

# Physics

## WACE written examination—2010 design brief

### Stage 2

#### Time allowed

Reading time before commencing work: ten minutes

Working time for paper: three hours

#### Permissible items

Standard items: pens, pencils, eraser, correction fluid, ruler, highlighter

Special items: non-programmable scientific calculators, drawing templates, drawing compass and a protractor

#### Additional information

The examination is weighted approximately equally between Unit 2A and Unit 2B.

The weighting of the content areas of the examination are within the following ranges:

20–25%	Working in physics
20–25%	Motion and forces
15–20%	Nuclear physics
15–20%	Heating and cooling
20–25%	Electrical fundamentals

These weightings apply to the whole exam rather than individual sections.

A weighting of 1–2% is allocated for appropriate use of units across the whole paper.

A combined question/answer booklet will be used. Instructions to candidates will indicate that, unless otherwise specified, their working or reasoning should be shown clearly when calculating or estimating answers. A formulae and constants insert sheet (A4 booklet size) will be provided.

Section	Supporting information
<b>Section One</b> <b>Short answer</b> 35–45% of the written exam 15–20 questions Suggested working time: 50–80 minutes	Formats include short questions that relate to: scenarios, diagrams, tables, laboratory work, calculations, estimations, explanations and predictions.  Suitable stimulus material for scenarios includes original material, scientific journals and current events in which physics is involved.
<b>Section Two</b> <b>Problem-solving</b> 45–55% of the written exam 5–7 questions Suggested working time: 80–100 minutes	Formats include scaffolded questions with parts that relate to scenarios, diagrams, tables, laboratory work, calculations, estimations, explanations and predictions.  Stimulus material is used and includes scenarios and second-hand data.
<b>Section Three</b> <b>Comprehension</b> 5–15% of the written exam 1–2 questions Suggested working time: 15–35 minutes	Questions in this section introduce candidates to unfamiliar contexts, including investigations, requiring them to apply learned concepts, principles and strategies to solve problems using the unfamiliar content.  Formats include scaffolded questions with parts that relate to a written or graphical stimulus which should not exceed one page in length.