## THE NATIONAL EXAMINATIONS COUNCIL OF TANZANIA



# ANALYSIS ON THE ASSESSMENT OF READING, WRITING AND ARITHMETIC SKILLS (3Rs) OF STANDARD TWO PUPILS 2019 

Prepared by:
The National Examinations Council of Tanzania, P.O. Box 2624, Dar es Salaam.

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May, 2020

Published by:
The National Examinations Council of Tanzania
P.O. Box 2624

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## FOREWORD

The National Examinations Council of Tanzania (NECTA) assessed Reading, Writing and Arithmetic Skills (3Rs) for Standard Two pupils in 2019. The assessment was done to evaluate the pupils' competence in those skills. All regions in Tanzania Mainland participated in the assessment whereby a total of 524 public primary schools were sampled from all councils for the assessment. Moreover, 2 to 5 schools were sampled from each Council based on rural and urban criteria.

The National Examinations Council prepared the assessment tools for all the three skills. All 524 schools were assessed by using question papers for Writing and Arithmetic Skills. Furthermore, a total of 482 schools were assessed by using Reading scale for Reading and Arithmetic Skills which were administered orally while 42 schools used tablets to administer the assessment. In addition, Head teachers and assessors filled out a questionnaire regarding teaching and learning status of 3Rs so as to find out to what extent resources such as textbooks for teaching and learning of Reading and Writing Skills were available in school settings.

A total of 35,358 pupils were registered for 3Rs assessment of which 30,158 sat for the assessment. In addition, only 28,816 pupils out of 30,158 participated in both Reading Skills and Arithmetic. Therefore, 5,200 pupils did not sit for the assessment due to various reasons.

The analysis of pupils' responses indicates that the performance of the pupils who sat for the assessment in all the three Skills was good (69.02\%). The performance in Writing Skills was the highest as 75.20 percent of pupils had the performance ranging from average to very good unlike Reading Skills (74.80\%) and Arithmetic Skills (64.20\%).

This report is divided into six chapters. Chapter one is an introduction. Chapter two, three and four describe the assessment in Reading, Writing and Arithmetic skills, respectively. Chapter five discusses the findings from the questionnaires whereas Chapter six presents conclusion and recommendations.

The National Examinations Council of Tanzania has prepared this report so as to give feedback to stakeholders on the strengths and challenges faced by the pupils in acquiring 3Rs Skills.

It is expected that through this report, the educational stakeholders will get feedback on pupils performance in 3Rs and find the best ways to strengthen the teaching and learning of the $3 R \mathrm{~s}$ in order to improve the pupils' competence in the skills.


Dr. Charles E. Msonde

## EXECUTIVE SECRETARY

## CHAPTER ONE

## SAMPLE, ASSESSMENT TOOLS AND DATA ANALYSIS

### 1.1 Introduction

The National Examinations Council of Tanzania assessed Standard Two pupils in Reading, Writing and Arithmetic Skills (3Rs) on $31^{\text {st }}$ January, 2020 and $01^{\text {st }}$ February, 2020. The aim was to determine the pupils' ability in those skills. The assessment was conducted to 2019 Standard Two pupils.

In Reading Skills, the pupils' competence was assessed basing on their ability to identify sounds, letters, read a passage fluently, carefully and quickly as well as to answer questions which aimed at testing comprehension and expansion of vocabulary. Moreover, in Writing Skills, the pupils' competence was assessed on the basis of word formation by using pictures, identifying the words written in capital and small letters, as well as copying a passage and using the punctuation marks correctly. In Arithmetic Skills, the pupils' competence was assessed basing on their ability to identify the missing numbers in the sequence of ascending and descending numbers, add and subtract numbers which do not exceed 999 as well as solving word problems.

### 1.2 Assessment Sample

The assessment was conducted in the 26 regions of Tanzania Mainland, namely; Arusha, Dar es Salaam, Dodoma, Geita, Iringa, Kagera, Katavi, Kigoma, Kilimanjaro, Lindi, Manyara, Mara, Mbeya, Morogoro, Mtwara, Mwanza, Njombe, Pwani, Rukwa, Ruvuma, Shinyanga, Simiyu, Singida, Songwe, Tabora and Tanga. A total of 186 councils from all regions participated in the assessment, where schools were randomly selected from each council in urban and rural localities. A minimum of 2 , and a maximum of 5 schools per council were selected. Those schools were among the schools which use Kiswahili as a medium of instruction in teaching and learning, making a total of 524 assessed schools. A total of 30,158 pupils were assessed in Writing Skills whereas a total of 28,816 pupils were assessed in Reading Skills and Arithmetic Skills. The pupils' attendance at the assessment varied from one skill to another due to various reasons including truancy, sickness, rain and transfer.

### 1.3 Limitations

In this assessment, some of the limitations were found on the sample used namely; time and weather. The random sampling method was used to select the assessed primary schools, of which only 524 schools were selected among the 16,340 schools available in Tanzania Mainland. Nevertheless, the selected schools excluded private schools which use English Language as a medium of instruction. Moreover, the data used to calculate pupils' performance in each of the skills was not weighted; therefore, the analysis was accomplished by using actual data.

Furthermore, the training for facilitators and assessors were planned for four days. However, due to time constraints; facilitators were trained for three days while the assessors were trained for four days. In addition, the assessment process was affected by weather challenges that compelled changing of some of the sampled schools.

### 1.4 Assessment Tools

The tools that were used in the assessment included: question papers for Reading, Writing and Arithmetic skills (see Appendices No. 1 to 4). The questions which were set in each skill were intended to assess the pupils' competences basing on their performance levels. Also, questionnaires were prepared for head teachers and invigilators in order to collect information about the availability of 3Rs' teachers, teaching and learning materials and the teaching and learning environment.

### 1.5 Data and Responses Analysis for the Assessment of the 3Rs in 2020

The data analysis in Reading, Writing and Arithmetic skills was done so as to determine the pupils' competence in each skill. Their competence was assessed basing on the levels of performance whereby, 0-12 marks was considered inadequate performance, 13-25 was considered average, $26-37$ was considered good and $38-50$ was considered very good performance. Also, the data analysis on the levels of performance for each skill is shown in Table 1.

Table 1: The 2019 Pupils' Performance in each Skill

| Skill | Number of <br> Pupils Assessed | The Pupils whose <br> performance ranged from <br> Average to Very Good |  |
| :--- | :---: | :---: | :---: |
|  |  | Number | Percentage |
| Reading | 28,816 | 21,554 | 74.80 |
| Writing | 30,158 | 22,679 | 75.20 |
| Arithmetic | 28,816 | 18,500 | 64.20 |

During the analysis, the samples of pupils' responses were used to show their competence in the performance and the challenges they faced in each skill. Also, the data involved the comparison of the pupils' performance by sex, school location and regions.

## CHAPTER TWO

## READING SKILLS ASSESSMENT

### 2.1 Introduction

The Reading Skills assessment was carried out in order to determine the pupils' ability to read a passage of fifty words fluently and with the required speed. Moreover, that passage tested their ability to answer comprehension questions. The pupils' competence in question one depended on the number of words that a pupil was able to read fluently in a minute. In the second question, a pupil's competence was assessed based on the ability to read the passage, understand its content, interpreting what he/she has read, and answer comprehension questions orally. Furthermore, the results of the Reading Skills Assessment was in turn used to make a comparison of the pupils' competence based on the Regions, location of the school (urban/rural) and gender (boys/girls).

### 2.2 Structure of the Reading Skills Assessment Paper

The Reading Skills Assessment paper had two questions. Those questions were prepared in the Swahili language. Pupils were assessed by using the assessment scale in 175 Councils whereas those in 11 Councils were assessed using tablets. The first question tested the pupil's competence (fluency and speed) in reading a passage with fifty (50) words correctly in a minute, and the second question tested pupil's competence in answering comprehension questions orally after reading the passage.

Paper based (scale) assessment took ten (10) minutes for each pupil. One (1) minute was used to test the pupil's accuracy (fluency and speed) in reading a passage and three (3) minutes were used in reading the same passage in order to answer comprehension questions orally. Moreover, the assessor spent six (6) minutes rating each pupil's reading performance, calculating and summing up the score based on the assessment scale for all the questions.

Additionally, a pupil who was tested using a tablet spent five minutes. One (1) minute was used in reading a passage, and at the same time the assessor rated the pupil whereby the marks were automatically captured by system in the tablet. Furthermore, three minutes were used by a pupil
to reread the passage in order to answer comprehension questions orally. The assessor used one minute to ask questions to the pupil.

### 2.3 Performance Criteria in Reading Skills Assessment

Reading Skills Assessment was based on the performance criteria which had four levels, namely: very good performance, good performance, average performance and inadequate performance. In question one, the criterion was based on the number of words a pupil was able to read fluently. A pupil, who read $38-50$ words correctly in a minute had a very good performance, a pupil was considered to have a good performance if he/she read $26-37$ words, $13-25$ words average performance and the one who managed to read 0-12 words was considered to have inadequate performance.

In order to identify the words read fluently by a pupil, the assessor was supposed to apply the following procedures:
(a) If a pupil read all words fluently, the assessor put brackets [] on the last word of the passage.
(b) If a pupil failed to read a word fluently, the assessor put a slanted slash mark on the word (/).
(c) The assessor put a circle ( $\varnothing$ ) on a slanted slash mark (/) if a pupil corrected the word which he/she had failed to read fluently.
(d) If a pupil failed to read all the words of the first sentence, the assessor put a slanted slash mark (/) and brackets [] on the last word of the sentence. The remaining words were counted as failed.
(e) If a pupil failed to read the whole passage within a minute, the assessor put brackets [] on the last word read, unread words were considered as failed.

The Performance criterion on the pupil's competence in the second question was based on the number of items a pupil managed to answer orally after reading the same passage. The question had five items that a pupil was supposed to answer. The pupil who answered five items correctly had a very good performance; the one who answered four items had good performance; two to three items had an average
performance and the one who answered one item or none had inadequate performance.

### 2.4 Pupils' Performance in Reading Skills

A total of 35,358 pupils were registered for Reading Skills Assessment. Among them, 28,816 (81.15\%) pupils sat for the assessment. Boys were 14,010 ( $48.62 \%$ ) and 14,806 ( $51.38 \%$ ) were girls. Pupils' response analysis indicates that 74.80 percent of pupils had performance ranging from average to very good and 25.20 percent had inadequate performance.

### 2.4.1 Question 1: Competence in Reading Words

This question tested the pupils' competence in reading fifty words fluently per minute. The pupils whose performance ranged from average to very good were 75.12 percent as they were able to read from 13 to 50 words. On the other hand, 24.88 percent of pupils had inadequate performance as they read from 0 to 12 words. Table 2 illustrates the pupils' performance in this question.

Table 2: Performance of Pupils in Reading Words

| Words | Performance | Number | Percentage |
| :--- | :--- | :---: | :---: |
| $0-12$ | Inadequate | 7,168 | 24.88 |
| $13-25$ | Average | 6,342 | 22.01 |
| $26-37$ | Good | 6,183 | 21.46 |
| $38-50$ | Very Good | 9,123 | 31.66 |
| Total |  |  |  |
| $\mathbf{2 8 , 8 1 6}$ | $\mathbf{1 0 0}$ |  |  |

Table 2 shows that 9,123 (31.66\%) were able to read from 38 to 50 words fluently, hence showed a very good performance. These pupils were able to read more than three-quarters of all the words which they were supposed to read. Extract 1 shows a sample of response from a pupil with a very good performance.

Tina na Subira ni marafiki.
Wanaishi kijiji cha Ng 'alo. Kijiji chao kina shida kubwa ya maji. Siku moja, Tina na Subira walikwenda kisimani kuteka maji. Subira alichukua kata na kujaza ndoo yake. Mara akaanza kupiga kelele, kumbe alikuwa amechomwa na mwiba. Hatimaye, Subira alishindwa kubeba ndoo. Wazazi wake walimpeleka[hospitali]

Extract 1: A sample of correct responses to question 1 from one of the pupils.

In Extract 1, the pupil demonstrated the ability to read all 50 words fluently. The pupil read the passage within one minute as instructed.

However, 7,169 (24.88\%) pupils had inadequate performance. Of these 2,608 ( $36.38 \%$ ) pupils were able to read from 1 to 12 words and 4,561 ( $63.62 \%$ ) pupils read none of the words as illustrated in Extracts 2 and 3, respectively.
ripía na Subíra ni marafiki.
Wanaishi kijiji cha $N g^{\prime}$ alo. Kijiji chao kina(shida)kubwa ya maji. Siku moja, Tina na Subira walikwenda kisimani kuteka maji. Subira alichukua kata na kujaza ndoo yake. Mara akaanza kupiga kelele, kumbe alikuwa amechomwa na mwiba. Hatimaye, Subira alishindwa kubeba ndoo. Wazazi wake walimpeleka hospitali.

Extract 2: A sample of responses from a pupil who read 10 words out of 50 words in a minute.

In Extract 2, the pupil read 10 words fluently. The number of words he/she read indicates inadequate performance.

Tika na Subifa a[majafiki.]
Wanaishi kijiji cha Ng'alo. Kijiji chao kina shida kubwa ya maji. Siku moja, Tina na Subira walikwenda kisimani kuteka maji. Subira alichukua kata na kujaza ndoo yake. Mara akaanza kupiga kelele, kumbe alikuwa amechomwa na mwiba. Hatimaye, Subira alishindwa kubeba ndoo. Wazazi wake walimpeleka hospitali.

