

# General Certificate of Education

## Archaeology 5011

### *Unit 2 Archaeological Sources and Methods: Post-Excavation, Dating and Interpretation*

## Mark Scheme

### *2005 examination – June series*

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

## ACH2

### Post-Excavation, Dating and Interpretation

#### Question 1

Study **Figure 1** and use your own knowledge.

Explain how an archaeologist could establish the sources of the artefacts shown.

(6 marks)

- L1: Plausible but incorrect or unlikely. Able to identify a characterisation technique which has been used for some lithic studies. **1**
- L2: **Either** able to name thin section/petrology but explanation is vague.  
**Or** able to describe aspects of the process but without correct terminology.  
**Or** able to describe accurately how another characterisation technique which has been used for some lithic studies could be employed. **2-4**
- L3: Able to explain using appropriate terminology on how petrological thin sections are used. **5-6**

The method used would almost certainly be petrological thin section. For 6 marks expect clear explanation of what is looked for in a thin section (colour/shape/structure of mineral crystals etc) **and** the relation to known geological sources from other samples or geological maps. Answers which just refer to finds of other worked artefacts of a similar nature alone will not get beyond 2 marks. Give 4 marks for good accounts of thin section processes which do not relate to geology even implicitly. Where unusual techniques are suggested which are valid for identifying trace element in some lithics (e.g. XrD for chert or Isotope analysis for marble) credit within L2 according to how well the method is related to lithics.

#### Question 2

Study **Figure 2** and use your own knowledge.

What types of evidence could the archaeologists have used in order to produce this map? (12 marks)

- L1: Brief lists including some relevant sources or accounts of how some relevant methods are collected or equipment used. **1-3**
- L2: **Either** good lists which are directly relevant to this map but without development. If completely scattergun, restrict to 4.  
**Or** good, explicit discussion of how at least one method or type of source could be used in constructing **this** map. **4-6**
- L3: **Either** sensible discussion of **2-3** relevant sources **related directly** to this map.  
**Or** extensive, relevant lists with some brief comments about **this** map. **7-9**
- L4: Discussion of 4 or more relevant methods/sources **clearly related** to this map.  
**Or** very comprehensive lists, consistently well focused. **10-12**

Do not expect a complete range of methods to be mentioned for maximum marks. Do not reward material unless directly relevant. Allow both direct and indirect evidence. Maximum of 5 for generic environmental answers which contain much relevance **but are not made specific to this map**.

Where the churches are discussed, credit within the overall band. Unrealistic expectations about the survival of coprolites or the ability of phosphate analysis to differentiate between different animals should not be rewarded. Dendrochronology and TL are unlikely to be relevant.

For example:

Geology, morphology etc	desktop sources, observation
Fish	bones, weights/hooks, traps
Oats/Barley	pollen, plant remains, locations in valleys
Deer	bones, antler artefacts, environmental evidence for woods, hunting tools
Sheep/cattle	bones, environmental evidence for grazing land, spindle whorls and loom weights
Iron, clay	local geological maps, slag, kilns
Pebbles	finds on-site
Seaweed	site catchment analysis
Wildfowl	site catchment analysis, bones, evidence of hunting equipment
Fuel	environmental evidence for wood or peat (bog)

Generic environmental might include pollen, beetles, faunal data, site catchment analysis (but term not required) for most elements, other plant remains, soils, historical records, phosphate analysis (if explained) etc. Responses may be organised by area, method or potential sources.

### Question 3

Study **Figure 3** and use your own knowledge.

How might you account for the differing patterns in the excavated finds across these three excavations? (9 marks)

- L1: Generic responses, e.g. ‘better techniques or more excavators’. **1-2**
- L2: Responses which focus on one of:
- the scale and purpose of excavation (e.g. with reference to the introduction).
  - the possibility of different recovery techniques or retention policies.
  - different locations within the fort. **3-5**
- L3: Two elements of Level 2 clearly addressed. **6-8**
- L4: Three parts Level 2 clearly addressed. **9**

Credit responses which use examples from the sources to illustrate plausible reasons towards the top of bands. Note that the question is about recovery of artefacts, not detection of features.

