

**Chapter test grades G–E** teacher notes**When students should sit these tests**

These tests are intended to be taken by students when they have completed a chapter.

**Length of test**

Each test is designed to last 30 minutes and to give students an idea of what it is like to work under examination type conditions.

**Use of calculator**

Students can choose whether to use a calculator during the test, apart from those questions where it is indicated that a calculator should or should not be used.

**Grade coverage**

Each test covers three grades, which are identified at the top of the test. When a chapter covers more than three grades, two overlapping tests are provided. Where a chapter covers fewer than three grades, additional grade content has been added.

For example, if a chapter covers grades F, E, D and C, the following tests will be provided:

- One test covering grades F, E and D
- One test covering grades E, D and C

Give out the test that you feel is most appropriate for the students in the class.

**Mark scheme**

The mark scheme contains exemplar solutions to each question and marks in the style of an AQA mark scheme. The following abbreviations are used:

- M = Method marks awarded for a correct method which could lead to a correct answer.
- A = Accuracy marks awarded when following on from a correct method. It is not necessary to always see the method. This can be implied.
- B = Marks awarded independent of method.

It is useful to share these mark schemes with students and explain the different types of marks that are awarded. Use the 'Examiner's tips' to discuss how students can improve their marks for each question.

**Grade boundaries**

The mark scheme is followed by a grade boundary table that gives an approximate indication of the grade at which the student is working. This will allow targets to be set for future work based on the student's actual performance.

Note that these grade boundaries are offered for guidance only and are not necessarily a reflection of the grade boundaries used by AQA for marking real papers.

**Chapter test** grades G–E **answers**

**Solutions**

**Marks**

**Examiner's tips**

**1 a** There are sixteen 10p coins.

**B1**

**b** See diagram below.

**B5**

You score 1 mark for each correct line.

Coin	Number of coins
1p	○
2p	○ ◐
5p	◐
10p	○ ○ ○ ○
20p	○ ○ ○ ○ ○ ◐

**Key:** ○ = 4 coins

**c** Bars of appropriate height (7, 17 and 6) added to bar chart

**B3**

You score 1 mark for each correct bar.

**d** The 20p coin is found most.

**B1**

**2 a** 56 were sold in 2002 and 60 in 2003.

**B2**

These marks are for reading the two values off the graph correctly.

**b**

Category	Year	Number sold
4 × 4s	2002	12
	2003	8
Hatchbacks	2002	20
	2003	20
Saloons	2002	24
	2003	32

**B3**

You only score these marks if you have written down both answers for each category.

**c** The mode was the saloon in 2003.

**B2**

1 mark for 'saloon' and 1 for '2003'.

The mode is the model of car with the highest frequency.

**d** Sales of 4 × 4s decreased by 4.

**B1**

You **must** state that it is a decrease and give the value.

Hatchbacks' sales did not change.

**B1**

Saloons increased by 8.

**B1**

You **must** state that it is an increase and give the value.

- 3** 2002: 56 vehicles needs  $360^\circ$   
 Therefore 1 vehicle needs  $6\frac{3}{7}^\circ$   
 2003: 60 vehicles needs  $360^\circ$   
 Therefore 1 vehicle needs  $6^\circ$

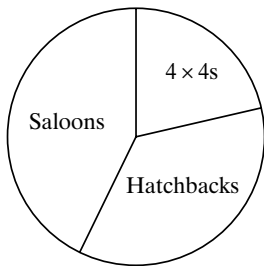
**2002 chart**

Vehicle	Angle
4 × 4s	$12 \times 6\frac{3}{7}^\circ = 77^\circ$ (nearest degree)
Hatchbacks	$20 \times 6\frac{3}{7}^\circ = 129^\circ$ (nearest degree)
Saloons	$24 \times 6\frac{3}{7}^\circ = 154^\circ$ (nearest degree)

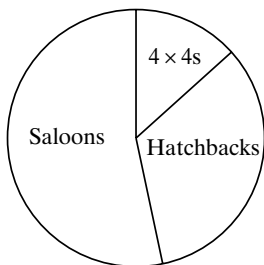
**2003 chart**

Vehicle	Angle
4 × 4s	$8 \times 6^\circ = 48^\circ$
Hatchbacks	$20 \times 6^\circ = 120^\circ$
Saloons	$32 \times 6^\circ = 192^\circ$

**Car sales 2002**



**Car sales 2003**



**M1**

You only get this method mark once.

**A1**

**(M1)**

**A1**

**M1**

Multiply each number of vehicles by  $6\frac{3}{7}^\circ$  to get the angle.

You only get this method mark once.

**(M1)**

Multiply each number of vehicles by  $6^\circ$  to get the angle.

**A3**

You score 3 marks for all six answers. You lose a mark for each error.

**M1**

1 mark is for drawing the chart correctly.

**A1**

For chart 1.

**A1**

For chart 2.

**Grade boundaries**

Mark achieved	Grade awarded
25–30	<b>E</b>
15–24	<b>F</b>
5–14	<b>G</b>
0–4	<b>U</b>