Extract 3: A sample of responses from a pupil who read none of the words in question 1.

In Extract 3, the pupil failed to read any of the words in the given passage, hence demonstrated inadequate performance.

On the contrary, 6,342 ( $22.01 \%$ ) pupils were able to read 13 to 25 words hence demonstrated an average performance as shown in Extract 4.

Tina na Sybira ni marafiki.
Wanaishi kijiji cha Ng'alo. Kijiji chao kina shida kubwa ya maji. Siku moja, Tina na Sybira walikwenda kisimani kuteka maji. Supira alichukua [kata] na kujaza ndoo yake. Mara akaanza kupiga kelele, kumbe alikuwa amechomwa na mwiba. Hatimaye, Subira alishindwa kubeba ndoo. Wazazi wake walimpeleka hospitali.

Extract 4: A sample of responses from a pupil with an average performance in question 1

In Extract 4, the pupil showed an average performance as he/she read fluently 24 words. The pupil spent one minute in reading those words in the passage.

On the other hand, 21.46 percent of the pupils who sat for Reading Skills Assessment demonstrated good performance as they were able to read from 26 to 37 words fluently. The number of words
read is more than half of all the words which were supposed to be read in this passage. Extract 5 is a sample of responses from a pupil with good performance.

```
Tina na Subira ni marafiki.
Wanaishi kijiji cha Ng'alo. Kijiji chao kina shida kubwa ya
maji. Siku moja, Tina na Subira walikwenda kisimani kuteka
maji. Subira alichukua kata na kujaza ndoo yake. Mara
akaanza kupiga kelele, kumbe [alikuwa] amechomwa na
mwiba. Hatimaye, Subira alishindwa kubeba ndoo. Wazazi
wake walimpeleka hospitali.
```

Extract 5: A sample of pupil's good responses in question 1.
In Extract 5, the pupil read 37 words fluently in one minute. The number of words he/she read indicates good performance.

### 2.4.2 Pupils Performance in Reading Each Word

The analysis shows that, the pupils performed differently in reading each word. Some of them were able to read all words fluently while others failed due to various reasons. Chart 1 indicates the percentage of pupils who were able to read each word.


Chart 1: Pupils' performance in reading each word
Chart 1 shows that many pupils were able to read the words formed by a single syllable, such as na (81.71\%), ni (80.79\%) and cha (78.98). Furthermore, words formed by syllables with a single consonant and a vowel were also read more fluently by many pupils compared to the words formed by syllables with consonant cluster.

Those words include: Tina (77.50\%), kina (77.07\%), kijiji (75.23\%) and siku (73.11\%).

Further analysis indicates that some pupils failed to read some words fluently because of different reasons. Such words include: Ng'alo (31.05\%) Subira (57.41\%) and Mara (38.87\%). Some pupils failed to read the word Ng 'alo because it is made of consonant sounds $n g^{\prime}$ (nasal sound) whose production involves the air passage through the nasal cavity. Most of them pronounced the sound through the oral cavity (mouth) instead of nasal cavity (nose). Hence, the word was pronounced as Ngalo instead of Ng'alo.

In addition, other pupils failed to read the word Mara and Subira because they could not distinguish between the sounds ' $r$ ' and ' $l$ '. The sound ' $r$ ' was therefore pronounced as ' $I$ '. The failure of these pupils to make a distinction between these two sounds was contributed by the influence of the ethnic languages on the second language (Kiswahili Language).

Moreover, the sounds ' $r$ ' and ' $l$ ' are both liquids/glides which are produced at the alveolar with partial obstruction of the air flow. The sound ' l ' is produced when the tip of the tongue touches the alveolar ridge and the air is let to flow over the two sides of the tongue. On the other hand, sound ' $r$ ' is produced when the tip of the tongue touches the back of the alveolar ridge and sides of the tongue are in contact with the sides of the palate. So, it was a challenge to some pupils to make distinction on the manner of articulation of these two sounds as they are produced at the same place of articulation.

Further analysis shows that only 5.20 percent of pupils could read 50 words per minute. This implies that, 94.80 percent of the pupils failed to read the whole passage in a minute as the majority of them ended up reading the word kupiga, which is the $35^{\text {th }}$ word of the passage. The other words which they could not read within time limit are:- kelele (39.58\%), kumbe (36.63\%), alikuwa (35.98\%), amechomwa (32.42\%), na (33.50\%), mwiba (31.50\%), Hatimaye (27.72\%), Subira (22.72\%), alishindwa (24.01\%), kubeba (23.50\%), ndoo (22.92\%), Wazazi (20.49\%), wake (19.95\%), walimpeleka (17.98\%) and hospitali (15.82\%). Therefore, the majority of pupils
were able to read but not with the required speed as they read twenty six (26) words on average per minute.

### 2.4.3 Question 2: Competence in Reading Comprehension

Question two tested the pupils' competence in answering comprehension questions orally after reading a passage. The question had five items based on the passage which was supposed to be read in three minutes. The following is the passage which a pupil was supposed to read and answer orally the questions drawn from it.

## The passage

Tina na Subira ni marafiki. Wanaishi kijiji cha Ng'alo. Kijiji chao kina shida kubwa ya maji. Siku moja, Tina na Subira walikwenda kisimani kuteka maji. Subira alichukua kata na kujaza ndoo yake. Mara akaanza kupiga kelele, kumbe alikuwa amechomwa na mwiba. Hatimaye, Subira alishindwa kubeba ndoo. Wazazi wake walimpeleka hospitali.

The analysis shows that 20,111 (69.79\%) pupils had the performance ranging from average to very good. Those pupils were able to answer from two to five items of the question correctly. Table 3 shows the performance of the pupils in question 2.

Table 3: Pupils' Performance in Reading Comprehension

| Number of <br> items | Performance <br> levels | Number of <br> Pupils | Percentage of <br> Pupils |
| :---: | :--- | :---: | :---: |
| 1 | Inadequate | 8,559 | 29.70 |
| $2-3$ | Average | 9,078 | 31.50 |
| 4 | Good | 6,108 | 21.20 |
| 5 | Very Good | 5,071 | 17.60 |
|  | Total | $\mathbf{2 8 , 8 1 6}$ | $\mathbf{1 0 0}$ |

The pupils' responses analysis shows that 31.50 percent of the pupils had an average performance. These pupils managed to answer from two to three items of the question correctly. Extract 6 indicates a sample of responses from a pupil who performed averagely in this question.

| Kipengete | Maswall na majibu | Alama |  |
| :---: | :---: | :---: | :---: |
| 1. | Rafiki yake Tina anaitwa nani? (Subira) | (5) | 0 |
| 2. | Tina na Subira wanaishi katika kijiji gani? ( $\mathrm{Ng}^{\prime}$ alo) | 5 | (O) |
| 3. | Tina na Subira walikwenda wapi? CKisimand | (5) | 0 |
| 4. | Subira alitumia nini kujaza maji kwenye ndoo yake? (Kata) | 5 | (0) |
| 5. | Kwanini Subira alipelekwa Hospitali? (Kwa sababu alikuwa amechomwa na mwiba/ kwa sababu alikuwa ameumia/ iti apate matibabu/ill apate dawa) | (5) | 0 |
| Jumla ya Alama |  | 15 |  |

Extract 6: A sample of responses from a pupil with an average performance in question 2.

In Extract 6, the pupil showed an average competence in answering comprehension questions. The pupil managed to answer three items of the question correctly. Furthermore, he/she managed to answer the fifth item of this question which tested a higher level of thinking capacity.

However, 8,558 (29.70\%) pupils had inadequate performance. Among them, 1,955 (22.84\%) managed to answer correctly only one item out of five. Extract 7 indicates a sample of the responses from a pupil with inadequate performance.

| Maswali na Majibu |  |  |  |  |
| :---: | :--- | :---: | :---: | :---: |
| Kipengele | Maswali na majibu | Alama |  |  |
| 1. | Rafiki yake Tina anaitwa nani? <br> (Subira) | 5 | 0 |  |
| 2. | Tina na Subira wanaishi katika kijiji <br> gani? (Ng'alo) | 5 | 0 |  |
| 3. | Tina na Subira walikwenda wapi? <br> (Kisimani) | 5 | 0 |  |
| 4. | Subira alitumia nini kujaza maji <br> kwenye ndoo yake? (Kata) | 5 | 0 |  |
| Kwanini Subira alipelekwa Hospitali? <br> (Kwa sababu alikuwa amechomwa <br> na mwiba/ kwa sababu alikuwa <br> ameumia/ ili apate matibabu/ili apate <br> dawa) | 5 | (0) |  |  |

Extract 7: A sample of responses from a pupil with inadequate performance in question 2.

In Extract 7, the pupil gave a correct response to one item only which implies inadequate performance.

However, 6,603 (77.16\%) pupils failed to respond to any of the items of the question as it is shown in Extract 8.

| Maswali na Majibu |  |  |  |
| :---: | :---: | :---: | :---: |
| Kipengele | Maswali na majibu | Alama |  |
| 1. | Rafiki yake Tina anaitwa nani? (Subira) | 5 | (0) |
| 2. | Tina na Subira wanaishi katika kijiji gani? ( Ng 'alo) | 5 | (0) |
| 3. | Tine na Subira walikwenda wapi? (Kisimani) | 5 | (0) |
| 4. | Subira alitumia nini kujaza maji kwenye ndoo yake? (Kata) | 5 | (0) |
| 5. | Kwanini Subira alipelekwa Hospitali? (Kwa sababu alikuwa amechomwa na mwibal kwa sababu alikuwa ameumia/ ili apate matibabu/lii apate dawa) | 5 | (0) |
|  | Jumla ya Alama | 0 |  |

Extract 8: A sample of responses from a pupil with inadequate performance in question 2.

In Extract 8, the pupil failed to respond to all five items correctly, hence showed inadequate performance in this question.

Further analysis shows that 21.20 percent of pupils answered four items of the question correctly. Those pupils had good performance as shown in Extract 9.

| Maswali na Majibu |  |  |  |  |
| :---: | :--- | :---: | :---: | :---: |
| Kipengele | Maswali na majibu | Alama |  |  |
| 1. | Rafiki yake Tina anaitwa nani? <br> (Subira) | 5 | 0 |  |
| 2. | Tina na Subira wanaishi katika kijiji <br> gani? (Ng'alo) | 5 | 0 |  |
| 3. | Tina na Subira walikwenda wapi? <br> (Kisimani) | 5 | 0 |  |
| 4. | Subira alitumia nini kujaza maji <br> kwenye ndoo yake? (Kata) | 55 | 0 |  |
| Kwanini Subira alipelekwa Hospitali? <br> (Kwa sababu alikuwa amechomwa <br> na mwiba/ kwa sababu alikuwa <br> ameumia/ ili apate matibabu/ili apate <br> dawa) | 5 | 0 |  |  |

Extract 9: A sample of pupils' good responses in question 2
In Extract 9, the pupil responded correctly to four (4) items. The responses indicate good performance. The pupil comprehended the passage and this enabled him/her to respond correctly to the items which tested knowledge and evaluation. This proves that the pupils in this category were competent in reading, interpreting what they have read and responding to the questions correctly.

Furthermore, 5,072 (17.60\%) pupils answered all the five items of the question correctly, hence demonstrated a very good performance. Extract 10 shows a sample of their responses to question 2.

| Kipengele | Maswali na majibu | Alama |  |
| :---: | :--- | :---: | :---: |
| 1. | Rafiki yake Tina anaitwa nani? <br> (Subira) | (5) | 0 |
| 2. | Tina na Subira wanaishi katika kijiji <br> gani? (Ng'alo) | (5) | 0 |
| 3. | Tina na Subira walikwenda wapi? <br> (Kisimani) | (5) | 0 |
| 4. | Subira alitumia nini kujaza maji <br> kwenye ndoo yake? (Kata) | (5) | 0 |
| $5 .$Kwanini Subira alipelekwa Hospitali? <br> (Kwa sababu alikuwa amechomwa <br> na mwibal kwa sababu alikuwa <br> ameumial ili apate matibabu/ili apate <br> dawa) | (5) | 0 |  |

Extract 10: A sample of the pupil's responses with very good performance in question 2

Extract 10 shows a sample of responses from a pupil who answered correctly all five items in this question. The pupil demonstrated high level of comprehension skills by scoring 25 marks.

### 2.4.4 Pupils' Performance in Comprehension Question

In the second question, the pupils' performance varied in answering the items of the question due to different reasons. Despite these differences, on average, all the pupils answered correctly two items of the question. This indicates that the pupils' ability to read a passage and answer comprehension questions is average. Chart 2 shows percentages of the performance of pupils in each item.


Chart 2: Pupils' performance in each item for question 2.
The data shows that 18,290 ( $63.47 \%$ ) pupils managed to answer the first item which asked: "Rafiki yake Tina anaitwa nani?" Furthermore, 37.28 percent of the pupils answered correctly the second item which asked: "Tina na Subira wanaishi kijiji gani?" The third item which asked "Tina na Subira walikwenda wapi?" was answered correctly by 17,157 ( $59.54 \%$ ) of the pupils. Moreover, 35.36 percent of the pupils answered correctly the fourth item which asked: "Subira alitumia nini kujaza ndoo yake?" Additionally, a total of 17,719 (61.49\%) answered correctly the fifth item which asked: "Kwa nini Subira alipelekwa hosipitali?"

Further analysis of data shows that many pupils (63.47\%) answered correctly the first item of the question, which asked: "Rafiki yake Tina anaitwa nani?" Those pupils managed to answer that item correctly because it tested lower level of thinking (remembering).