Better responses are likely to refer explicitly to the different areas of the site plan excavated by each team and to attempt to explain, e.g. different areas may have had different functions and therefore finds. Also different dates. Patterns within the tables of finds may also reflect different purposes of excavation or recovery strategy and methods.

A specific, plausible example of why modern excavations might be ‘better’ needed for 2 marks.

Answers which speculate about early excavations removing all of particular finds or robbery of the site are low Level 1. Credit responses which identify accelerated bone decay as a result of exposure to the atmosphere by earlier excavation.

#### Question 4

Study **Figure 4** and use your own knowledge.

These rock carvings were found carved in the bedrock at the summit of Dunadd. How might archaeologists investigate them further in order to try to understand them and date them? (6 marks)

- L1: Plausible but unlikely responses, e.g. ‘when boars were about’ (1 mark). Very basic responses on the right lines (1-2 marks). **1-2**
- L2: Reasonable point on either nature/function/technology or date. **3-5**
- L3: Both elements of Level 2. **6**

Credit any specialist knowledge on dating petroglyphs or Ogham script but do not expect it. Discussion about how to date the bedrock to provide a TPQ should **not** be credited. Credit historical records about Fergus to provide a TAQ within bands.

Possible responses might include:

- Examination of tool marks, studying iconography.
- Relation to known technology, artefacts or written sources with similar imagery or carved in the same way.
- Location, written accounts, antiquarian sources, etc.

Reward within band candidates who suggest plausible function for footprint – but do not expect it as reproduction does not make it easily visible.

#### Question 5

Study **Figure 5** and use your own knowledge.

What techniques and sources of information might you use to investigate the production of metal artefacts at Dunadd? (9 marks)

- L1: Generic or vague responses with some merit. **1**
- L2: Brief or generalised consideration of a narrow range of relevant lines of enquiry or scattergun responses, including lists which contain some relevant methods. Particularly good responses which only address one method or source. **2-4**
- L3: **Either** several valid lines of enquiry outlined **or** two investigations described in detail. **5-7**
- L4: 3 or more relevant lines of enquiry described in detail. Must include some relevant scientific techniques for this level. **8-9**

Credit responses with a firm grasp of relevant terminology at the top of bands. Credit at the bottom of relevant bands responses which demonstrate an implicit understanding of lines of enquiry in explaining how metal manufacturing took place here.

Possible responses might include:

**Characterisation:** composition of elements linked to appropriate analytical techniques to establish likely origin, relative date etc. Analysis of slag. Identification and sourcing of inset stones.

**Inspection:** visual/microscope/SEM to determine wear patterns (use/function/purpose) and manufacturing technique (craftsmen etc). X-ray to understand structure etc.

**Comparative study:** using archives to establish date and associations/social significance. Typology.

**Experiment** or **Ethnographic study** to determine possible use of manufacturing techniques/skill levels.

On site distribution of production areas.

Note – brooch not necessarily from Dunadd, although it may be. Credit distribution of products off site (e.g. trade) or discussion of art within bands.

## Question 6

Study **Figure 6** and use your own knowledge.

In addition to a printed publication, a dedicated web site has been set up by the authors of the 1980-81 site report. **Figure 6** is an extract from the first page of the on-line archive.

What advantages does the internet offer over conventional site reports? (8 marks)

- L1: Simple generic advantages of the internet in terms of communication, e.g. reach wider audience, available worldwide, speed of dissemination, cost. Do not credit things which the Internet can provide which books already do. Reserve 2 marks for developed responses on access. **1-2**
- L2: Identification of some internet features which are helpful in researching or presenting information **generically**, e.g. more colour pictures, panoramas, navigation aids, speed of publication, translation packages, interactive features, hyperlinks, definitions, contacts, cross-referencing, different sections, video clips, updates, differentiated presentations. Reserve 5 marks for responses with archaeological examples. **3-5**
- L3: **Either** very wide range of Level 2 points **or** largely Level 2 response but **focus** is specifically on presenting archaeological sites rather than generic to any area of knowledge, e.g. video clips of excavation process, 3D reconstructions of features. Credit examples from Dunadd at top of band. **6-7**
- L4: Specific focus on advantages for site reports, e.g. 3D and multiple overlay presentation of stratigraphy, links to comparator sites or artefacts, detailed plans which go beyond constraints of A4/A3, access to site archives. **8**