



Be World Class

**Autumn Term
Term 1**

Science
Year 10

Name: _____

Tutor: _____

Year 10 Homework Timetable

Monday	English Exam Question	English Sparx	Maths Sparx
Tuesday	Option A Exam Question	Science Carousel	Science Sparx
Wednesday	Option B Exam Question	Option A Carousel	Maths Sparx
Thursday	Option C Exam Question	Option B Carousel	Science Sparx
Friday	Science Exam Question	Option C Carousel	Catch Up Sparx

Sparx Science

- Complete 100% of their assigned homework each week

Sparx Maths

- Complete 100% of their assigned homework each week

Option A (EBACC)	Option B	Option C
Computer Science	Business Studies	Art
Languages	Hospitality and Catering	Business Studies
Geography	Drama	Hospitality and Catering
History	Music	Computer Science
	Geography	Drama
	Health and Social Care	Photography
	ICT	Science (Triple)
	Media Studies	Sport
	Music	
	Religious Studies	
	Sport	
	Travel and Tourism	

Half Term 1 (7 weeks) - Year 10

Week / Date	Homework task 1 Carousel Quiz	Homework task 2 Exam Question
Week 1 7th September 2026	Complete the questions on Carousel, these will be tested in your LSQ	Complete the exam question. Ensure Sparx & Carousel are both at 100%
Week 2 14th September 2026	Complete the questions on Carousel, these will be tested in your LSQ	Complete the exam question. Ensure Sparx & Carousel are both at 100%
Week 3 21st September 2026	Complete the questions on Carousel, these will be tested in your LSQ	Complete the exam question. Ensure Sparx & Carousel are both at 100%
Week 4 28th September 2026	Complete the questions on Carousel, these will be tested in your LSQ	Complete the exam question. Ensure Sparx & Carousel are both at 100%
Week 5 5th October 2026	Complete the questions on Carousel, these will be tested in your LSQ	Complete the exam question. Ensure Sparx & Carousel are both at 100%
Week 6 12th October 2026	Complete the questions on Carousel, these will be tested in your LSQ	Complete the exam question. Ensure Sparx & Carousel are both at 100%
Week 7 19th October 2026	Complete the questions on Carousel, these will be tested in your LSQ	Complete the exam question. Ensure Sparx & Carousel are both at 100%

Half Term 2 (6 weeks) - Year 10

Week / Date	Homework task 1 Carousel Quiz	Homework task 2 Exam Question
Week 8 9th November 2026	Complete the questions on Carousel, these will be tested in your LSQ	Complete the exam question. Ensure Sparx & Carousel are both at 100%
Week 9 16th November 2026	Complete the questions on Carousel, these will be tested in your LSQ	Complete the exam question. Ensure Sparx & Carousel are both at 100%
Week 10 23rd November 2026	Complete the questions on Carousel, these will be tested in your LSQ	Complete the exam question. Ensure Sparx & Carousel are both at 100%
Week 11 30th November 2026	Complete the questions on Carousel, these will be tested in your LSQ	Complete the exam question. Ensure Sparx & Carousel are both at 100%
Week 12 7th December 2026	Complete the questions on Carousel, these will be tested in your LSQ	Complete the exam question. Ensure Sparx & Carousel are both at 100%
Week 13 14th December 2026	Complete the questions on Carousel, these will be tested in your LSQ	Complete the exam question. Ensure Sparx & Carousel are both at 100%

Week 1 Task 2 - Complete the exam question using full sentences. Then ensure Sparx and Carousel are both completed to 100%.

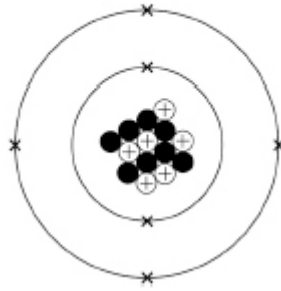
Cells are the basic units of all forms of life. Describe four differences between a bacterial cell and a plant cell. (4)

[illegible]

Improvement Work: Cells are the basic units of all forms of life. Describe four differences between a bacterial cell and a plant cell. (4)

Week 2 Task 2 - Complete the exam question using full sentences. Then ensure Sparx and Carousel are both completed to 100%.