However, the fourth item of the question which asked, "Subira alitumia nini kujaza ndoo yake?" had the lowest performance compared to other items. Many pupils failed to answer this item because it tested a higher level of thinking.

### 2.5 A Comparison of Pupils' Performance Region wise, School Location wise and Gender wise

A comparison of pupils' performance was done based on the regions, school location (rural or urban) and gender (Boys and Girls). This comparison aimed at establishing whether there is any difference in the performance among these categories and make recommendations so as to improve the teaching and learning process.

### 2.5.1 Pupils' Performance Region Wise

The Reading Skills Assessment in 2019 was done in all the regions in Tanzania Mainland. Chart 3 illustrates the comparison of the pupils' performance region wise.


Chart 3: Comparison of the Pupils' Performance Region Wise
Chart 3 shows that, many pupils from Dar es Salaam region had the performance ranging from average to very good by 92.40 percent in Reading Skills. In addition, this performance is above the national performance of 74.80 percent. On the other hand, Kigoma had the lowest performance (59.80\%) of all the regions.

### 2.5.2 Comparison of Pupils' Performance by School Location

A total number of 28,816 candidates were assessed in Reading Skills. Among them, 10,114 (35.10\%) were from urban schools and $18,702(64.90 \%)$ were from rural schools. The performance of the pupils based on school location is indicated in chart 4.


Chart 4: Comparison of Performance between Urban and Rural
Schools
Chart 4 shows that the performance of pupils in urban schools was ranging from average to very good by 78.78 percent whereas the one in rural schools was ranging from average to very good by 72.64 percent. Thus, the pupils from urban schools had good performance by 6.14 percent compared to the pupils from rural schools.

### 2.5.3 Comparison of Pupils' Performance by Gender

In 2019 Reading Skills Assessment, a total of 28,816 pupils were assessed. The girls were 14,806 ( $51.38 \%$ ) whereas the boys were $14,010(48.62 \%)$. The analysis of pupils' responses indicates that the performance of girls and boys were 77.82 and 71.60 percent, respectively. Therefore, girls performed better than boys by 6.22 percent. Chart 5 illustrates the performance between girls and boys.


Chart 5: Comparison of Performance between Boys and Girls.

### 2.6 Summary of Reading Skills Analysis

Generally, 74.80 percent of pupils showed the performance ranging from average to very good in Reading Skills. The pupils were able to read 30 to 50 words in a minute fluently, and answer 3 to 5 out of 5 comprehension questions correctly. However, 25.20 percent of pupils had inadequate performance. These pupils failed to read some words fluently with a required speed. For example, words formed by consonant cluster and those formed with sounds 'l' and 'r' were difficult to some of the pupils. This implies that they were not competent in reading a comprehension passage, interpreting what they have read and responding to the questions correctly.

## CHAPTER THREE

## WRITING SKILLS ASSESSMENT

### 3.1 Introduction

This chapter describes the Writing skills assessment. The chapter presents the Structure of Assessment Paper, the performance criteria upon which the pupils' competencies are assessed, and the pupils' responses analysis. Not only that but also the chapter indicates skills where pupils had very good performance (38 to 50 marks), good performance ( 26 to 37 marks), average performance (13 to 25 marks) and inadequate performance ( 0 to 12 marks). The chapter explains on the ability of pupils to write correctly, differentiate capital from small letters and use punctuation marks correctly. The chapter is concluded by a summary of pupils' performance who sat for writing skills assessment.

### 3.2 Structure of Writing Skills Assessment Paper

The writing skills assessment paper comprised three questions. The first question had 10 items. A pupil was tested on the ability to identify the image in each picture and write its name. Moreover, the pupil's competence was tested on word formation. The second question had 5 items which instructed the pupils to identify and underline 10 words written in lower cases. The question aimed at testing the pupil's competence in identifying words written in lower and upper cases. Question 3 required a pupil to copy a passage and punctuate it by using appropriate punctuation marks.

### 3.3 Performance Criteria for Each Writing Skills Assessment Question

The pupils' competences in writing skills were determined by four levels of performance, namely inadequate, average, good and very good. In question 1, the pupil's competence was considered inadequate if he/she could write the names of $0-2$ pictures; average for $3-5$ pictures; good for $6-8$ pictures; and very good for writing the names of $9-10$ pictures. The pupil's performance was considered inadequate if he/she could underline 0-2 words, average for 3-5 words, good for 6-8 words and very good for 9-10 words. However, the pupils' performance depended on the overall score after copying and applying the correct punctuation marks. Scores from 0-5 marks denoted inadequate performance; 6-10
meant an average performance, 11-15 indicated a good performance, and 16-20 scores designated a very good performance.

### 3.4 Pupils' Performance in Writing Skills

A total of 30,158 pupils sat for the assessment in writing skills. Of these, 22,679 (75.20\%) pupils had the performance ranging from average to very good. However, 7,479 ( $24.80 \%$ ) had inadequate performance. Table 4 summarises the pupils' performance in writing skills.

Table 4: Pupils' Performance in Writing Skills

| $T$$a_{\text {Assessed }}^{\text {Competence }}$$b$ | Level of Performance |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Inadequate |  | Average |  | Good |  | Very Good |  |
|  | Number | \% | Number | \% | Number | \% | Number | \% |
| Word eformation | 6,689 | 22.18 | 5,817 | 19.29 | 10,245 | 33.97 | 7,407 | 24.56 |
| The use of 4 upper and ${ }^{4}$ lower cases | 12,823 | 42.52 | 2,352 | 7.80 | 3,737 | 12.39 | 11,246 | 37.29 |
| Copying the passage and Sputting it with happropriate punctuation Omarks | 11,282 | 37.41 | 1,966 | 6.52 | 7,132 | 23.65 | 9,778 | 32.42 |

w
s the performance of pupils in writing skills. The performance of pupils ranged from average to very good in writing down the names of the pictures was 77.82 percent, identifying upper and lower cases 57.48 percent, copying the passage and inserting the correct punctuation marks was 62.59 percent.

### 3.4.1 Question 1: Identification of Pictures and Writing down their Names

The analysis was conducted to identify the pupils who were able to write the names of the pictures correctly. The statistics shows that 23,469 (77.82\%) pupils had the performance ranging from average to very good in identifying the pictures and writing the correct names of those pictures as shown in Chart 6.


Chart 6: Pupils' Performance in Writing Names of Pictures.
Chart 6 shows that 77.82 percent of the pupils had the performance ranging from average to very good. On the other hand, 22.18 percent of the pupils had inadequate performance.

Further analysis of the pupils' responses indicates that 6,689 (22.18\%) pupils had inadequate performance. Those pupils failed to identify and write correctly the names of the pictures. Some of them managed to write only from one to two names as they faced a challenge in forming letters. Also, other pupils misspelled some letters (spelling mistakes) for some words that represent a particular pictures. Some redrew the given pictures and others copied the instructions of the question instead of writing down the correct names. For example, one of the pupils copied the instructions from the question instead of writing names of the pictures. Extract 11 shows a sample of responses from a pupil with an inadequate performance.


Extract 11: A sample of pupil's incorrect responses to question 1.
Extract 11 shows responses from a pupil who copied instructions from the question instead of writing the names of the given pictures.

On the other hand, 5,817 (19.29\%) pupils had an average performance. These pupils were able to identify 3 to 5 pictures and wrote their names correctly.

However, they had a challenge of writing words with consonant clusters. Some of them wrote the names using their ethnic languages. Others failed to write words which are formed by vowels only as they added some letters that resulted into the meaning differing from that of the picture provided. For example, in a word "ua" they added a semi vowel " $w$ " hence wrote the word "uwa". Extract 12 shows a sample of responses from a pupil with an average performance.


Extract 12: A sample of responses from a pupil with an average performance

Extract 12 is a sample of responses from a pupil who managed to write correctly names of pictures in items (a), (d), (f), (g) and (j). However, he/she failed to write correctly names in items (b), (c), (e), (h), and (i). In items (c) and (e), the pupil failed to write correctly the words which start with a nasal consonant " $m$ " as he/she added the vowel "u" to form the words "mupira" and "muguu" instead of "mpira" and "mguu", respectively.

Further analysis shows that 10,245 (33.97\%) pupils had good performance. Those pupils were competent in identifying correctly some of the pictures and wrote their names ( 6 to 8 words). Extract 13 shows a sample of responses from a pupil with good performance.


Extract 13: A sample of responses from a pupil with good performance

Extract 13 indicates a sample of responses from a pupil who had good performance despite the fact that he/she failed to write correctly names of pictures in items (a), (c), (e) and (h).

Furthermore, 7,407 (24.56\%) pupils had very good performance. Those pupils were able to identify all pictures correctly and wrote their names appropriately. Also, the letters that represent a name for a particular picture were well formed. Extract 14 shows a sample of responses from a pupil who had very good performance.


Extract 14: A sample of responses from a pupil who had very good performance.

Extract 14 shows a sample of responses from a pupil who managed to write correctly the names in all the items tested.

### 3.4.2 Pupils' Performance in Identifying and Writing each Word

The analysis was done to determine the performance of pupils in each word assessed. Their performance in each word was as follows:

## (a) Chura

A total of 15,724 ( $52.14 \%$ ) pupils failed to identify and write the correct name of the picture as some of them wrongly associated it with a crab (kaa). Others wrote mamba (crocodile) and Kobe (tortoise). Those responses are incorrect due to the fact that, "kaa" has unique features which are different form "chura". Additionally, "mamba" has a long body and scales and "kobe" is a terrestrial animal moving with its thick shell.

However, a total of 14,434 (47.86\%) pupils wrote correctly the word "chura". These pupils were competent as they identified the picture and associated it with its correct name.

## (b) Ua

Further analysis indicates that 16,940 (56.17\%) pupils wrote the word 'Ua' correctly. These pupils were able to write words with syllables formed by vowels only. The syllables formed by vowels only are easier to pronounce compared to those formed by consonants and vowels.

On the other hand, 13,218 (43.83\%) pupils failed to write correctly the word "Ua" while others wrote nothing. Some of the pupils wrote the names that are not related to a given picture, such as "uyoga" and "mawingu". Moreover, there were pupils who wrote the word "uwa" by adding the sound " $w$ " to simplify pronunciation. They pronounced the ward "Ua" as "Uwa" due to the fact that, sound $|w|$ is a semi vowel which simplifies the pronunciation of the word "Ua". A semi vowel is inserted to simplify pronunciation but it is dropped in written form.

## (c) Mguu

Further analysis indicates that 15,172 (50.31\%) failed to write the name "mguu" correctly. Some of them wrote the words in their ethnic languages, such as "muguu", "mgulu", "miguu", "muguhu" while others wrote incomprehensible words which are not related at all with the picture given and others wrote nothing.

A total of 14,986 (49.69\%) pupils managed to write correctly the name of the picture. Those pupils managed to write consecutive consonants "mg" and two vowels "uu", to form the word "mguu".

## (d) Meza

The statistics indicates that 22,278 (73.87\%) pupils were able to write correctly the name "meza". These pupils showed their ability to identify the picture pertaining to the type of furniture used in different localities, such as in schools, at home and in hospitals.

However, 7,880 (26.13\%) pupils failed to write correctly the word "meza". Some of them wrote incorrect words as "mesa", "imesa" and "metha" since they were affected by their ethnic languages. Also, they failed to distinguish the sounds " $s$ ", " $z$ " and "th" owing to the fact that all the three sounds are more or less similar in terms of their manner of articulation, which is fricative. Other left the item unanswered.

## (e) Mpira

The data indicates that 17,271 (57.27\%) pupils were not able to write the word "mpira", as they wrote words such as "mpila". Those pupils failed to differentiate between the letters "r" and "l". Others wrote "mupila" as the manifestation of ethnic language effect on the pupils' second language (Kiswahili). They inserted the letter " $u$ " after the syllable " $m$ ". Also, others wrote the words "boli", "gozi", "tufe" and "kitenesi". This indicates that they wrote in informal Swahili the names for "mpira" which are commonly used in their playing context.

On the other hand, 12,887 (42.73\%) pupils managed to identify and write the word "mpira". Those pupils manifested their competencies in associating the picture of mpira which is found within their living premises with its name; hence it was possible for them to get it right.

## (f) Saa

The findings show that 22,962 ( $76.14 \%$ ) pupils had good performances as they were able to identify the picture and write correctly the name "saa". These pupils were competent in associating the picture with the letters/syllables constituting the word "saa".

Conversely, 7,196 (23.86\%) pupils failed to write the name "saa" correctly. These pupils faced challenges in forming letters of the word "saa". Consequently, they incorrectly wrote words such as "sa" "zaa" "thaa" and "saha" instead of the word "saa" which is formed by two syllables, namely \{sa\} and $\{\mathrm{a}\}$. The first syllable is formed by a Consonant and a Vowel (CV) and the second one is formed by a vowel (V) alone making it easier for a pupil to drop the sound "a" of the second syllable and write incorrectly "sa". It was revealed that these pupils were affected by their ethnic languages.

## (g) Bata

A total of 20,333 (67.42\%) pupils demonstrated the best performance in writing the name "bata". Those pupils identified the given picture and wrote its name correctly. These pupils were familiar with the picture provided and they knew how to write its name correctly.

On the contrary, 9,825 ( $32.58 \%$ ) pupils failed to write the name of the picture correctly. These pupils failed to identify the picture and associate it with its name. Some of them wrote the word "samaki" simply because the picture "bata" showed that it was in the water. There were pupils who failed to join letters properly, hence wrote meaningless words such as "bana". This made them to perform inadequately.

