



Year 9 Science Term 2 Homework Booklet

Name: _____

Teacher : _____

Class: _____

<i>Homework</i>	<i>Pages</i>	<i>Due</i>
<i>C2 – Periodic Table</i>	<i>3-6</i>	
<i>P12 – Waves</i>	<i>7-10</i>	
<i>C5 – Chemical Changes</i>	<i>11-12</i>	
<i>P13 – Electromagnetic Waves</i>	<i>13-16</i>	

Introduction

Why is it important?

Learning at home is very important; it will help you become a more confident learner by developing your key skills within the subject.

In Science the purpose of learning at home is to:

- Help you to find time and develop your understanding of science in the world
- Help you to build confidence in your knowledge and skills.
- Help you to apply the topics covered in lessons to work outside of lessons

What do I have to do?

Every week you will be expected to complete a section of your homework booklet.

Tasks will vary depending on the skill you are working on, however, each week will contain either:

- A section of the knowledge organiser
- Practice questions

You will have time in lesson to peer mark one another's work and your teacher will check that you have completed the work to a good standard.

What if I get stuck?

If you are unsure with what to do, or need a hand please see Mr Zulfiqar who will be happy to help

Useful resources include:

- Asking your class teacher
- Asking an adult at home to help
- The CGP revision booklet
- GCSE Bitesize
- Youtube

Science Homework

C2 - Periodic Table

1 - Explain the trend down group 7.



Science Homework

C2 - Periodic Table

2 - State the colour and state of the group 7 elements:
 fluorine
 chlorine
 bromine
 iodine



Science Homework

C2 - Periodic Table

3 - Explain the reactivity of group 0 elements



Science Homework

C2 - Periodic Table

4 - Describe the trend in melting point down group 7.



Science Homework

C2 - Periodic Table

5 - How were elements arranged in early attempts at producing a table of elements?



Science Homework

C2 - Periodic Table

6 - Why did Mendeleev leave gaps in his periodic table?



Science Homework

C2 - Periodic Table

7 - How are the elements in the modern periodic table arranged?



Science Homework

C2 - Periodic Table

8 - Explain the trend in reactivity down group 1.



Science Homework

C2 - Periodic Table

2 -



Science Homework

C2 - Periodic Table

1 -



Science Homework

C2 - Periodic Table

4 -



Science Homework

C2 - Periodic Table

3 -



Science Homework

C2 - Periodic Table

6 -



Science Homework

C2 - Periodic Table

5 -



Science Homework

C2 - Periodic Table

8 -



Science Homework

C2 - Periodic Table

7 -



Science Homework

C2 - Periodic Table

9 - Complete the word equation:
sodium + water →



Science Homework

C2 - Periodic Table

10 - Complete the word equation:
potassium + water →



Science Homework

C2 - Periodic Table

11 - Complete the word equation:
lithium + chlorine →



Science Homework

C2 - Periodic Table

12 - Complete the word equations:
lithium + oxygen →
sodium + oxygen →
potassium + oxygen →



Science Homework

C2 - Periodic Table

10 -



Science Homework

C2 - Periodic Table

9 -



Science Homework

C2 - Periodic Table

12 -



Science Homework

C2 - Periodic Table

11 -



Science Homework

P12 - Waves

1 - Describe a transverse wave.



Science Homework

P12 - Waves

2 - Describe a longitudinal wave.



Science Homework

P12 - Waves

3 - What type of wave is a sound wave?



Science Homework

P12 - Waves

4 - What type of wave is a radio wave.



Science Homework

P12 - Waves

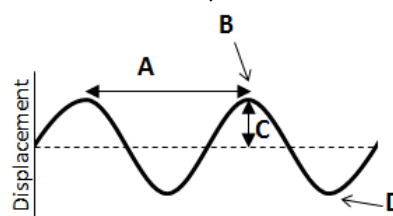
5 - What type of wave is a water wave?



Science Homework

P12 - Waves

6 - Name each part of a wave:



Science Homework

P12 - Waves

7 - Define frequency.











Science Homework

P12 - Waves

8 - How is the frequency of a wave calculated on a ripple tank?



