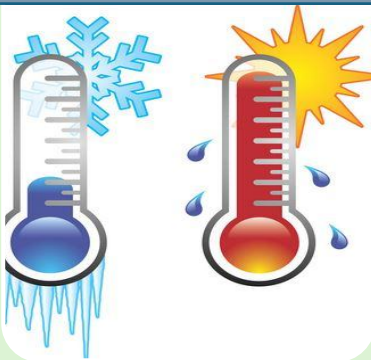


What does change mean, and where do we see it in our everyday lives?



Part 1

How do materials change when they are heated or cooled?



Part 2

What is a reversible change, and how do we know if a change can be undone?



Part 3

What is an irreversible change, and why can some changes not be undone?



Part 4

What responsibilities come with making changes?



Part 5

How can we investigate change like scientists and apply this to our own lives?



Part 6

Why am I learning this?

I am learning this so I can understand how materials change state, such as when a solid melts or a liquid freezes. Learning about heating and cooling helps me see how temperature affects materials I use every day. This helps me understand scientific ideas and use the correct words to explain what I observe.

My learning experience

I will explore what change means by looking at things that change around me every day. I will share my ideas and listen to others so I can notice similarities and differences in our experiences. This will help me understand that change is a normal part of life and happens in many ways.

Why am I learning this?

I am learning this so I can understand that change happens all around me all the time. By noticing changes in my everyday life, I can begin to explain what is happening and why things do not always stay the same. This helps me make sense of the world around me and talk about my own experiences with confidence.

My learning experience

I will observe what happens to different materials when they are heated or cooled. I will describe what I see using scientific words and explain my ideas to others. This will help me understand how temperature can change materials in different ways.

Why am I learning this?

I am learning this so I can understand that some changes are reversible and can be changed back again. Knowing this helps me realise that not all changes are permanent and that materials can behave in different ways. This supports me in thinking carefully about what has happened and why.

My learning experience

I will investigate changes that can be undone by exploring examples and talking about what happens. I will share my thinking and listen to other viewpoints to decide whether a change is reversible. This will help me explain my ideas clearly and use evidence to support them.

Why am I learning this?

I am learning this so I can understand that some changes cannot be reversed and make new materials. Learning about irreversible changes helps me recognise that some actions have permanent results. This helps me think more carefully about my choices and the impact they can have.

My learning experience

I will explore changes that cannot be reversed and think about why they are permanent. I will compare examples and discuss my ideas with others respectfully. This will help me understand that some changes have lasting effects and need careful consideration.

Why am I learning this?

I am learning this so I can understand that my actions matter and that some changes cannot be undone. This helps me become more responsible by thinking about the consequences of my choices, especially when using materials or caring for shared spaces. It helps me act more thoughtfully at school and in my everyday life.

My learning experience

I will think about my choices and how changes I make can affect people, materials, and the environment. I will discuss responsible decisions with others and reflect on my actions. This will help me become more thoughtful and considerate in my everyday life.

Why am I learning this?

I am learning this so I can use my scientific skills to investigate changes in a fair and careful way. Planning and carrying out my own investigation helps me understand change more deeply and see how science explains real-life situations. This helps me become more confident, independent and reflective in my learning.

My learning experience

I will plan and carry out simple investigations by observing, predicting, and recording changes. I will reflect on what I discover and explain my learning to others. This will help me think like a scientist and use these skills in real-life situations.