## (h) Ng'ombe

A total of 18,876 (62.59\%) pupils performance inadequately in writing the name with nasal sounds. This is due to the fact that during their articulation, the airstream escapes through the oral cavity and at the same time via the nasal cavity. These pupils wrote incorrect words such as "ngombe" because they failed to insert an apostrophe (') between the letters ' $g$ ' and ' $o$ ' to mark a nasal sound. They were all affected by the pronunciation of their ethnic languages as in the word "mang'ombe".

Despite the inadequate performance for the majority of pupils, a total of 11,282 ( $37.41 \%$ ) pupils demonstrated a good performance in writing the name "ng'ombe". These pupils managed to identify the picture and associated it with the letter of the word and correctly write its name. They also managed to insert an apostrophe (') between ng and ombe (ng'ombe).

## (i) Jani

The analysis indicates that 15,375 (50.98\%) pupils performed well in writing the name "Jani". These pupils identified the picture and wrote its name correctly.

On the contrary, 14,783 (49.02\%) pupils failed to identify the name associated with the picture. They wrote names such as "ua", "tawi", "nanasi", "unyoya wa kuku" and "mti" due to the lack of enough competence in identifying the given pictures. For example, they failed to differentiate the words "jani" from "tawi" although they are both parts of tree (mti). Other pupils did not write anything.

## (j) Kikombe

A total of 19,455 (64.51\%) pupils had good performance as they were able to write the word "kikombe". These pupils managed to form the consonant cluster "mb" and they finally wrote the word "kikombe" correctly.

However, 10,703 (35.49\%) pupils had inadequate performance in writing the name "kikombe". These pupils wrote names like: "ikikobe", "kikobe", and "kkapiabe". For example, one of the pupils wrote words such as "ikikombe" "umunengo" due to the effects of their ethnic languages. Also, some pupils did not manage to write the word "kikombe" correctly due to their incompetence in forming the words with consonant cluster "mb". Other pupils wrote nothing.

### 3.4.3 Question 2: Identification and Underlining Words in Lower Cases

In question two, the pupils were required to underline words written in small letters from the groups of words provided. The question aimed at testing the pupils' competences in identifying upper and lower cases.

A total of 30,158 pupils attempted this question. The performance in this question was good. A total of 11,246 (37.29\%) pupils underlined 9 to 10 words written in small letters hence indicating very good performance. Moreover, 3,737 (12.39\%) pupils managed to underline 6 to 8 words written in small letters signifying good performance. Furthermore, 2,352 ( $7.80 \%$ ) pupils managed to underline 3 to 5 words indicating an average performance. On the contrary, 12,820 ( $42.51 \%$ ) had inadequate performance as they underlined 0 to 2 words written in small letters. Chart 7 shows a summary of pupils' performance in question 2.


Chart 7: Pupils Performance ' in Identifying Lower Cases
The findings show that 12,820 pupils (42.51\%) had inadequate performance. These pupils failed to identify the words written in small letters. Among them, there are those who underlined the words written in capital letters. Others wrote a single collective noun for a group of words instead of underlining words which are formed by small letters. There were also pupils who underlined all the words provided. However, others wrote those words then underlined them while others underlined all words. Extracts 15 (a c) shows samples of responses from pupils with inadequate performance.
2. Pigia mstari maneno yaliyoandikwa kwa herufi ndogo.
(a) MVULANA, msichana, BABU, bibi
(b) NYANYA, KAROTI, pilipili, kitunguu
(c) dawati, KITI, meza, KABATI
(d) PAPAI, pera, NANASI, fenesi
(e) fisi MBUZI twiga, SUNGURA

Extract 15 (a): A sample of responses from a pupil who underlined all words

## 2. Pigia mstari maneno yaliyoandikwa kwa herufi ndogo

(a) MVULANA, msichana, BABU, bibi
(b) NYANYA, KAROTI, pilipili, kitunguu
(c) dawati, KITI, meza, KABATI
(d) PAPAI, pera, NANASI, fenesi
(e) fisi, MBUZL twiga. SUNGURA

Extract 15 (b): A sample of responses from a pupil who underlined words with upper case
2. Pigia mstari maneno yaliyoandikwa kwa herufi ndogo
(a) MVULANA, msichana, BABU, bibi urdtu
(b) NYANYA, KAROTI, pilipili, kitunguu Uiungo
(c) dawati, KITI, meza, KABATI saman i
(d) PAPAI, pera, NANASI, fenesi Matunda
(e) fisi, MBUZI, twiga, SUNGURA wranyama

Extract 15 (c): A sample of responses from a pupil who wrote collective names for groups of words provided

In Extract 15 (a) - (c) the pupils did not understand the requirement of the question. They underlined all words while others underlined capitalised words.

Further analysis shows that 2,352 (7.80\%) pupils had an average performance. These pupils managed to underline some of the words. Among them, there are those who underlined the capitalised words and those who underlined both the small and capital letters. Extract 16 is a sample of responses from a pupil who had an average performance.

## 2. Pigia mstari maneno yaliyoandikwa kwa herufi ndogo.

(a) MVULANA, msichana, BABU, bibi
(b) NYANYA, KAROTI, pilipili, kitunguu .
(c) dawati, KITI, meza, KABATI
(d) PAPAI, pera, NANASI, fenesi
(e) fisi, MBUZI, twiga, SUNGURA

Extract 16: A sample of responses from a pupil with an average performance

Extract 16 shows a sample of responses from a pupil who had an average performance. The pupil underlined five words correctly out of ten.

However, 12.39 percent of pupils had good performance. They underlined correctly words with small letters in 6 items. Extract 17 is a sample of responses from a pupil who had good performance.

## 2. Pigia mstari maneno yaliyoandikwa kwa herufi ndogo-

(a) MVULANA, msichana, BABU, bibi
(b) NYANYA, KAROTI, pilipili, kitunguu
(c) dawati, KITI, meza, KABATI
(d) PAPAI, pera, NANASI, fenesi
(e) fisi, MBUZI, twiga, SUNGURA

Extract 17: A sample of responses from a pupil with good performance

Extract 17 shows a sample of responses from a pupil who managed to underline the words written in small letters with the exception of words like "dawati", "pera" and "kitunguu".

On the other hand, 11,246 (37.29\%) pupils had very good performance. They were able to identify and underline all words written in small letters. Extract 18 shows a sample of responses from a pupil who had a very good performance.

## 2. Pigia mstari maneno yaliyoandikwa kwa herufi ndogo.

(a) MVULANA, msichana, BABU, bibi
(b) NYANYA, KAROTI, pilipili, kitunguu.
(c) dawati, KITI, meza, KABATI
(d) PAPAI, pera, NANASI, fenesi
(e) fisi, MBUZI, twiga, SUNGURA

Extract 18: A sample of responses from a pupil who had very good performance

Extract 18 shows a sample of responses from a pupil who underlined all words written in small letters correctly hence demonstrated very good performance.

### 3.4.4 Question 3: Copying a Passage and Putting Punctuation Marks

The pupils were tested on the competence of copying the passage and using punctuation marks (full stop (.), comma (,), Exclamation mark (!), and a question mark (?) appropriately.

A total of 30,158 ( $85.29 \%$ ) pupils attempted this question. Their performance was generally good as 9,777 ( $32.42 \%$ ) of the pupils had marks ranging from 16 to 20 which is a very good performance. These pupils managed to copy the passage and put all the punctuation marks in the appropriate places. Moreover, 7,132 (23.65\%) pupils had good performance as they copied the words in the given passage and put some of the punctuation marks, and hence scored from 11 to 15 marks. Furthermore, a total of 1,963 (6.51\%) pupils had marks ranging from 6 to 10 marks which indicate an average performance. Likewise, 11,282 (37.41\%) pupils performed inadequately with scores ranging from 0 to 5 . These pupils failed to copy the given passage and punctuate it accordingly. Chart 8 shows a summary of pupils' performance in question 3.


Chart 8: Pupils' Performance in Copying a Passage and punctuating it in Question 3

The analysis shows that 11,282 (37.41\%) had inadequate performance since they failed to copy the given passage and put appropriate punctuation marks. Some of them wrote irrelevant words while others wrote letters which constituted meaningless Swahili words. Others copied some words from question 2. Also, there were some pupils who misplaced the punctuation marks. Extracts 19 and 20 are samples of responses from such pupils.
3. Nakill kifungu cha maneno kifuatacho na kisha weka alama za uandishi yaani: nukta (.), mkato (,), alama ya kushangaa (1), na alama ya kuuliza (?) mahali panapostahiti.

Umeiona ile bustani yenye maua mazuri _ Looh inapendeza sana __ pamoja na kuwa inahitaji kumwagiliwa maji mengi __
pigia mstari mangno yaliÿoendikwakwe herusindoge (a) MVULANA msiChona Bripubibi
(6) NYANYA KAROTIPllipili kitungure
(c) dawoti KITlmez a KABATI
(a) PAPAI PcYaNANYASi fonesi
(P) fisimBUZItusgu SVNGUA

Extract 19: A sample of a response from a pupil who failed to copy the given passage and put the punctuation marks accordingly

Extract 19 shows a sample of responses from a pupil who did not understand the requirement of the question. The pupil copied question 2 instead of copying the passage and putting the appropriate punctuation marks in the blank spaces provided.
> 3. Nakill kijungu cha maneno ktfuatacho na kisha weka alama za uandishi yaani: nukta (.), mkato (), alama ya kushangaa (1), na alama ya kuuliza (?) mahali panapostahili.

Umeiona ile bustani yenye maua mazuri _ Looh _ inapendeza sana _ pamoja na kuwa inahitaji kumwagiliwa maji mengi $\qquad$
umeiona ike, bustani mazvri, cooh?
hapdrdeza sank. mamoja na kuvive ina hitaik
maji mprgi! (.)
Extract 20: Pupil's incorrect response for question 3
In Extract 20, the pupil was not able to recognise the correct place for a particular punctuation mark.

Further analysis shows that 1,963 (6.51\%) pupils had an average performance. They were able to copy 5 to 8 words. Some of them failed to put punctuation marks while others applied them in wrong places. These pupils had inadequate knowledge of writing skill and appropriate use of punctuation marks. Extract 20 shows a sample of responses from a pupil who scored averagely in Question 3.

> 3. Nakul kijungu cha maneno kujuatacho na kisha weka alama za uandishi yaani: nukta (.), mkato (), alama ya kushangaa (1), na alama ya kuuliza (7) mahali panapostahili.

Umeiona ile bustani yenye maua mazuri __ Looh inapendeza sana _ pamoja na kuwa inahitaji kumwagiliwa maji mengi $\qquad$


Extract 20: A sample of responses from a pupil with an average performance

Extract 20 shows a sample of responses from a pupil who copied 10 out of 16 words correctly but failed to put punctuation marks.

Moreover, 7,132 pupils (23.65\%) had good performance. These pupils managed to copy from 9 to 12 words correctly from the passage. However, they put some punctuation marks incorrectly and others did not put them at all. Extract 21 shows a sample of responses from a pupil with good performance in Question 3.
3. Nakili kifungu cha maneno kifuatacho na kisha weka alma za uandishi yaani: nukta (), mkato (), alama ya kushangaa (1), na alma ya kuuliza (?) mahali panapostahili.
Umeiona tile bustani yenye mana mazuri (9) Look ? inapendeza sana - pamoja na kuwa inahitaji kumwagiliwa maji mengi $\perp$


Extract 21: A sample of responses from a pupil with good performance
Extract 21 shows a sample of responses from a pupil who copied 14 words correctly but failed to put any punctuation mark.

On the other hand, 9,777 (32.42\%) pupils had very good performance. They managed to copy the passage and put the punctuation marks correctly. Extract 22 is a sample of responses from a pupil with very good performance.
3. Nakilt kifungu cha maneno kifuatacho na kisha weka alama za uandishi yaani: nukta (.), mkato (), alama ya kushangaa (1), na alama ya kuuliza (?) mahali panapostahili.

Umeiona ile bustani yenye maua mazuri _ Looh inapendeza sana __ pamoja na kuwa inahitaji kumwagiliwa maji mengi ___

$\qquad$
$\qquad$


Extract 22: A sample of responses from a pupil with very good performance

Extract 22 is a sample of responses from a pupil who had very good performance. The pupil managed to copy the given passage as well as putting all the punctuation marks correctly.

### 3.5 Comparison of the Pupils' Performance Region wise, School Location (Urban/Rural) and Gender wise

A comparison was done for the purpose of specifying the performance of the pupils based on regions, the location of the school (urban and rural) and gender. The comparison was done in order to determine the extent to which the pupils perform in each category.

### 3.5.1 Comparison of the Pupils' Performance Region wise

In writing skills assessment, the comparison of pupils' performance was conducted region wise as shown in Chart 9.


Chart 9: Pupils' Competence Region wise
Chart 9 shows the percentages of pupils region wise. Out of 26 regions that were involved in the study, 14 performed above the national benchmark ( $75.30 \%$ ). Of these, Dar es Salaam was the highest performer by 95.2 percent. However, 11 regions were below the National benchmark of which Kigoma was the lowest performer by 51.90 percent.

Kigoma being the lowest performer, it was preceded by Katavi 60.1 percent and Mwanza 63.9 percent. Other regions had varied performances as shown in Chart 9.

### 3.5.2 Comparison of Pupils' Performance by School Location (Urban and Rural)

The comparison of pupil's performance indicates that 30,158 pupils sat for the writing assessment in 2019. The statistics show that there were differences between urban pupils' performance and rural pupils' performance. Chart 10 shows the comparison of performance between pupils from urban and rural schools.


