



General Certificate of Education
Advanced Level Examination
June 2010

Human Biology

HBI6T/Q10/TN

Unit 6T A2 Investigative Skills Assignment

Teachers' Notes

Confidential

**A copy should be given immediately to the teacher(s) responsible for
GCE Human Biology**

Teachers' Notes

CONFIDENTIAL

These notes must be read in conjunction with *Instructions for the Administration of the Investigative Skills Assignment* on the ISA disk and published on the AQA Website.

The effect of using one or two eyes on the perception of distance

Candidates are required to find out how using one or two eyes affects their ability to judge distance.

Materials

In addition to access to general laboratory equipment, each candidate needs

- 10 counters such as tiddlywinks
- a small container
- a clear, flat surface to work on
- a ruler or tape measure

Managing the Investigation

Candidates must individually collect data from the trials with one and then with two eyes open. They should decide what is a 'hit' or a 'miss' when they drop the counter. Every candidate must record the number of times they record a 'hit' or a 'miss.' Sufficient data should be collected to enable a suitable statistical test to be used.

It is very important that candidates are told that they must not practise this experiment before they start the investigation.

Candidates should be told that if they wear spectacles they should do so in this investigation.

Technical Information

The small container could be a 100 or 150 cm³ beaker, or a container of a similar size, such as a plastic pot which had previously contained 35 mm film. These might be available from film processing shops. The diameter of the container should be approximately twice the diameter of the counter.

A thin layer of cotton wool should be used to line the bottom of the container to prevent the counters bouncing out.

Suitable counters, or tiddlywinks, may be obtainable from your LEA's Junior School section.

A clear, flat surface should be made available. Bench tops are ideal, together with a stool or chair.

If you use different apparatus, please change the Task Sheet to reflect the equipment available.

You should instruct candidates to bring a calculator.

One week before sitting Stage 1 of the ISA, teachers may give their candidates the following information.

You will investigate the perception of distance using one or two eyes.

There should be no further discussion of this topic.

In this investigation, teachers must not give candidates the following information

- how to decide what is a 'hit' and what is a 'miss'
- how many repeats to do
- which statistical test to carry out.