

Principal Assessor Report 2005

Assessment Panel:

Geology

Qualification area

**Subject(s) and Level(s)
Included in this report**

Geology Intermediate 2

Statistical information: update

Number of resulted entries in 2004	30
Number of resulted entries in 2005	16

General comments re resulted entry numbers

The number of candidates remains at a very low level. The number of 16 in 2005 compares with 30 in 2004; 20 in 2003; 19 in 2002; 28 in 2001; and 19 in 2000.

Statistical Information: Performance of candidates

Distribution of awards including grade boundaries

Distribution of awards	%	Cum %	Number of candidates	Lowest mark
Maximum Mark- 110		-	-	-
A	12.5	12.5	2	77
B	25.0	37.5	4	66
C	18.8	56.3	3	55
D	31.3	87.5	5	49
No award	12.5	100.0	2	-

General commentary on passmarks and grade boundaries

- While SQA aims to set examinations and create mark schemes which will allow a competent candidate to score a minimum 50% of the available marks (notional passmark) and a very well-prepared, very competent candidate to score at least 70%, it is almost impossible to get the standard absolutely on target every year, in every subject and level
- Each year we therefore hold a passmark meeting for each subject at each level where we bring together all the information available (statistical and judgmental). The Principal Assessor and SQA Qualifications Manager meet with the relevant SQA Business Manager and Statistician to discuss the evidence and make decisions. The meetings are chaired by members of the senior management team at SQA
- We adjust the passmark downwards if there is evidence that we have set a slightly more demanding exam than usual, allowing the pass rate to be unaffected by this circumstance
- We adjust the passmark upwards if there is evidence that we have set a slightly less demanding exam than usual, allowing the pass rate to be unaffected by this circumstance
- Where the standard appears to be very similar to previous years, we maintain similar grade boundaries
- An exam paper at a particular level in a subject in one year tends to have a marginally different set of grade boundaries from exam papers in that subject at that level in other years. This is because the particular questions are different. This is also the case for exams set in centres. And just because SQA has altered a boundary in a particular year in say Higher Chemistry does not mean that centres should necessarily alter boundaries in their prelim exam in Higher Chemistry. The two are not that closely related as they do not contain identical questions
- Our main aim is to be fair to candidates across all subjects and all levels and maintain standards across the years, even as arrangements evolve and change.

Comments on any significant changes in distribution of awards/grade boundaries

As in all previous years grade boundaries were set at 55 for a C award; 66 for a B; 77 for an A; and 93 for an Upper A. The small number of candidates means that no valid conclusion may be drawn on changes to distribution of awards. In 2005, 60% of candidates gained a C award or better. This compares with 72.4% in 2004; 55.6% in 2003; 78.9% in 2002; 67.9% in 2001; and 53.6% in 2000. (All figures pre appeal) It is noteworthy, perhaps, that of the six candidates with no award, four had marks in the range 52-54.

Comments on candidate performance

General comments

Field work: Mean mark 9.6 / 15

This compares with 9.4 in 2004; 9.9 in 2003; and 9.7 in 2002.

While fieldwork studies were not moderated, the mean of 9.6 suggests that they were of good quality.

Written paper: Mean mark 52.9 /95

This compares with 52.0 in 2004; 46.9 in 2003; and 54.6 in 2002.

While responses were variable, most candidates performed well.

The main strengths were:

- placing geological events in the correct order from oldest to youngest
- planning a field trip
- identifying sedimentary environments.

The main weaknesses were:

- performing calculations
- interpreting graphs
- identifying fossils and naming morphological features
- describing rock forming processes
- stating mineral properties
- explaining why earthquake shadow zones exist.

Areas of external assessment in which candidates performed well

Q1(b) Completing a rock identification key.

Q3 On relative ages of rocks and fossils.

Q4(b), 5(d), 13(a) Placing geological events in order from oldest to youngest.

Q7(a) Plotting points on a graph.

Q8 Planning a field trip.

Q9 Explaining observations relating to lava flows.

Q10 On sedimentary environments.

Q11(a)(b)(c) On plate tectonics.

Q13(b) Explaining observations relating to raised beaches.

Areas of external assessment in which candidates had difficulty

Q1(a) Stating mineral properties.

Q1(c) On rock forming processes.

Q1(d) On the formation of amygdalae.

Q2(a) Naming fossils and identifying morphological features.

Q2(c) Drawing pallial lines on bivalves.

Q6 Interpreting a graph and performing calculations.

Q11(d) Explaining how a transform fault differs from a tear fault.

Q12(b) Interpreting a graph and performing calculations.

Q12(c) On earthquake shadow zones.

Recommendations

Feedback to centres

Fieldwork:

While no fieldwork studies were moderated, it is plain that standards remain high. Centres are to be congratulated on their continuing fine work.

Written paper:

While most candidates performed well, weaknesses commonly appeared in the following areas:

- Performing calculations
- Giving fully detailed interpretations of graphs
- Mineral properties
- Rock forming processes
- Fossil morphology
- Differences between a transform fault and a tear fault