Chart 10: Pupils' Performance in Urban and Rural Schools
Chart 10 shows that 80.3 percent of the urban schools had the performance ranging from average to very good compared to rural schools which had 72.5 percent.

### 3.5.3 Comparison of Pupils' Performance by Gender

A total of 30,158 pupils sat for the writing skills assessment in 2019. Among these, boys were 15,075 while the girls were 15,083 . Further analysis shows that girls had good performance. Chart 11 illustrates a comparison of performance between boys and girls.


Chart 11: Comparison of Pupils' Performance by Gender
Chart 11 shows that girls had the performance ranging from average to very good by 77.2 percent while the boys had 73.00 percent. Generally, the girls had a better performance than boys by 4.31 percent.

### 3.6 Summary of Writing Skills Analysis

The analysis of writing skills shows that a total of 22,679 (75.20\%) pupils had the performance ranging from average to very good. The pupils' competence in writting the names of the pictures was higher compared to that of differentiating upper and lower cases, and copying a passage and putting punctuation marks appropriately.

A total of 23,469 ( $77.82 \%$ ) pupils were able to identify and write the names of the pictures provided. They had the performance ranging from average to very good since they wrote 3-10 words correctly. However, a total of 18,876 ( $62.59 \%$ ) pupils managed to copy and insert punctuation marks in the passage given. These pupils copied 6-16 words from the passage given and put 1 to 4 punctuation marks.

Additionally, 17,338 (57.49\%) pupils were competent in small letters identification. They had the performance ranging from average to very good in identifying small letters as they managed to underline 3 to 10 words correctly.

## CHAPTER FOUR

## ARITHMETIC SKILLS ASSESSMENT

### 4.1 Introduction

This chapter provides the structure of the Arithmetic Skills assessment paper in 2020, and the criteria used to determine the pupils' performance. Moreover, the chapter describes the areas in which the pupils had very good, good, average and inadequate performance. Also, in this analysis the comparison of the pupils' performance was conducted basing on different variables. Those variables are gender, school location (urban/rural) and regions. Moreover, this chapter provides a summary of the analysis of pupils' performance in Arithmetic skills.

### 4.2 Structure of the Assessment Papers

The Arithmetic Skills assessment had two papers and each paper had 10 items. The first paper assessed the pupils' competence in identifying the missing numbers in sequences of numbers and solving word problems. In that paper, the pupils were required to answer all items by writing answers in the spaces provided.

Moreover, the second paper assessed the pupils' competence in addition and subtraction of whole numbers whereby they were required to answer all items orally. The pupils' scores were recorded in a special form (the assessment scale) for recording the pupils' scores (Assessment Scale) by invigilators. Invigilators who were using tablets got the scores directly captured and stored into the database system of the tablets.

The first paper had a total of thirty marks where each item in the subtask of identifying the missing numbers carried two marks, whereas those in the subtask of problem solving carried four marks each. The second paper had a total of twenty marks where each item had two marks. Therefore, both papers had a total of 50 marks.

### 4.3 Performance Criteria in Arithmetic Skills Assessment

In Arithmetic Skills Assessment, the pupils' performance criterion applied in each competence was divided into four levels of performance which are: an inadequate performance for a pupil who correctly answered not
more than two items; an average performance for a pupil who correctly answered three items; a good performance for a pupil who correctly answered four items; and a very good performance, for a pupil who correctly answered all five items.

### 4.4 Overall Performance in Arithmetic Skills

The data shows that 28,816 out of 30,158 pupils sat for Arithmetic Skills. This implies that 1,342 ( $4.45 \%$ ) pupils did not appear for the assessment due to various reasons. The number and percentage of pupils with inadequate, average, good and very good performances in each subtask are indicated in Table 5.

Table 5: Overall Performance in Arithmetic Skills

| Assessed Compete nce | Pupils' Performance |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Inadequate |  | Average |  | Good |  | Very Good |  |
|  | ¢ <br> ¢ <br> ¢ <br> $\overline{3}$ |  | ¢ ¢ E Z |  | ¢ ¢ ¢ Z |  |  | 0 0 0 \#1 0 0 0 |
| Identifying <br> Missing <br> Numbers | 16,684 | 57.90 | 5,213 | 18.09 | 3,285 | 11.40 | 3,634 | $\begin{gathered} 12.6 \\ 1 \end{gathered}$ |
| Addition | 16,664 | 57.83 | 5,060 | 17.56 | 3,412 | 11.84 | 3,680 | $\begin{gathered} 12.7 \\ 7 \end{gathered}$ |
| Subtractio <br> n | 19,142 | 66.43 | 4,432 | 15.38 | 2,723 | 9.45 | 2,519 | 8.74 |
| Solving <br> Word Problems | 17,318 | 60.10 | 4,850 | 16.83 | 3,334 | 11.57 | 3,314 | $\begin{gathered} 11.5 \\ 0 \end{gathered}$ |

Table 5 shows that $57.90,57.83,66.43$ and 60.10 percent of pupils failed to answer three to five items correctly in Identifying the Missing Numbers, Addition, Subtraction and Solving Word Problems, respectively. Generally, the pupils had the highest performance in addition but they had the lowest performance in subtraction of numbers.

### 4.5 Pupil's Performance in each Subtask

The analysis of pupils' responses was done in each item in order to identify the pupils' performance in each competence.

### 4.5.1 Competence in Identifying Missing Numbers in a Sequence

The ability of pupils to identify the missing number in a sequence was assessed in items 1 to 5 . The items in this subtask assessed the pupil's ability to identify the missing numbers and write the answers in the blank spaces. Items 1,3,4 and 5 were increasing sequences while item 2 was a decreasing sequence. Chart 12 shows a summary of pupils' performance in items 1 to 5 .


Chart 12: Percentage of pupils who were able to identify the missing number in each item

Chart 12 shows that many pupils were more compentent in answering items 1, 4 and 2 correctly compared to items 3 and 5 in this subtask. This indicates that the pupils were more competent in identifying the missing numbers in sequences whose numbers differ by 1 or 10 than the sequences in which the numbers differ by 2 or 5 . Moreover, the pupils had average performance in item 2 which was a decreasing sequence.

Furthermore, Chart 12 shows that 20,033 (69.52\%) pupils answered item 1 in this subtask correctly. Thus, the pupils had the highest performance in this item compared to other items. However, a few pupils (20.65\%) answered item 3 correctly. Thus, this item had the lowest performance in the concept of identifying the missing numbers in the sequence of numbers which were increasing by 2 .

The data analysis reveals that 10,933 (37.94\%) pupils had the performance ranging from average to very good in recognising the missing numbers in the sequence. This indicates that the pupils understood the concept of number patterns. Extract 23 shows a sample of responses from a pupil who correctly wrote the missing numbers in all five items.

> Andika namba inayakosekana katika nafast ily yoachwa waza.
> 1. 3, 4, 5, \&, 7, 8.
> 2. $27,26,25,24,23$.
> 3. $54,56,58,60,62$.

> 4 10, 20, 30, 40, 50.
> 5. 40, 45,50, 55, 60 .

Extract 23: A sample responses from a pupil who correctly wrote the missing numbers in all items

Extract 23 shows that the pupil was able to recognise the mathematical operation which was applied in order to get the missing number in each sequence. The pupil realised that, in items 1, 3, 4 and 5 , the numbers were increasing by $1,2,10$ and 5 , respectively. Likewise, in item 2 the pupil was aware that the numbers, in the given sequence, were decreasing by 1.

Further analysis shows that 4,636 (18.09\%) pupils had average performance. These pupils answered correctly three out of five items. Their responses reveal that they failed to comply with the rules of identifying the missing numbers in the given sequences as indicated in Extract 24.

```
Andika netrnba inayokosek arta kapika nafast ileyperchwa wozi.
\(1 \quad 3,4,5, i, 7,8\).
2. \(27,74,25,24,22\)
\(354,56,58,51,67\)
4 T0, 2: , 30, 40, 50.
5. \(40,45,4+, 55,60\).
```

Extract 24: A sample of responses from a pupil who correctly answered items 1, 2 and 4

In Extract 24, the pupil did not recognise that, in items 3 and 5, the numbers are increasing by 2 and 5 , respectively.

On the other hand, the analysis shows that 17,883 (57.90\%) pupils had inadequate performance as shown in table 5 . Some of them could not identify the requirements of items, hence they did not write answers. Others wrote the answers that were not related to the pattern of the given numbers, implying that they had insufficient knowledge on the concept of missing numbers in a sequence. Extract 25 shows the responses of a pupil who correctly answered only one item out of the five items.

```
Andika namba inayokosekana katiku räfas! ilvgoachwa wazt.
1. 3,4,5,6,7,8.
2. 2/, 26, 25, 24, % .
3 54, 56, 58,: ! . 62.
4. 10, , 30,40,50.
5. 40,45., &: 55,60.
```

Extract 25: A sample of responses from a pupil who correctly answered only 1 item.

In Extract 25, the pupil added 1 to the previous number without considering the common difference between the consecutive numbers of the sequences in all the four items. Also, the pupil added 1 to 24 to get 25 in item 2 by considering the given sequence as increasing. The pupil was supposed to subtract 1 from 24 to get the next number. This is due to the fact that the numbers of the given sequence were decreasing by 1 .

### 4.5.2 Pupils' Competence in Addition

In the items that aimed at assessing competence in Addition, the pupils were required to answer orally. They were given five items on addition of numbers as shown in Table 6.

Table 6: Addition Items

| Item <br> Number | Item |  |
| :---: | :---: | :---: |
| 1. | $11+6=$ | $\square$ |
| 2. | $15+8=$ | $\square$ |
| 3. | $27+36=$ | $\square$ |
| 4 | $42+18=$ | $\square$ |
| 5 |  |  |

Table 6 shows that;
(a) Items 1 and 3 assessed the pupils' ability to add numbers without carrying. Item 1 involved addition of a single-digit number to a two-digit number. Furthermore, item 3 involved adding two numbers with two digits each.
(b) Items 2, 4 and 5 assessed the pupils' ability to add numbers by carrying. In item 2, the pupils were required to add a single-digit number to a two-digit number. Items 4 and 5 involved adding two numbers with two digits each.

During the assessment, the pupils who were not able to answer the first four items were not allowed to proceed with the fifth item, they were instructed to answer the items involving subtraction of numbers. Likewise, the pupils who could not answer the first four items of subtraction subtask were not allowed to answer the fifth item. Chart 13 shows the summary of the pupils' performance in addition subtask (item 1 to 5 ).


Chart 13: Percentage of pupils who correctly answered the items involving addition

Chart 13 shows that 64.69 percent and 53.05 percent of the pupils were able to perform better in items 1 and 2 than in other items respectively. However, the pupils had the lowest performance in item 4 (23.58\%) followed by item 5 (26.43\%). Among the causes of weak performance in these question is the pupils' failure to add by carrying. They did not add the numbers to tens after they have carried from ones, hence they got incorrect answers. Others added the digits in the place value of ones and they could not get the required answer. Moreover, there were pupils who failed to
answer the items due to inability to read and write. For example, in item 4, some pupils stated 53 as the answer instead of 63 . In item 2, others added 8 to 1 and ended up with 95 instead of adding 8 to 5 in the place value of ones followed by tens so as to get 23 .

### 4.5.3 Pupils' Competence in Subtraction

The pupils' competence in subtracting numbers was assessed in items 6 to 10 as shown in Table 7.

Table 7: Subtraction Items

| Item <br> Number | Item |
| :---: | :---: |
| 6. | $17-3=\square$ |
| 7. | $20-8=\square$ |
| 8. | $35-24=\square$ |
| 9. | $50-21=\square$ |
| 10. |  |

Table 7 shows that:
(a) Items 6 and 8 assessed the pupils' ability to subtract without borrowing. Item 6 required the pupils to subtract a single-digit number from a two digit number. Moreover, item 8 involved subtraction of two-digit numbers.
(b) Items 7, 9 and 10 assessed the pupils' ability to subtract by borrowing. In item 7, the pupils were required to subtract a single-digit number from a two-digit number by borrowing. Items 8, 9 and 10 involved subtraction of two-digit numbers.

Chart 14 presents the summary of the pupils' performance in the subtask involving subtraction of numbers.


Chart 14: Percentage of pupils who correctly answered the items involving subtraction

Chart 14 shows that most of the pupils had good performance in items 6 (56.08\%) and 7 (47.02\%) compared to other items. The pupils were able to answer the items correctly by using counting aids such as fingers. However, the pupils had the lowest performance in item 9 followed by item 10, both involving subtraction in this subtask. This is because these items required the pupil to borrow when performing subtraction.

### 4.5.4 Pupils' Competence in Solving Word Problems

The pupils' ability to solve word problems was assessed in items 6 to 10 as shown in Table 8.

Table 8: Word Problem Items

| Item <br> Number | Item |
| ---: | :--- |
| 6. | Kikapu kina machungwa 3. Iwapo yataongezwa <br> machungwa 2, kikapu hicho kitakuwa na machungwa <br> mangapi? |
| 7. | Juma alikuwa na pipi 7. Alimpa rafiki yake pipi 4. Je, <br> alibakiwa na pipi ngapi? |
| 8. | Daftari langu la kuandika lina kurasa 48. Ikiwa kurasa 32 <br> zimejaa, je, zimebaki kurasa ngapi? |
| 9. | Musa alinunua mayai 33 siku ya kwanza. Siku ya pili <br> alinunua mayai 19. Je, jumla alinunua mayai mangapi? |
| 10. | Mwalimu alikuwa na penseli 51. Aliwapa wanafunzi <br> penseli 17. Je, alibakiwa na penseli ngapi? |

The items assessed the pupils' ability to solve real life related problems using the concept of addition or subtraction. The performance of the pupils in this subtask is summarised in Chart 15.


