Province of the
EASTERN CAPE
EDUCATION

CHIEF MARKER'S REPORT

SUBJECT:	MATHEMATICAL LITERACY

GRADE:	ABET LEVEL 4	PAPER:	

1. ANALYSIS OF QUESTION BY QUESTION PERFORMANCE

QUESTION 1

1.1.2 Some learners don't know the meaning of brackets. As a result some learners add instead of multiplying, eg. for (-6)(-5), their answer is -11 instead of 30, the correct answer.

1.1.3 In addition of fractions, learners/candidates are supposed to convert mixed fractions first to improper fractions, or add whole numbers and proper fractions together first and then find the L.C.M. in order to get the correct answer. If it is addition, candidates must add the numerators.

1.1.4 Most candidates don't write the units in their answers. They are penalised for ignoring the units and don't get the full marks. Example they just write 50 instead of 50 apples.

1.1.9 Very few learners managed to get the correct answer because they are supposed to convert hours to minutes or vice versa before any calculation. The question is saying : Calculate 2½ hours - 35 minutes, so they have to convert 2½ hours to minutes firs in order to get 150 minutes - 35 minutes = 115 minutes.

1.2.1 and 1.2.2 Learners are expected to give their answer in the simplest form by doing cancellation. Example 40/100 = 2/5, which is the simplest form.

QUESTION 2

2.3.1 Candidates don't know the formula for calculating perimeter. As a result they cannot get the correct answer. Perimeter = l + b + l + b, then substitute = 8 + 5 + 8 + 5, then answer = 26m, the correct answer. Candidates are asked to show their calculations, step by step, in order to obtain all the marks.

2.3.2 Even in this question, candidates are given a formula for volume. What is needed from them is correct substitution and correct multiplication of numbers and not to forget to write the unit of volume, which is m^3.

2.3.3 In this question which involves the application of Pythagoras' Theorem, the performance of candidates has not been good at all for 6 consecutive years and I think the challenge is with the educators. Candidates must apply

Pythagoras' Theorem saying, the square of the hypotenuse is equal to the sum of the squares of the two opposite sides.
$F^2 = (2,6)^2 + (2,2)^2 = 6,76 + 4,84$ Then add to get $F^2 = 11,6\ m^2$. In order to get F, apply a Square root to both sides i.e. $\sqrt{(F^2)} = \sqrt{(11,6m^2)}$. Therefore, F = 3,41m.

QUESTION 3

3.1.5 Some candidates don't know the formula for mean, which is the total number of scores divided by the number of terms, and they therefore didn't get the correct answer.
3.16 to 3.1.8 Candidates failed to write down the units, ºC, in their answers.
3.1.7 Candidates were supposed to arrange the scores first in ascending or descending order.
3.1.9 Few candidates managed to complete the bar graph from Thursday to Sunday. For Thursday, they were given minimum and maximum temperatures of 13ºC and 20º; on Friday, 13ºC and 21ºC; Saturday, 10ºC and 16ºC; and Sunday, 9ºC and 18ºC.

QUESTION 4

In **4.2 and 4.3.1**, learners are given the formula for speed. However, they are unable to correctly substitute the variables.
In **4.3.2**, candidates fail to apply the knowledge that running on a bend is more difficult than on a straight track.

QUESTION 5

From **5.2 to 5.4.1**, the candidates made the same mistake of ignoring units and were penalised for that and lost marks.

QUESTION 6

In **6.1**, the correct answer is G3, and not 3G.

In **6.3 and 6.4**, learners need knowledge on map direction to be able to give accurate directions. Very few candidates managed to get marks in these questions.

7. ANY ADVICE THAT YOU COULD GIVE TO EDUCATORS TO HELP LEARNERS TO REACH THE EXPECTED LEVELS

- Educators must cover all the unit standards.
- Educators must have passed at least grade 12 Mathematics.
- Some questions are taken from the SBAs. Therefore all SBA tasks must be completed.
- Revision of previous question papers where the unit standards are covered.
- Calculations must be shown.