Advance Information for Summer 2022

GCSE (9−1)

Physics A (Gateway Science)

J249

We have produced this advance information to help support all teachers and students with revision for the Summer 2022 exams.

Information

- The format/structure of the papers remains unchanged.
- This notice covers all examined components.
- For each paper, the main list shows the major focus of the content of the exam.
- Topics **not** assessed, either directly or synoptically, have also been listed.
- The information is presented in specification order, **not** in question order.
- Assessment of practical skills, maths skills, and Working Scientifically skills will occur throughout all of the papers.
- You are **not** permitted to take this notice into the exam.
- This document has **3** pages.

Advice

- It is advised that teaching and learning should still cover the entire subject content in the specification, so that students are as well prepared as possible for progression.
- Topics not explicitly given in either list may appear in low tariff questions or via synoptic questions (e.g., questions where students are asked to bring together knowledge, skills and understanding from across the specification).
- Students will still be expected to apply their knowledge to unfamiliar contexts.

If you have any queries about this notice, please call our Customer Support Centre on **01223 553998** or email general.qualifications@ocr.org.uk.

J249/01

- Section 1.1 The particle model
- Section 2.1 Motion
- Section 2.3 Forces in action
- Section 3.2 Simple circuits

Required practical skills that **will be assessed**:

- Practical Activity Group 2: Investigate the effects of forces on the extension of springs and magnets.
- Practical Activity Group 3: Measure speeds and accelerations.
- Practical Activity Group 6: Investigate the characteristics of circuit elements.

Topics **not assessed** in this paper:

- Section 4.2 Uses of magnetism

J249/02

- Section 5.1 Wave behaviour
- Section 7.1 Work done
- Section 7.2 Power and efficiency
- Section 8.1 Physics on the move
- Section 8.2 Powering the earth

Required practical skills that **will be assessed**:

- Practical Activity Group 3: Investigate braking distance.
- Practical Activity Group 4: Measure the speed of sound.
- Practical Activity Group 5: Investigate work done.
- Practical Activity Group 8: Investigate light waves reflecting, refracting and being absorbed.

There are **NO** topics that are **not assessed** in this paper.

J249/03

- Section 2.1 Motion
- Section 2.2 Newton's laws
- Section 2.3 Forces in action
- Section 3.2 Simple circuits

Required practical skills that **will be assessed**:

- Practical Activity Group 2: Investigate the effects of forces on the extension of springs and magnets.
- Practical Activity Group 3: Measure speeds and accelerations.
- Practical Activity Group 6: Investigate the resistance of metallic wires.

There are **NO** topics that are **not assessed** in this paper.

J249/04

- Section 5.1 Wave behaviour
- Section 7.1 Work done
- Section 7.2 Power and efficiency
- Section 8.1 Physics on the move

Required practical skills that **will be assessed**:

- Practical Activity Group 4: Measure the speed of sound.
- Practical Activity Group 5: Investigate work done and measure the specific heat capacity of a metal.
- Practical Activity Group 8: Investigate light waves reflecting, refracting and being absorbed.

There are **NO** topics that are **not assessed** in this paper.

END OF ADVANCE INFORMATION