Chart 15: Percentage of pupils who correctly solved the given word problems.

Chart 15 shows that item 6 had the largest number of pupils (62.0\%) who correctly solved the given word problem followed by item 7 and 8 . On the other hand, a few pupils (19.01\%) correctly solved the word problem given in item 10 in this subtask.

The data shows that, among 28,816 pupils who were assessed in this subtask, 5,916 (20.53\%) pupils had good performance whereas 4,273 ( $16.83 \%$ ) pupils had an average performance.

The analysis of the pupils' responses shows that some pupils who did well in this subtask were able to use the addition and subtraction operations. Thus, they managed to solve the word problems as shown in Extract 26.
6. Kikapu kina machungwa 3. Iwapo yataongezwa machungwa 2, kikapu hicho kitakuwa na machungwa mangapi?
$\qquad$
7. Juma alikuwa na pipi 7. Alimpa rafiki yake pipi 4. Je, alibakiwa na pipi ngapi?
$\qquad$
8. Daftari langu la Kuandika lina kurasa 48. Ikiwa kurasa 32 zimejaa, je, zimebaki kurasa ngapi ambazo hazijaandikwa?

9. Musa alinunua mayai 33 siku ya kwanza. Siku ya pili alinunua mayai 19. Je, jumla alinunua mayai mangapi?

10. Mwalimu alikuwa na penseli 51. Aliwapa wanafunzi penseli 17. Je, alibakiwa na penseli ngapi?


Extract 26: A sample of responses from a pupil who correctly solved the given word problems.

In Extract 26, the pupil was able to solve the given word problems by using mathematical operations and counting aids, hence got the correct answers for all items. Additionally, other pupils answered all items by counting fingers, tallying or using paper and pencil in finding the answers. Extract 27 shows the responses of a pupil who was able to solve all word problems correctly.

6 Kıkapu king machungwa 3. Jwapo yataongezwa machufigwa 2, kuapu hicho kitakuwa nel machurigwo mangapi"

$$
Q Q Q+Q Q=5
$$

$\qquad$
$\qquad$
$r$ Jumn alikuwa na pupi 7. Alımpa rafiki gake pipı 4. de, alıbakiwa ла pipi ngapı? Q0\&000 $=3$.

Onftari tangu la Kuandika dina kurasa 48. Ikiwa kurasa 32 zımejan, je, zimebokt kurasa ngapi ambazo harafand
中QQ4\%安
9. Musur alithortax maymi 33 siku ya kwarezr. Sikle yid pr. alinuntur mayat 19. Je, juma alınarna mayai mangapi"

...--- - ..---_...-........-
. .- .
10. Mowalimu alikuwa na pernseli 51. Alwapa wanafur penselı 17. de, alibakiwa di perseti ngapi?
 Q


Extract 27: A sample of responses from a pupil who correctly answered the given word problem.

In Extract 27, the pupil drew small circles and counted them by tallying when adding and subtracting numbers in solving the given word problems, hence the pupil got the correct answers.

On the other hand, a total of 18,627 (60.10\%) performed inadequately. Some of them failed to solve all the given word problems. The analysis of the pupils' responses revealed that the reasons for the pupils' inadequate performance are:
(a) Lack of knowledge on addition and subtraction of numbers. For instance, in items 6, 7 and 8, some pupils added instead of subtracting the numbers. Also, in item 9 there were pupils who failed to add the numbers by carrying. For example, they wrote " $33+19=412$ ", " $33+19=42$ " or " $33+19=124$ " which are incorrect answers. In item 10, others failed to subtract by borrowing. For example, they wrote " $51+17=44$ " or " $51+17=46$ " which are incorrect answers.
(b) Failure to understand the meaning of the words like yataongezwa, alibakiwa, zimebaki and jumla which were used in the given word problems.
(c) Copying the given word problems instead of solving them.
(d) Omitting the items and writing the responses that are not related to the given word problems, indicating the pupils' inability to read and write.

Extract 28 represents a sample of responses from a pupil who failed to answer correctly all five items in this subtask.

> 6. Kikapu kina machungwa 3. Iwapo yataongezwa machungwa 2, kikapu hicho kitakuwa na machungwa mangapi?

```
3-2=1
```



Extract 28: A sample of responses from a pupil who failed to solve all word problems

In Extract 28, the pupil subtracted instead of adding the numbers in items 6, 7 and 8. Furthermore, the pupil lacked knowledge on addition of two-digit numbers in item 9. For example, the pupil added the digits in the place value of ones and wrote the result in the place value of tens and vice versa. Also, in item 10, the pupil failed to subtract two-digit numbers by borrowing.

### 4.6 Comparison of Pupils' Performance by Sex

The comparison of the performance of pupils who were assessed in Arithmetic Skills has been done basing on two variables. The first variable is on their competence in identifying the missing numbers in sequence of numbers and solving word problems. The second variable is on the competence in adding and subtracting numbers.

### 4.6.1 Comparison of pupils' performance on Identifying the Missing Number and Solving Word Problems by Sex

The data shows that a total of 28,816 pupils sat for the assessment involving Identifying the Missing Numbers and Solving Word Problems. In that assessment, 14,010 pupils were boys and 14,806 were girls. Chart 16 shows the percentage of boys and girls who responded correctly.


Chart 16: The overall results for the comparison of two subtasks by sex

Chart 16 shows that 39.10 percent of girls had the performance ranging from average to very good in identifying the missing numbers in sequences compared to 36.83 percent of boys. Also, it shows that both boys and girls had the performance ranging from average to very good with 37.98 and 32.62 percent, respectively, in solving word problems. This shows that boys performed better than girls in both competences.

### 4.6.2 Comparison by Sex in Addition and Subtraction

The statistics shows that 28,816 pupils were assessed on the competence of addition and subtraction of numbers in Arithmetic Skills. Of these, 14,010 pupils were boys while 14,806 pupils were girls. Chart 17 shows the percentage of boys and girls who responded correctly to the items in addition and subtraction of numbers.


Chart 17: The overall results for the comparison of two subtasks by sex

Chart 17 shows the comparison of performance between boys and girls in each item. In the subtraction items, 19.18 percent of boys correctly answered the item " $50-21=$ " orally, while the percentage of girls was 19.32. However, the difference of performance between boys and girls in each level was not
significant. Both boys and girls performed well in items 1 and 6 compared to items 2, 3 and 4.

### 4.7 Comparison of Pupils' Performance by School Location

The comparison of the pupils' performance by school location aimed to determine the real situation of Arithmetic skills in urban and rural areas and propose measures for improving it. The comparison of performance was made on Identifying Numbers, Solving Word Problems, Addition and Subtraction Subtasks. Likewise, the pupils' performance has been analysed region wise in Tanzania mainland.

### 4.7.1 Comparison of Performance in Number Identification and Solving Word Problems in Urban and Rural Schools

The arithmetic skills assessment was carried out to 10,114 pupils from urban schools and 18,702 from rural schools. The performance of pupils in both urban and rural schools are presented in Chart 18.


Chart 18: Comparison of pupils' performance between urban and rural schools

The data in Chart 18 shows that, in each level of performance, there is a difference in pupils' performance between rural and urban schools. The percentage of pupils with performance ranging from average to very good in urban schools is 68.44 percent
whereas that of rural schools is 61.50 percent. This indicates that the pupils' performance in urban schools is better than the one in rural schools.

### 4.7.2 Comparison of Performance in Addition and Subtraction between Urban and Rural Schools

The comparison of pupils' performance in addition and subtraction subtasks was done in order to find out the variation of pupils' performance basing on schools' location shown in Chart 19.


Chart 19: Comparison of pupils' performance between urban and rural schools in Addition and Subtraction subtasks

The data in Chart 19 show that 39.42 percent of pupils in rural schools had inadequate performance while 34.77 percent of pupils in urban performed inadequately. This reveals that the ability of pupils to answer items on Addition and subtraction orally is better in urban schools than that of the pupils in rural schools.

### 4.7.3 Comparison of Pupils' Performance in the Competence of Number Identification and Solving Word Problems Region Wise

The comparison of the pupils' performance in identifying the missing numbers in sequences and solving word problems in each region has been done. This comparison is based on the
number of pupils who were able to correctly answer at least 6 items out of 10 items with a performance lying above the average. Additionally, the pupils who correctly answered at most 4 items performed inadequately. The comparison of performance has been done in 26 regions in which the total of 28,816 pupils sat for the assessment. The results are shown in Chart 20.


Chart 20: Pupils' performance in identifying numbers and solving word problems region wise

Chart 20 shows that, generally, many pupils in most of the regions had good performance. Out of 26 regions, 5 regions which are Morogoro, Dar es Salaam, Ruvuma, Dodoma and Njombe had higher performance of $88.08,82.81,77.01,74.20$ and 73.96 percent, respectively. However, the pupils in 5 regions which are Rukwa, Kigoma, Songwe, Katavi and Shinyanga performed inadequately with $53.85,51.14,48.78,48.11$ and 46.20 percent, respectively.

### 4.7.4 Comparison of Pupils' Performance in Addition and Subtraction of Numbers by Region

In assessing pupils' competence in addition and subtraction of numbers, the pupils were required to answer all items orally. A total of 28,816 pupils were assessed in this competence. The pupils' performance in 26 regions in Tanzania mainland is shown in Chart 21.


Chart 21: Pupils' performance in addition and subtraction of numbers region wise

Chart 21 shows that the pupils in 5 regions out of 26, namely Geita, Mbeya, Dar es Salaam, Ruvuma and Mwanza had very good, good and average performance with $80.63,74.28,74.28$, 73.52 and 71.38 percent, respectively. On the other hand, the pupils in Tabora, Kilimanjaro, Kigoma, Iringa and Mtwara regions had inadequate performance of $58.24,48.89,45.07,44.75$ and 44.53 percent, respectively. This shows that most pupils were able to answer correctly the oral items which assessed the
competences in Adding and Subtracting whole numbers up to 1000.

### 4.7.5 Pupils' Overall Performance Region Wise

The comparison of the overall performance of pupils assessed in each region has been done in this part. This comparison focused on the number of pupils who were able to score from 13 to 50 marks out of 50 . A total of 28,816 pupils sat for the assessment. The overall performance in each region is indicated in Chart 22. The comparison of performance has been done in 26 regions of Tanzania Mainland in which 28,022 pupils sat for the assessment. The results of the comparison are shown in Chart 22.


Chart 22: Pupils' overall performance region wise
Chart 22 shows that out of the 26 regions, 13 were above the National benchmark (64.20). Of these pupils in 5 regions, namely Morogoro, Dar es Salaam, Ruvuma, Dodoma and Pwani had the
highest performance (Very good and average) with 87.30, 83.20, $76.71,75.50$ and 73.50 percent respectively. On the other hand, 13 regions were below the National Benchmark of which Rukwa, Kigoma, Mara, Songwe and Katavi had inadequate performance of $41.50,49.40,52.50,53.90$ and 54.60 percent, respectively. This shows that all regions had good or very good performance in Arithmetic Skills.

### 4.8 Summary of the Performance in Arithmetic Skills Assessment

In the Arithmetic Skills assessment, the questions tested the pupils' levels of performance in Identifying the Missing Numbers in a sequence, Solving Word Problems, Addition and Subtraction.

In the subtask of identification of numbers, about 69.52 and 52.27 percent of pupils responded correctly in the sequences of numbers which increase by 1 and 10, respectively. Moreover, in the sequences of numbers which decrease by $1,38.08$ percent of the pupils responded correctly. However, in the sequence of numbers which increase by 5 , only 23.74 percent of the pupils wrote the correct answer. Similarly, in the sequence of numbers which increase by 2 , only 20.65 percent of pupils wrote the correct answer. Many pupils had low performance as they lacked knowledge and skills, especially in the sequences of twodigit numbers.

In the subtask of addition of numbers, 64.69 percent of the pupils showed good understanding of addition of a single-digit number to a twodigit number without carrying, and 53.05 percent in addition of a singledigit number to a two-digit number by carrying. Also, 45.29 percent of the pupils were able to correctly add two-digit numbers without carrying. However, in the items involving addition of two-digit numbers by carrying, 26.43 and 23.58 percent responded correctly to item 5 and 4 , respectively.

In the subtask of subtraction of numbers, 56.08 and 47.02 percent of pupils responded correctly to the item involving subtraction of a singledigit number from a two-digit number without borrowing. They also responded to the item involving subtraction of a single-digit number from a two-digit number by borrowing, respectively. In the items involving subtraction of two-digit numbers by borrowing, 19.25 and 18.80 percent
of the pupils managed to correctly respond to items 10 and 9 , respectively.

In word problem subtask, 62.00 and 54.39 percent of the pupils were able to correctly solve the word problems involving addition and subtraction of single-digit numbers, respectively. Furthermore, 28.15 and 19.01 percent of the pupils were able to solve correctly the word problems involving two-digit numbers by borrowing and without borrowing, respectively. The pupils' failure to answer the items correctly was due to lack of knowledge and skills in solving word problems involving two-digit numbers. Another reason for the pupils' failure was inability in identifying the requirements of the word problems that led to the omission of the items.