Figure 1

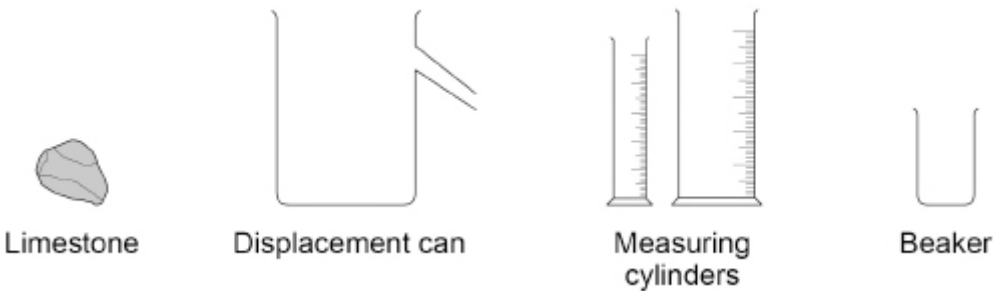


Describe the atomic structure of this carbon atom. You should include the number of electrons, neutrons and protons. (6)

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

Improvement Work: Describe the atomic structure of this carbon atom. You should include the number of electrons, neutrons and protons. (6)

Week 3 Task 2 - Complete the exam question using full sentences. Then ensure Sparx and Carousel are both completed to 100%.



Describe a method the student could use to determine the volume of the piece of limestone. (4)

Improvement Work: Describe a method the student could use to determine the volume of the piece of limestone. (4)

Week 4 Task 2 - Complete the exam question using full sentences. Then ensure Sparx and Carousel are both completed to 100%.

Malaria is transmitted by mosquitoes. Male mosquitoes can be sterilised so they are infertile. The spread of malaria is reduced by releasing sterile mosquitoes into the environment. Explain how releasing sterile mosquitoes reduces the spread of malaria. (2)

[illegible]

Improvement Work: Explain how releasing sterile mosquitoes reduces the spread of malaria.
(2)

Week 5 Task 2 - Complete the exam question using full sentences. Then ensure Sparx and Carousel are both completed to 100%.

Gold is a metal. Describe the structure of a metal. (3)

[illegible]

Improvement Work: Gold is a metal. Describe the structure of a metal. (3)

Week 6 Task 2 - Complete the exam question using full sentences. Then ensure Sparx and Carousel are both completed to 100%.

The person on the scales has a mass of 55 kg. Gravitational field strength = 9.8 N/kg

Calculate the weight of the person. (3)

[illegible]

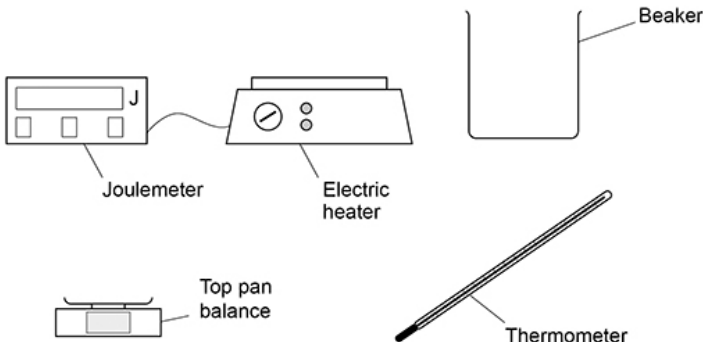
Improvement Work: The person on the scales has a mass of 55 kg. Gravitational field strength = 9.8 N/kg. Calculate the weight of the person. (3)

Week 7 Task 2 - Complete the exam question using full sentences. Then ensure Sparx and Carousel are both completed to 100%.

A student made measurements to determine the specific heat capacity of vegetable oil.

Figure 1 shows the equipment used.

Figure 1



Describe how the student could use the equipment shown in Figure 1 to determine the specific heat capacity of vegetable oil. (6)

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Improvement Work: Describe how the student could use the equipment shown in Figure 1 to determine the specific heat capacity of vegetable oil. (6)

Week 8 Task 2 - Complete the exam question using full sentences. Then ensure Sparx and Carousel are both completed to 100%.

Give two reasons why aluminium should be recycled. (2)

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page, typical of notebook paper. There are no margins, text, or other markings on the page.

