FREE REVISION PACK

Classifying Particles

Pearson Edexcel International Advanced Level Physics · Unit 4 (WPH14) · Specification points 121

Easy | Multiple choice · past-paper questions

4	4	≈ 5 min
QUESTIONS	TOTAL MARKS	SUGGESTED TIME*

Contents

Q	LEVEL	FOCUS	SOURCE	MARKS
1	Easy	Recognising a meson	Edexcel IAL January 2025 · Unit 4 · Q2	1 mark
2	Easy	Which particle is fundamental	Edexcel IAL June 2021 · Unit 4 · Q1	1 mark
3	Easy	Which particle is fundamental	Edexcel IAL June 2022 · Unit 4 · Q1	1 mark
4	Easy	Fundamental and non-fundamental particles	Edexcel IAL October 2024 · Unit 4 · Q3	1 mark

Key ideas to have ready

- Fundamental: leptons (electron, muon, neutrinos) and quarks.
- Hadrons are made of quarks: baryons (qqq, e.g. proton, neutron) and mesons (q $\bar{q}$, e.g. pion).
- Exchange particles (e.g. photon) are separate from these groups.
- Antiparticles are classified the same way as their particles.

How to use this pack

1. The questions are grouped into levels (Easy). Work through them in order, and check your answers at the end of each level before moving on.
2. Every question is multiple choice with one correct answer. Write down your working anyway; that is how you find mistakes.
3. The separate mark scheme uses the same numbers and explains every answer.

Levels are based on how students did in Pearson's examiner reports where that information exists, plus our own difficulty rating. *About 1.5 minutes per question.

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Easy

Definitions and one-step ideas. Most students get these right.

Questions 1–4

Choose **one** answer for each question and put a cross in the box next to it.

Edexcel IAL January 2025 · Unit 4 · Q2

1 The standard quark-lepton model includes particles called mesons.

Which of the following is a meson?

- ☒ **A** photon
- ☒ **B** pion
- ☒ **C** positron
- ☒ **D** proton

Edexcel IAL June 2021 · Unit 4 · Q1

2 Which of the following is a fundamental particle?

- ☒ **A** antiproton
- ☒ **B** muon
- ☒ **C** neutron
- ☒ **D** pion

Edexcel IAL June 2022 · Unit 4 · Q1

3 Which of the following is a fundamental particle?

- ☒ **A** pion
- ☒ **B** proton
- ☒ **C** neutrino
- ☒ **D** neutron

Edexcel IAL October 2024 · Unit 4 · Q3

4 Which row of the table shows a fundamental particle and a non-fundamental particle?

	Fundamental	Non-fundamental
☒ **A**	alpha	neutron
☒ **B**	lepton	meson
☒ **C**	proton	electron
☒ **D**	quark	muon

End of questions. Check your answers with the matching mark scheme. More free packs and 1-to-1 tuition: **www.getbetteratphysics.co.uk**