

Q1. (2018)

0 4

Figure 5 shows types of waves within the electromagnetic spectrum.

Some of the types of waves are represented by letters.

Figure 5

P	microwaves	Q	visible light	R	S	gamma rays
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0 4 . 1

Which letter shows the position of ultraviolet (UV) radiation within the electromagnetic spectrum?

[1 mark]

Tick **one** box.

P	☐	Q	☐	R	☐	S	☐
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Q2. (2019)

0 5

The Sun emits all types of electromagnetic waves.

Figure 7 shows the electromagnetic spectrum.

Figure 7

Radio waves	Microwaves	Infrared	Visible light	Ultraviolet	X-rays	Gamma rays
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0 5 . 1

Complete the sentences.

Choose answers from the box.

[3 marks]

frequency	mass	power
velocity		wavelength

In a vacuum, all electromagnetic waves travel at the same _____.

Gamma waves have the greatest _____.

Radio waves have the greatest _____.

Q3. (2020)

0 3

X-rays and gamma rays are types of electromagnetic waves.

X-rays are used for medical imaging.

0 3 . 1

Which substance will **not** absorb X-rays?

[1 mark]

Tick (✓) **one** box.

Bone	☐	Metal	☐	Skin	☐
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Q4. (2022)

0 1 There are different types of electromagnetic waves.

0 1 . 1 What do all electromagnetic waves transfer?

[1 mark]

Tick (✓) **one** box.

Charge

☐

Energy

☐

Matter

☐

Sound

☐

Q5. (2022)

0 1 . 3 Figure 1 shows the electromagnetic spectrum.

Figure 1

Radio waves	Microwaves	Infrared	A	Ultraviolet	X-rays	B
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Give the names of parts **A** and **B** of the electromagnetic spectrum.

[2 marks]

A _____

B _____

Q6. (2023)

0 6 The Sun emits a continuous spectrum of electromagnetic waves.

Figure 14 names some of the groups of waves in the electromagnetic spectrum.

Figure 14

A	B	Infrared	Visible light	Ultraviolet	C	Gamma rays
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a)

0 6 . 1 Name groups **A**, **B** and **C** in Figure 14.

[2 marks]

A _____

B _____

C _____

b)

0 6 . 2 Give **one** similarity and **one** difference between the properties of ultraviolet waves and gamma rays.

[2 marks]

Similarity _____

Difference _____