Improvement Work: Give two reasons why aluminium should be recycled. (2)

Week 9 Task 2 - Complete the exam question using full sentences. Then ensure Sparx and Carousel are both completed to 100%.

The temperature of a thermistor increases. The potential difference across the component remains constant. Explain what happens to the current in the component. (2)

[illegible]

Improvement Work: The temperature of a thermistor increases. The potential difference across the component remains constant. Explain what happens to the current in the component. (2)

Week 10 Task 2 - Complete the exam question using full sentences. Then ensure Sparx and Carousel are both completed to 100%.

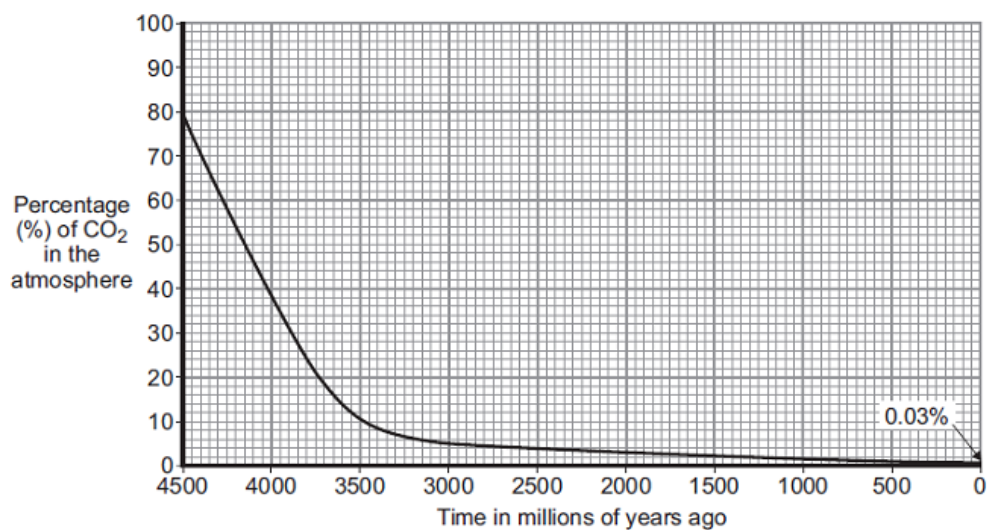
Gonorrhoea is a bacterial disease. A new vaccine is being developed against gonorrhoea.

Describe how a vaccine would work to prevent gonorrhoea. (4)

[illegible]

Improvement Work: Describe how a vaccine would work to prevent gonorrhoea. (4)

Week 11 Task 2 - Complete the exam question using full sentences. Then ensure Sparx and Carousel are both completed to 100%.



Use information from Graph 1 to answer these questions.

Describe how the percentage of carbon dioxide has changed in the last 4500 million years. (2)
Give two reasons why the percentage of carbon dioxide has changed. (2)

Improvement Work: Describe how the percentage of carbon dioxide has changed in the last 4500 million years. (2) Give two reasons why the percentage of carbon dioxide has changed. (2)

Week 12 Task 2 - Complete the exam question using full sentences. Then ensure Sparx and Carousel are both completed to 100%.

Explain how greenhouse gases cause global warming. (4)

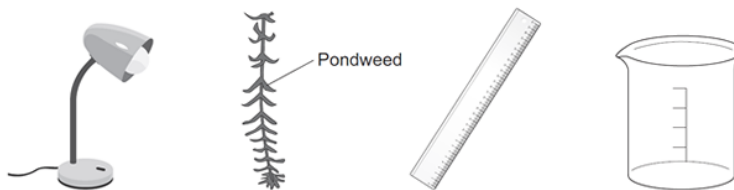
[illegible]

Improvement Work: Explain how greenhouse gases cause global warming. (4)

Week 13 Task 2 - Complete the exam question using full sentences. Then ensure Sparx and Carousel are both completed to 100%.

How would you investigate the effect of light intensity on the rate of photosynthesis?

The image below shows some of the apparatus you might use. (6)



You should include details of how you would set up the apparatus and the materials you would use, the measurements you would make and how you could make this a fair test.

[illegible]

Improvement Work: How would you investigate the effect of light intensity on the rate of photosynthesis? (6)