Generally, 64.20 percent of the pupils were able to answer the assessment items in Arithmetic Skills correctly. This shows that the pupils had good performance in that assessment. They managed to: identify the missing numbers in sequences, add single-digit numbers and two-digit numbers by carrying, subtract single-digit numbers and two-digit numbers by borrowing, solve word problems and use the counting aids like paper and pencil, fingers and tallying. In contrast, 35.80 percent of the pupils had inadequate performance: they lacked competence in reading and writing numbers, adding by carrying and subtracting by borrowing, and in solving word problems by using counting aids like paper and pencil, fingers and tallying.

## CHAPTER FIVE

## AVAILABILITY OF TEACHING RESOURCES AND GENERAL CONDITION ON TEACHING AND LEARNING ENVIRONMENT

### 5.1 Introduction

This chapter is about teaching and learning resources as well as limitations for Reading, Writing and Arithmetic Skills (3Rs) in schools. The information was obtained through questionnaires. The intention of the questionnaires was to identify the state of teaching and learning environment, availability of teaching and learning materials, teachers and other resources.

### 5.2 General Conditions about Schools

Head of schools who responded to questionnaires were 491 (93.7\%). The analysis of the questionnaires shows that about 309 (62.9\%) Schoolteachers were trained in the teaching and learning of 3Rs. They also indicated that their schools had a reasonable number of 40 pupils and not exceeding 50 per class.

### 5.3 Availability of Teaching and Learning Resources and Tools

The head of schools were required to give information based on the availability of teaching and learning materials, such as textbooks and supplementary books. This was done in order to oversee the prevailing condition at school which may affect teachers and pupils in teaching and learning. The responses are presented in Table 9.

Table 9: Status of Teaching and and Learning materials

| S/N | Item | Number of <br> respondents | $\%$ |
| :---: | :--- | :---: | :---: |
| (i) | Availability of textbooks for teaching <br> Arithmetic skills. | 468 | 95.3 |
| (ii) | Availability of additional books for teaching <br> Arithmetic skills. | 431 | 87.8 |
| (iii) | Presence of tools such as counting aids for <br> teaching Arithmetic skills. | 440 | 89.6 |
| (iv) | Presence of aid materials such as writing <br> boards for teaching Writing skills. | 393 | 80.0 |


| (v) | Presence of books for teaching Reading <br> skills. | 471 | 95.9 |
| :---: | :--- | :---: | :---: |
| (vi) | Availability of reading books such as short <br> story books for teaching Reading skills. | 467 | 95.1 |

$\mathrm{N}=491$
Table 9 shows that the resources for teaching and learning of 3Rs are quite enough. It was further indicated that textbooks, supplementary books and other supportive resources for all the three Skills were available at above 95.9 percent.

Statistics further shows that Reading skill had more textbooks and supplementary books such as short story books, which were at 95.9 percent and 95.1 percent, respectively. Similarly, the availability of textbooks, supplementary books, teaching and manipulative tools for Arithmetic skill was good at 89.6 percent as well as the teaching materials pertaining to the Writing skill ( $80.0 \%$ ). However, based on heads of schools' comments, the amount of books in schools is sufficient for the pupils to learn.

### 5.4 Teaching and Learning Environment for 3Rs

The head of schools' responses to the question about teaching and learning environment on each item are as shown in Table 10.

Table 10: Status of Teaching and Learning Environment

| S/N | Item | Number of <br> respondents | $\%$ |
| :--- | :--- | :---: | :---: |
| (i) | Presence of desks, tables and chairs for <br> pupils and teachers for standard I and II. | 445 | 90.6 |
| (ii) | Presence of enough classrooms relative <br> to number of pupils in Standard I and II. | 367 | 74.7 |
| (iii) | Availability of water sources for the pupils <br> to drink and sanitation. | 382 | 77.8 |
| (iv) | Relations between the school <br> management with parents/ guardians of <br> the Standard II pupils. | 467 | 95.1 |

$$
N=491
$$

The statistics in Table 10 show that there was a good relationship between the school management and parents as 95.1 percent of heads of schools claimed to have been satisfied with the prevailing situation. Regarding the availability of water service in the school setting, 77.7 percent of heads of schools from the sampled schools reported that the children had access to clean and safe water for various uses.

The analysis of the questionnaires also revealed that 90.6 percent of the heads of schools involved in the assessment reported that there were sufficient furniture for teaching and learning of 3Rs in their schools. In addition, these furniture were situated in the good classrooms as 74.7 percent respondents reported the adequacy of classrooms. Despite the availability of the furniture, some of the heads of schools explained that the furniture such as chairs and tables used were not appropriate to the age of the pupils as they appear to be too high for them to sit comfortably.

Although there was shortage of buildings and furniture, the majority of schools ( $66.6 \%$ ) appeared to satisfy a reasonable number of a maximum of 40 pupils per stream as suggested by the primary education curriculum of 2007. Additionally, 84.7 percent had classrooms capable of accommodating not more than 50 pupils.

### 5.5 Limitations to the Development of Teaching and Learning of 3Rs

Head of schools were required to highlight setbacks in the implementation of teaching and learning of the 3R skills in their context. The setbacks outlined by heads of schools are shown in Table11.

Table 11: Factors Limiting Teaching and Learning of 3 R skills

| $\mathbf{S / N}$ | Item | Number of <br> respondents | $\%$ |
| :---: | :--- | :---: | :---: |
| 1. | Distance travelled by pupils from home to <br> school. | 275 | 56.0 |
| 2. | Unsatisfactory school attendance. | 262 | 53.4 |
| 3. | Shortage of 3Rs teachers. | 352 | 71.7 |
| 4. | Reception of pupils with low 3R skills. | 238 | 48.5 |
| 5. | Shortage of teaching and learning <br> materials like books. | 263 | 53.6 |

$$
N=491
$$

As indicated in Table 11, the home to school distance which pupils walk has been identified as one of the factors that affect the pupils' learning due to tiredness, hunger and thirst. This challenge was the most prevalent in Simiyu and Katavi regions. Other regions that faced the similar challenge were Singida and Iringa.

Another challenge was inadequate pupils' attendance (53.4\%) that is attributable to low income families and ignorance. Finally, there was shortage of 3 Rs teachers which was mentioned by 71.69 percent of the respondents. According to the responses form the heads of schools, this was caused by the allocation of teachers in the workstations and transfer. This challenge may be overcome by having a good plan of allocating and transferring teachers.

## CHAPTER SIX

## CONCLUSION AND RECOMMENDATIONS

### 6.1 Introduction

This chapter provides the conclusion of the analysis of 2019 standard II performance on Reading, Writing and Arithmetic Skills (3Rs). Moreover, it provides recommendations to teachers and the Ministry of Education, Science and Technology on areas for improvement as well as how to implement them.

### 6.2 Conclusion

In general, the pupils performance in Reading, Writing and Arithmetic was good since 69.02 percent of pupils performed well.

In the Reading Skill, 21,554 ( $74.80 \%$ ) pupils had the performance ranging from average to very good. The pupils' performance is attributable to their competence in reading the passage and comprehending it, and this helped them to answer the questions drawn from the passage correctly. However, 7,267 (25.20\%) pupils had an inadequate performance. These pupils failed to read the words which were formed by consonant clusters. They also failed to read correctly and in accurate speed. Furthermore, the influence of their ethnic languages over the Swahili language affected their pronunciation of the Swahili words. Similarly, they lacked competence in reading the passage, interpreting it and answering question related to the content of the passage read.

Further analysis indicates that 22,679 (75.20\%) pupils had the performance ranging from average to very good in writing skills. These pupils were competent in forming letters and words. They identified the pictures and wrote the correct names for each picture. Moreover, they underlined the words which were written in small letters. Additionally, they were able to copy the group of words and marked correctly the punctuation marks. On the other hand, 7,479 (24.80\%) pupils had inadequate performance, because they failed to write the names of the pictures given, identify the words written in small letters. They also failed to copy and punctuate the group of words.

As for Arithmetic skills, the analysis indicates that 18,500 (64.20\%) pupils had the performance ranging from average to very good. These pupils
were competent in adding with carrying and substituting with carrying as they were able to use the counting aids like fingers, paper and pencil, and tallying. On the contrary, 10,316 (35.80\%) pupils had inadequate performance, since they lacked competence in reading and counting. They were incompetent in addition and subtraction by carrying and failed to use counting aids.

The pupils' performance for schools in urban and rural areas shows that urban schools had good performance of 80.28 percent compared to rural schools which had 72.47 percent. This was due to the fact that urban schools have enough teachers and are well equipped with teaching and learning facilities which facilitate the teaching and learning process.

Further analysis indicates that region wise, Dar es Salaam was the best performer by 92.58 percent in reading skills. However, Kigoma region ranked last by having 59.77 percent. In writing skills, Morogoro region had a very good performance of 93.58 percent while the last region was Kigoma having 51.89 percent. Moreover, in Arithmetic skills, Morogoro was the best region with performance of 88.08 percent while the last region in this study was Rukwa having 53.85 percent.

Therefore, more efforts are needed to increase the performance of the regions whose performance was unsatisfactory.

### 6.3 Recommendations

In order to improve more on the pupils' average or inadequate performance in the three skills (Reading, Writing and Arithmetic skills), The National Examinations Council of Tanzania recommends that:
(a) Teachers should insist and guide pupils to read 50 words or more fluently with accurate speed (one minute), avoiding words with consonant clusters. They should also train them in reading for comprehension in order to improve their performance in Reading skills.
(b) Teachers should put more efforts and give more exercises on identifying pictures, writing the names of pictures, writing consecutive letters, forming syllables and words in order to improve their writing skills. Moreover, teachers should guide the pupils on how to identify capital and small letters. They should also guide the pupils through writing the passage and use
punctuation marks appropriately according to the context of the sentence.
(c) In order to improve arithmetic skills, teachers should use teaching aids like counting aids. Similarly, they should give more exercises on completing missing numbers in sequence, addition by carrying, subtraction by borrowing and solving word problems.
(d) The Ministry of Education and Technology through its educational quality assurance directorate and the regional and district education officers together with schools administrators should make follow up on the teaching and learning of the three skills in order to overcome the challenges observed.
(e) The teachers should use the available teaching and learning resources in order to improve the pupil's competences. Moreover, they should use school environment to create and develop teaching aids.
(f) Teachers, Head teachers and parents should monitor their children in order to prevent and combat truancy so as to improve their competence in Reading, Writing and Arithmetic.

# Appendix 1: Reading Skill Assessment Paper 

JAMHURI YA MUUNGANO WA TANZANIA<br>BARAZA LA MITIHANI LA TANZANIA UPIMAJI WA KITAIFA WA DARASA LA PILI<br>STADI YA KUSOMA NA KUHESABU<br>KARATASI YA MWANAFUNZI<br>Muda: Dakika 20 Jjumaa, 31 Januari 2020 asubuhi<br>Maelekezo

1. Mwanafunzi anatakiwa kujibu maswali yote kwa mdomo.
2. Kila mwanafunzi atapimwa kwa dakika 20.
3. Msimamizi anatakiwa kujaza taarifa za mwanafunzi katika nafasi zilizo wazi juu ya fomu maalum ya upimajt kwa kalamu ya wino wa bluu.
4. Mwanafunzi atakapokuwa amemaliza kusoma na kujibu maswali ya ujahamu na kuhesabu, msimamizi anatakiwa kujaza alama katika skeli ya upimaji kwa kutumia kalamu ya wino mwekundu.

Ukurasa wa 1 kati ya 4

Tina na Subira ni marafiki, Wanaishi kijiji cha $\mathrm{Ng}^{\prime}$ 'alo. Kijiji chao kina shida kubwa ya maji. Siku moja, Tina na Subira walikwenda kisimani kuteka maje Subira alichukua kata na kujaza ndoo yake. Mara akaanza kupiga kelele, kumbe alikuwa amechomwa na mwiba. Hatimaye, Subira alishindwa kubeba ndoo. Wazazi wake walimpeleka hospitali.

1. $11+6=$
2. $15+8=$
3. $11+23=$
4. $27+36=$
5. $42+18=$

Ukurasa wa 3 kati ya 4
echapuans.
6. $17-3=$
7. $20-8=$
8. $35-24=$
9. $46-19=$
10. $50-21=$

Ukurasa wa 4 kati ya 4
criso/kes

# JAMHURI YA MUUNGANO WA TANZANIA <br> BARAZA LA MITIHANI LA TANZANIA <br> UPIMAJI WA DARASA LA PILI STADI YA KUSOMA NA KUHESABU KWA KUTUMIA TABLET (KISHIKWAMBI) 

## SEHEMU A

201 STADI YA KUSOMA

1. Kusoma kifungu cha maneno kwa ufasaha, umakini na kasi inayotakiwa. (alama 25).

Maelekezo kwa Msimamizi
Gusa kila neno ambalo mwanafunzi atashindwa kulisoma na neno hilo litakuwa na rangi nyekundu. Iwapo uligusa neno ambalo mwanafunzi alikosea kusoma na akarudia kusoma kwa usahihi, gusa tena neno hilo na rangi nyekundu itaondoka.
(a) Mwelekeze mwanafunzi kusoma kifungu cha maneno kwa sauti, umakint na haraka kadri awezavyo. Mwanafunzi atakapokuwa anasoma, fuatilia usomaji wake kwa kutumia kifungu cha maneno kilichopo katika tablet.
(b) Iwapo mwanafunzi atashindwa kusoma neno baada ya sekunde 3, mwelekeze kusoma neno linalofuata.
(c) Iwapo mwanafunzi atashindwa kusoma maneno yote ya sentenst ya kwanza kishikwambi kitasitisha zoezi hivyo endelea na stadi ya kuhesabu.
(d) Iwapo mwanafunzi atasema sijui wakati akisoma neno, chukulia kama ni kosa.
(e) Iwapo mwanafunzi atashindwa kumaliza kusoma kifungu cha maneno ndani ya sekunde 60, gusa (hold) kwa muda neno la mwisho alilosoma mwanafunzi.

