

**4800-121 (Paper)**

**Essential Skills Application of Number Level 2**

**Chief Examiner's report – October 2017**

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# 1 Introduction

The purpose of this document is to provide centres with feedback on the performance of candidates for 4800-121 Essential Skills Application of Number Level 2.

This report covers the period from March 2017 to September 2017.

## 2 Overall Performance

### 2.1 Areas of good performance

A good level of basic numeracy skills has been demonstrated on both tasks. Candidates have shown proficiency at selecting and calculating suitable **averages** for sets of data.

Most candidates have also shown a good understanding of **fractions, percentages** and the **calculation of ranges**. Numerical skills have also been used effectively for **solving problems and calculating lengths** in Task 1.

**Basic probability** has been successfully calculated as a fraction by a high number of candidates. The presentation of results using **charts** has also been carried out extremely well.

### 2.2 Areas for development

There have been a significant number of candidates unable to show understanding on the following areas of the Level 2 papers.

**Scale Diagrams.** Candidates have struggled drawing a scale diagram. Good understanding of scales and their use are skills which can significantly boost a candidate's total marks. A significant number of diagrams created by the candidates are out of tolerance by a large number of squares. Only a half square tolerance is allowed for all diagrams across the papers.

**Comparing Trends.** Candidates are having trouble when asked to compare trends over different periods of time. They predominantly make individual comments on the trend(s) of either one, or both, of the time periods. They need to draw comparisons by making specific reference to the trends being similar or different with supporting information.

**Checking.** A large number of candidates are not even attempting to perform a check of a previous calculation. This is another area which candidates can, with simple preparation, almost guarantee an additional mark on their paper. Checking calculations requires candidates to use a different method from the original calculation, usually reverse calculations or approximation. Candidates must show the original calculation in their working.

**Probability.** Whilst most candidates are competent at working out a probability in terms of a fraction, there are few who can construct and interpret a tree diagram. They must be able to draw and accurately label a tree diagram before using its values to calculate probability. There are still too many candidates who are unable to draw and use probability scales correctly. These must be labelled from 0 to 1 whereas some candidates are giving an upper value in excess of 1. The candidates are also struggling to identify the correct position for their probabilities on the scale.

**Explanations.** Candidates are struggling to provide satisfactory explanations for their choice of data averages. Reference is too often being made to the ease of calculation or to the details of the calculation method. Candidates need, instead, to be confident at knowing the advantage of their choice of average based on its accuracy. For example, reference to extreme values not affecting the result is a good justification for using the median. Reference to all data being used is a good reason for the choice of mean. On some occasions, a comparison of two values will explain findings and candidates should be taught to use words that indicate comparison, eg 'the highest average'. Interpretation of the range is also poorly attempted with candidates unable to make accurate statements on the consistency of data.

**Ratio on scale.** The use of ratio to describe the scale on diagrams is proving challenging for some candidates to understand. It is important that the candidates are prepared for the scale being presented in this way.

**Area.** Whilst most candidates were able to calculate the area of a rectangle, only a small number have been able to calculate the area of an L-shape. An understanding of just one method for calculating this shape would have increased a large number of marks totals by one to three marks.

**Conversions within the same system.** Very few candidates were able to convert a measurement given in centimetres to metres.

Generally candidates should approach each task as a whole with the view that earlier parts of a task may inform later parts.

**Units.** Some candidates are giving answers in incorrect money format, eg an answer of £73.50 written as £73.5 will be penalised.

The presentation of results in charts has been done extremely well by most candidates. However, there are common reasons why some candidates fail to achieve full marks for charts:

**Charts / graphs:**

- fail to label axes, particularly the vertical axis
- do not construct a continuous linear scale on the vertical axis
- fail to start the vertical scale at zero (bar chart only).

**Trend lines**

- generally a straight line drawn between graph plots with approximately the same number of plots either side of the line will suffice. Many candidates draw a line with the correct gradient but position it with the vast majority of points either above or below the line.

**General**

- paper based presentations are more likely to be accurate if candidates use a ruler.

### **3 Recommendations/Advice for centres**

Centres should carefully consider whether a candidate is operating at an appropriate level for entry at Level 2. Unfortunately there have been a small number of candidates who were clearly not anywhere near the standard required.

There has been a lack of working out shown on a significant number of papers. Candidates who have failed to provide a correct answer are, therefore, missing out on compensation marks. It is recommended that the candidates show as much working out as possible.

Some candidates are using the extra space for workings and answers at the back of the exam papers. It is advisable that the candidates indicate when they have done this on the relevant answer section of the paper.

Centres should advise candidates about appropriate 'exam technique' particularly with regard to attempting Tasks in order. Candidates may attempt Tasks in any order and it may be to a candidate's advantage to start with Task 2 rather than Task 1.

### **4 Additional Information**

Centres should be aware that pass marks may vary from paper to paper as a result of an awarding process undertaken by City & Guilds. Any difference in pass marks reflects the perceived and actual difference in demand of the exam papers. Therefore, it is possible that two candidates with the same score may have different overall results (pass or fail) if they sat different papers.