

## **Mark Schemes for the Units**

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**June 2009**

**H810/MS/R/09**

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This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by Examiners. It does not indicate the details of the discussions which took place at an Examiners' meeting before marking commenced.

All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the Report on the Examination.

OCR will not enter into any discussion or correspondence in connection with this mark scheme.

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## Principal Learning

### OCR Level 2 Principal Learning in Engineering H810

#### MARK SCHEMES FOR THE UNITS

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# F548 - The Engineered World

By nature of the assessment criteria and the type of questions a definitive marking scheme is not available.

- 1        (a)        “Please identify the engineering achievement that you have researched.”  
          (b)        “Explain the social effects which have resulted from this engineering achievement.”

**Band 1**        Limited explanation – award one mark for identifying an engineering achievement and up to two further marks for relevant points about social effects that have resulted from this achievement.

**Band 2**        Adequate explanation – award one mark for identifying an engineering achievement and up to five marks for including depth or breadth regarding the social effects that have resulted from this achievement.

**Band 3**        Detailed explanation – award one mark for identifying an engineering achievement and up to nine marks for including clear and logical examples of the social effects that have resulted from this achievement.

Depth: Expansion of a single social effect.

Breadth:        Expansion involving multiple social effects.

- 2        “Please tell me about the political issues which may have driven the development of the engineering achievement you have researched.”

**Band 1**        Limited explanation – award one mark for identifying a single political issue and up to two further marks for relevant points

**Band 2**        Adequate explanation – award up to six marks for explaining at least two relevant political issues involving depth or breadth

**Band 3**        Detailed explanation – award up to six marks involving at least two relevant political issues and up to a further four marks for including logical and relevant supporting evidence that demonstrates depth and breadth

Depth: Expansion of a single political issue.

Breadth:        Expansion involving the linking of political issues with other issues e.g. human, social and economic effects of political issues

- 3        “Please explain the merits of professional body membership associated with different engineering professions.”

**Band 1**        Limited information – award one mark for identifying an appropriate professional body and up to a further two marks for relevant points about professional body membership

**Band 2** Adequate information – award one mark for identifying an appropriate professional body and up to a further five marks for explaining the relative merits of suitable professional body membership

**Band 3** Detailed information – award one mark for identifying an appropriate professional body and up to a further nine marks for giving a response outlining the merits of membership of a professional body including logical and relevant supporting evidence

**4 (a)** “Now, please tell me which engineering sectors you have studied.”  
**(b)** “Now, for one of the sectors you have studied, please tell me about the basic duties and responsibilities of a craft person.”

**Band 1** Limited information – award one mark for stating a sector and up to two further marks for a relevant point relating to a craft person

**Band 2** Adequate information – award two marks for stating at least two sectors and up to four further marks that involves a response with depth or breadth about a craft person

**Band 3** Detailed information – award two marks for stating at least two sectors and up to a further eight marks that involves a response with depth and breadth about a craft person including logical and relevant supporting evidence

Depth: Focussing on a single role in a single sector

Breadth: Multiple roles in a single sector or, a single role in more than one sector

**5** “Now, please explain the impact of sustainability on resources and the way engineering considers conservation issues.”

**Band 1** Limited explanation – award one mark for identifying an impact of sustainability on resources, and up to two marks for stating as to how engineering broadly considers conservation issues

**Band 2** Adequate explanation – award one mark for identifying an impact of sustainability on resources and up to five marks for a response which includes relevant supporting examples of how engineering considers conservation issues

**Band 3** Detailed explanation – award one mark for identifying an impact of sustainability on resources and up to nine marks for a response which includes logical and relevant supporting examples of how engineering considers conservation issues

**6** “What can you tell John about his duty as an employee and the responsibilities of his employer?”

**Band 1** Limited explanation – award one mark for a basic definition of the duties of an employee, one mark for the duties of an employer, and one mark for making reference to legal responsibilities

**Band 2** Adequate explanation – award one mark for a basic definition of the duties of an employee, one mark for the duties of an employer, one mark for making reference to legal responsibilities and up to three further marks for a response which includes relevant examples

**Band 3** Detailed explanation – award one mark for a basic definition of the duties of an employee, one mark for the duties of an employer, one mark for making reference to legal responsibilities and up to five further marks for a response which includes logical and relevant examples. Additionally, two marks for reference to appropriate legislation.

# Grade Thresholds

OCR Level 2 Principal Learning in Engineering H810  
June 2009 Examination Series

## Unit Threshold Marks

Unit		Maximum Mark	A*	A	B	C	U
F548	Raw	60	48	36	24	12	0
	Points	10	8	6	4	2	0
F549	Raw	60	48	36	24	12	0
	Points	10	8	6	4	2	0
F552	Raw	30	24	18	12	6	0
	Points	5	4	3	2	1	0
F554	Raw	30	24	18	12	6	0
	Points	5	4	3	2	1	0

## Specification Aggregation Results

No learners aggregated this series. Aggregation is not available for this specification until June 2010.

For additional guidance on the points awarding system, please refer to the Admin Guide for Diplomas at:

<http://www.ocr.org.uk/administration/documents.html?section=general>

Statistics are correct at the time of publication.

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