



# **Internal Assessment Report: Physics (SG)**

Sector Panel or SSC:

Physics

The purpose of this report is to provide feedback to centres on verification in National Qualifications in this subject.

# Standard Grade

## Element/coursework verified

Physics — Practical Abilities

### General comments

Fifteen centres were verified this year, with seven centres failing due to arithmetic errors and assessment errors.

Centres are generally applying the assessment criteria correctly. However, it was noticeable that many centres were not entering marks for the investigations but ticks/crosses, or are leaving blanks. Centres are reminded that marks, 0 or 1, are to be included. There was evidence of pupils only getting the opportunity to complete one Investigation, with no comment or explanation from the centres. Comments would be useful. All pupils should get the opportunity to attempt two Investigations.

Centres were more lenient in marking graphs this year. Centres were accepting sketches of lines in graphs rather than neat lines, and accepting poor best-fit lines and joining the dots, which are unacceptable.

Centres are reminded that all pupils must get the opportunity to attempt **all** techniques. This is a requirement of the assessment. Centres will fail verification if there is no evidence of this without an explanation.

Some centres have conducted internal verification, which has to be recommended as good practice. However, the team found it difficult to see which mark was the actual mark awarded to pupils — centres should make clear the final mark awarded.

Administrative arrangements in preparation for verification require careful reading and preparation by some centres. Some flyleaves were not signed, some used the Science flyleaf rather than Physics, some did not send the SGER form with grades, some did not complete all the grades in the SGER form for all pupils, and some centres sent the wrong number for sampling (it should be 12, unless from a small centre).

### Advice on good practice and areas for further development

There was one innovative Investigation on body temperature and exercise. The majority of Investigations continue to be on solar cells, pendulums, crashes, thermistors and electromagnets.

There was a slight improvement in centres' ability to assess the RR3 aspect of the Investigation.

It is good practice for centres to carry out internal verification, and not only if selected for external verification. Where this is being done, there is good evidence of teamwork and discussion taking place within departments.

The following were identified as areas for further development:

- ◆ Graphs should be more carefully assessed.
- ◆ Better internal verification and a clear final mark should be indicated.
- ◆ All pupils should have the opportunity to attempt all techniques.
- ◆ All pupils should have the opportunity to do two Investigations.
- ◆ When selected for verification, centres should ensure that all the paperwork is in order and that arithmetic is checked thoroughly.

Centres should use the following resources to help explain the standards and assessment criteria:

- ◆ exemplification materials
- ◆ SQA's website
- ◆ 'Understanding Standards' SQA workshops
- ◆ development visits
- ◆ the Qualifications Manager at SQA