



Half term points

7

AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
Cells – the building blocks of life	Mixing, dissolving, and separating	Cells – the building blocks of life	Eating, drinking, and breathing	Elements, compounds, and their reactions	Eating, drinking, and breathing
Mini assessment: How do substances move through different cells?	Mini assessment: How might we separate mixtures?	Mini assessment: How are seeds dispersed?	Mini assessment: How might we find out what's in our food?	Mini assessment: How might we identify chemical changes?	Mini assessment: What factors effect diffusion?
Key skills and knowledge assessed: <ul style="list-style-type: none"> Cells are the building blocks of life. They contain structures called organelles which have specific jobs Many cells are specialised for a specific task Explain how different factors affect the rate of exchange of substances 	Key skills and knowledge assessed: <ul style="list-style-type: none"> Recognise the differences between substances and use these to separate them Explain solubility Obtain pure salt from a mixture 	Key skills and knowledge assessed: <ul style="list-style-type: none"> Recognise the variety of different structures shown by different seeds Describe the need for plants to disperse their seeds Plan, execute and analyse an investigation into seed dispersal 	Key skills and knowledge assessed: <ul style="list-style-type: none"> Describe how to test foods for starch, sugars, protein, and fat. Predict the results of food tests for a range of foods. Evaluate the risks involved in carrying out food tests 	Key skills and knowledge assessed: <ul style="list-style-type: none"> Describe the composition and uses of carbonate compounds. Recognise and explain thermal decomposition reaction. Observe and explain mass changes. Use scientific terms and simple models to explain chemical processes. 	Key skills and knowledge assessed: <ul style="list-style-type: none"> Explain how diffusion makes breathing possible. Observe the effects of diffusion. Apply diffusion to our breathing system and ask questions to develop understanding.
Forces and their effects	Exploring the basics of electricity	Elements, compounds, and their reactions	Mixing, dissolving, and separating	Energy transfers and sound	Energy transfers and sound
Mini assessment: How might we use friction?	Mini assessment: TBC	Mini assessment: How was the periodic table built?	Mini assessment: How might we use chromatography?	Mini assessment: How do we get energy from fuels?	Mini assessment: How do soundwaves transfer energy?
Key skills and knowledge assessed: <ul style="list-style-type: none"> Describe the effects of friction Understand that friction acts in the opposite direction to the direction of movement Design procedures for investigating the force of friction 	<ul style="list-style-type: none"> TBC 	Key skills and knowledge assessed: <ul style="list-style-type: none"> Identify where and how different elements were found. Recognise differences between elements. Recognise that the periodic table has changed over time. 	Key skills and knowledge assessed: <ul style="list-style-type: none"> Use chromatography to identify unknown substances Draw conclusions from evidence Use chromatography to separate dyes 	Key skills and knowledge assessed: <ul style="list-style-type: none"> Describe the composition of fuels and recognise that different fuels transfer different amounts of energy. Describe the advantages and disadvantages of using different fuels. Present data using appropriate graphs and evaluate the quality of evidence collected. 	Key skills and knowledge assessed: <ul style="list-style-type: none"> Identify how sounds are made. Describe how sound waves transfer energy. Explain how loud and quiet sounds are made.



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Forces and their effects

Mini assessment: How might we use moments?

Key skills and knowledge assessed:

- Describe the effects of forces about a pivot point
 - Understand how distance and force effects moments
- Calculate moments