<p>Science Homework P12 - Waves</p> <p>2 -</p> <p></p>	<p>Science Homework P12 - Waves</p> <p>1 -</p> <p></p>
<p>Science Homework P12 - Waves</p> <p>4 -</p> <p></p>	<p>Science Homework P12 - Waves</p> <p>3 -</p> <p></p>
<p>Science Homework P12 - Waves</p> <p>6 -</p> <p></p>	<p>Science Homework P12 - Waves</p> <p>5 -</p> <p></p>
<p>Science Homework P12 - Waves</p> <p>8 -</p> <p></p>	<p>Science Homework P12 - Waves</p> <p>7 -</p> <p></p>

Science Homework

P12 - Waves

9 - How is the wavelength of waves on a ripple tank measured?



Science Homework

P12 - Waves

10 – How do I calculate wave speed?



Science Homework

P12 - Waves

11 – What do amplitude and frequency mean in terms of a sound?



Science Homework

P12 - Waves

10 -



Science Homework

P12 - Waves

9 -



Science Homework

P12 - Waves

11 -



Science Homework

C5 - Chemical Changes

1 - What is reduction and oxidation (in terms of oxygen)?



Science Homework

C5 - Chemical Changes

2 - What ion does an acid dissociate (release)?



Science Homework

C5 - Chemical Changes

3 - What ion does an alkali dissociate (release)?



Science Homework

C5 - Chemical Changes

4 - Complete these word equation:
 a) hydrochloric acid + magnesium →
 b) sulphuric acid + copper →
 c) nitric acid + zinc →



Science Homework

C5 - Chemical Changes

5 - What is the half equation for a neutralisation reaction?



Science Homework

C5 - Chemical Changes

6 - What is oxidation and reduction in terms of electrons?



Science Homework

C5 - Chemical Changes

7 - Complete the word equation:
 a) hydrochloric acid + zinc carbonate →
 b) sulphuric acid + copper oxide →
 b) hydrochloric acid + potassium hydroxide →



Science Homework

C5 - Chemical Changes

8 - Why can carbon be used to extract iron from iron oxide but not aluminium from aluminium oxide?



Science Homework

C5 - Chemical Changes

2 -



Science Homework

C5 - Chemical Changes

1 -



Science Homework

C5 - Chemical Changes

4 -



Science Homework

C5 - Chemical Changes

3 -



Science Homework

C5 - Chemical Changes

6 -



Science Homework

C5 - Chemical Changes

5 -



Science Homework

C5 - Chemical Changes

8 -



Science Homework

C5 - Chemical Changes

7 -



Science Homework

P13 – Electromagnetic Waves

1 - Give the order of the electromagnetic spectrum.



Science Homework

P13 – Electromagnetic Waves

2 - Which electromagnetic wave has the highest frequency?



Science Homework

P13 – Electromagnetic Waves

3 - Which electromagnetic wave transfers the least energy?



Science Homework

P13 – Electromagnetic Waves

4 - What properties do all EM waves have in common?



Science Homework

P13 – Electromagnetic Waves

5 - What are the dangers of UV rays to human health?



Science Homework

P13 – Electromagnetic Waves

6 - Give two uses of radio waves.



Science Homework

P13 – Electromagnetic Waves

7 - Give two uses of microwaves.



Science Homework

P13 – Electromagnetic Waves

8 - Give a use of visible light for communication.



Science Homework

P13 – Electromagnetic Waves

2 -



Science Homework

P13 – Electromagnetic Waves

1 -



Science Homework

P13 – Electromagnetic Waves

4 -



Science Homework

P13 – Electromagnetic Waves

3 -



Science Homework

P13 – Electromagnetic Waves

6 -



Science Homework

P13 – Electromagnetic Waves

5 -



Science Homework

P13 – Electromagnetic Waves

8 -



Science Homework

P13 – Electromagnetic Waves

7 -



Science Homework

P13 – Electromagnetic Waves

9 - Give a use of gamma waves



Science Homework

P13 – Electromagnetic Waves

10 - Why does refraction occur?



Science Homework

P13 – Electromagnetic Waves

11 - How are radio waves produced?



Science Homework

P13 – Electromagnetic Waves

12 - What is the relationship between the frequency of the alternating current and the frequency of the waves produced by a radio?



Science Homework

P13 – Electromagnetic Waves

13 - What is radiation dose?



Science Homework

P13 – Electromagnetic Waves

10 -



Science Homework

P13 – Electromagnetic Waves

9 -



Science Homework

P13 – Electromagnetic Waves

12 -



Science Homework

P13 – Electromagnetic Waves

11 -



Science Homework

P13 – Electromagnetic Waves

13 -