Ukurasa wa 1 kati 5

## Maelekezo ya Msimamizi kwa Mwanafunzi

Karibu $\qquad$ Hujambo?
(a) Hapa kuna kifungu cha maneno, nikisema anza utasoma (mwoneshe mwanafunzi kwa kugusa kwa kalamu) kuanzia neno la kwanza kutoka kushoto kwenda kulia katika kila mstari
(b) Utasoma maneno kwa sautt, umakint na kwa haraka kadrt uwezavyo.
(c) Weka kidole kwenye neno la kwanza. Je uko tayari? Anza.
2. Kusoma kifungu cha maneno kisha kujibu maswali kwa mdomo (alama 25).

## Maelekezo kwa Msimamizi

(a) Mwongoze mwanafunzt kusoma tena kifungu cha maneno (mwoneshe kwa kugusa kwa kalamu kuanzia sentensi ya kwanza kutoka kushoto kwenda kulia katika kila mstari). Baada ya mwanafunzi kusoma ndani ya dakika 3, chukua karatasi ya mwanafunzi kisha muulize maswalt yaliyopo kwerye tablet.
(b) Mwanafunzi akitoa jibu sahihi gusa alama ya vema ( $v$ ), iwapo atatoa jibu lisilo sahiht gusa alama ya kosa ( X ). Endapo mwanafunzi atatoa jibu lisilo sahihi na kisha kufanya marekebisho kwa kutoa jibu sahihi gusa alama ya vema ( $V$ ).
(c) Iwapo mwanafunzi ataulizwa swali na kushindwa kujibu ndani ya sekunde 10, utatakiwa kugusa alama ya kosa (X) kisha kuendelea na swalt tinalofuata.

## Maelekezo ya Msimamizi kwa Mwanafunzi

(a) Utasoma tena kifungu cha maneno (mwoneshe mwanafunzi kwa kugusa kwa kalamu kuanzia sentenst ya kwanza kutoka kushoto kwenda kulia katika kila mstari).
(b) Utasoma maneno kwa sauti, umakini na kwa haraka kadri uwezavyo. Baada ya kusoma nitachukua karatasi yako kisha nitakuultza maswali yanayotokana na kifungu cha maneno ulichosoma. Je upo tayari? Anza.

## SEHEMU B

## Maelekezo kwa Msimamizi

Gusa alama ya vema (v) kwenye tablet endapo mwanafunzi atajibu kwa usahihi swali husika au alama ya kosa ( $X$ ) iwapo mwanafunzi atatoa jibu lisilo sahihi. Iwapo mwanafunzi atatoa jibu lisilo sahihi na kisha kufanya marekebisho kwa kutoa jibu sahihi gusa alama ya vema ( 0 ).
(a) Mwongoze mwanafunzi kujibu maswalt ya kujumbisha na kutoa. Mpe karatasi na penseli kisha mwambie kuwa anaweza kutumia kama anataka lakini sio lazima.
(b) Iwapo mwanafunzi atatumia njia isiyoridhisha muulize kama anaweza kutumia njia nyingine.
(c) Iwapo mwanafunzi ataendelea kutumia nyia isiyoridhisha au atasimama/atakwama/hatajibu kwa sekunde 5 kisha endelea na swali linalofuata.
(d) Sitisha zoezi endapo mwanafunzi atakosa maswalt manne ya mwanzo katika maswali ya kujumlisha kisha endelea na maswali ya kutoo.
(e) Iwapo mwanafunzi atakosa maswali manne ya mwanzo katika maswali ya kutoa sitisha zoezi. Endelea na mwanajunzi anayefuata.

## Maelekezo ya Msimamizi kwa Mwanafunzi

(a) Hapo kuna maswalı ya kujumlisha na kutoa (mwoneshe mwanafunzi kwa mkono swali la 1 hadi ia 5 kisha swali la 6 hadi 10).
(b) Utaanza na swali la 1. Utajibu maswali hayo kwa mdomo, Unaweza kutumia penseli na karatasi kama unataka lakini sio lazima. Je upo tayari? Anza.

## Appendix 2: Reading and Arithmetic Skills Assessment Scale

## JAMHURI YA MUUNGANO WA TANZANIA BARAZA LA MITIHANI LA TANZANIA

Fomu Maalum ya Kujaza Alama za Mwanafunzi katika Upimajt wa Kusoma na Kuhesabu Jina la Mwanafunzi
Namba ya Mwanafunzi

| KWA MATUMIZI YA MPIMAJI TU |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| STADI YA KUSOMA |  |  | STADI YA KUHESABU |  |  |
| Namba ya Swali | Alama | Saini ya Mpimaji | Namba ya Swali | Alama | Saini ya Mpimaji |
|  |  |  | 1. |  |  |
|  |  |  | 2. |  |  |
| 1. |  |  | 3. |  |  |
|  |  |  | 4. |  |  |
|  |  |  | 5. |  |  |
|  |  |  | 6. |  |  |
|  |  |  | 7. |  |  |
| 2. |  |  | 8. |  |  |
|  |  |  | 9. |  |  |
|  |  |  | 10. |  |  |
| Jumla ya Alama |  |  |  |  |  |

Ukurase wa 1 kat ya?

## SEHEMU A

1. Kusoma kifungu cha maneno kwa ufasaha, umakini na kasi inayotakiwa. (alama 25).

## Maelekezo kwa Msimamizi

Weka alama ya mkwaju (1) kwa kila neno ambalo mwanafunzi ameshindwa kulisoma kwenye kifungu cha maneno. Iwapo uliweka alama ya mkwaju mwanafunzt alipokosea kusoma neno na akarudia kusoma kwa usahihi, zungushia (ø) neno hilo. (Kila neno moja sahihi alama 001/2)
(a) Mwelekeze mwanafunzi kusoma kifungu cha maneno kwa sauti, umakini na haraka kadri awezavyo. Mwanafunzi atakapokuwa anasoma, fuatilia usomaji wake kwa kutumia kifungu cha maneno kulichopo katika Skeli ya Upimaji.
(b) Iwapo mwanafunzi atashindwa kusoma neno baada ya sekunde 3 mwelekeze kusoma neno linalofuata.
(c) Iwapo mwanafunzi atashindwa kusoma maneno yote ya sentensi ya kwanza, sitisha zoezi na weka alama ya mabano [] katika neno la mwisho kusornwa kisha endelea na stadt ya kuhesabu.
(d) Iwapo mwanafunzi atasema sijui wakati akisoma, chukulia kama ni kosa kisha weka alama ya mkwaju.
(e) Iwapo mwanafunzt atoshindwa kumaliza kusoma kefungu cha maneno ndani ya sekunde 60, weka alama ya mabano [] katika neno la mwisho alilosoma.

## Maelekezo ya Msimamizi kwa Mwanafunzi

Karibu $\qquad$ Hujambo?
(a) Hapa kuna kifungu cha maneno, nikisema anza utasoma (mwoneshe mwanafunzi kwa kugusa kwa kalamu kuanzia neno la kwanza kutoka kushoto kwenda kulia katika kila mstari).
(b) Utasoma maneno kwa sauti, umakini na kwa haraka kadri uwezavyo.
(c) Weka kidele kwenye neno la kwanza. Je uko tayari? Anza.

Tina na Subira ni marafiki.
Wanaishi kijiji cha $\mathrm{Ng}^{\prime}$ alo. Kijiji chao kina shida kubwa ya maji. Siku moja, Tina na Subira walikwenda kisimani kuteka majl Subira alichukua kata na kujaza ndoo yake. Mara akaanza kupiga kelele, kumbe alikuwa amechomwa na mwiba. Hatimaye, Subira alishindwa kubeba ndoo. Wazazi wake walimpeleka hospital.

Alama: $\square$ Muda uliotumika:

2. Kusoma kifungu cha maneno kisha kujibu maswali kwa mdomo (alama 25).

## Maelekezo kwa Msimamizi

(a) Mwongoze mwanafunzi kusoma tena kifungu cha maneno (mwoneshe kwa kugusa kwa kalamu) kuanzia sentensi ya kwanza kutoka kushoto kwenda kulia katika kila mstari. Baada ya mwanafunzi kusoma ndani ya dakika 3, chukua karatasi ya mwanafunzi kisha muulize maswali yaliyopo kwenye Skell ya Upimaji.
(b) Mwanafunzt akitoa jibu sahithi zungushia alama 5, iwapo atatoa jibu lisilo sahihi zungushia alama 0. Endapo mwanafunzi atatoa jibu lisilo sahihi na kisha kufanya marekebisho kwa kutoa jibu sahihi, weka mkwaju kwenye alama 0 kisha andika jumla ya alama katika nafasi kwenye jedwali.
(c) Iwapo utamuuliza swali mwanafunzi na akashindwa kujibu ndani ya sekunde 10, zungushia alama 0 kisha endelea na swalt linalofuata.

## Maelekezo ya Msimamizi kwa Mwanafunzi

(a) Utasoma tena kifungu cha maneno (mwoneshe mwanafunzi kwa kugusa kwa kalamu kuanzia sentensi ya kwanza kutoka kushoto kwenda kulia katika kila mstari.
(b) Utasoma maneno kwa sauti, umakini na kwa haraka kadri uwezavyo. Baada ya kusoma nitachukua karatasi yako kisha nitakuuliza maswali yanayotokana na kifungu cha maneno ulichosoma Je uko tayari? Anza.

Tina na Subira ni marafiki. Wanaishi kijiji cha $\mathrm{Ng}^{\prime} a l o$. Kijiji chao kina shida kubwa ya maji. Siku moja, Tina na Subira walikwenda kisimant kuteka majt. Subira alichukua kata na kujaza ndoo yake. Mara akaanza kupiga kelele, kumbe alikuwa amechomwa na mwiba. Hatimaye, Subira alishindwa kubeba ndoo. Wazazi wake walimpeleka hospitali.

## Maswali na Majibu

| Kipengele | Maswali na majibu |  | Alama |  |
| :---: | :--- | :---: | :---: | :---: |
| 1. | Rafiki yake Tina anaitwa nani? <br> (Subira) | 5 | 0 |  |
| 2. | Tina na Subira wanaishi katika kigiji <br> gani? (Ng'alo) | 5 | 0 |  |
| 3. | Tina na Subira walikwenda wapi? <br> (Kisimani) | 5 | 0 |  |
| 4. | Subira alitumia nini kujaza maji <br> kwenye ndoo yake? (Kata) | 5 | 0 |  |
| 5. | Kwanini Subira alipelekwa Hospitali? <br> (Kwa sababu alikuwa amechomwa <br> na mwiba/ kwa sababu alikuwa <br> ameumia/ ili apate matibabu/ili apate <br> dawa) | 5 | 0 |  |

## SEHEMU B

## Maelekezo kwa Msimamizi

Zungushia alama 2 twapo mwanafunzi atatoa jibu sahihi, zungushia alama 0 iwapo atatoa jibu lisilo sahihi. Iwapo mwanafunzi atatoa jibu lisilosahihi na kisha kufanya marekebisho na kutoa jibu sahihi, weka mkwaju kwenye alama 0 kisha andika jumla ya alama katika nafasi kwenye jedwali.
(a) Mwongoze mwanafunzi kujibu maswali ya kujumlisha na kutoa. Mpe karatasi na penseli kisha mwambie kuwa anaweza kutumia kama anataka lakini sio lazima.
(b) Iwapo mwanafunzi atatumia njia isiyoridhisha muulize kama anaweza kutumia njia nyingine.
(c) Iwapo mwanafunzi ataendelea kutumia njta isiyoridhisha au atasimama/atakwama/hatajibu kwa sekunde 5 kisha endelea na swali linalofuata.
(d) Sitisha zoezi endapo mwanafunzi atakosa maswali marne ya mwanzo katika maswalt ya kujumlisha kisha endelea na maswall ya kutoa.
(e) Iwapo mwanafunzi atakosa maswali manne ya mwanzo katika maswalt ya kutoa sitisha zoezi. Endelea na mwanafunzi anayefuata.

## Maelekezo ya Msimamizi kwa Mwanafunzi

(a) Hapo kuna maswalt ya kujumlisha na kutoa (mwoneshe mwanafunzi kwa mkono swali la 1 hadi la 5 kisha swali la 6 hadi 10),
(b) Utaanza na swalt la 1. Utajibu maswalt hayo kwa mdomo. Unaweza kutumia penseli na karatasi kama unataka lakini sio lazima. Je upo tayari? Anza.

| Na. | Maswali na majibu | Alama |  |
| :--- | :--- | :--- | :--- |
| 1. | $11+6=(17)$ | 2 | 0 |
| 2. | $15+8=(23)$ | 2 | 0 |
| 3. | $11+23=(34)$ | 2 | 0 |
| 4. | $27+36=(63)$ | 2 | 0 |
| 5. | $42+18=(60)$ | 2 | 0 |
| 6. | $17-3=(14)$ | 2 | 0 |
| 7. | $20-8=(12)$ | 2 | 0 |
| 8. | $35-24=(11)$ | 2 | 0 |
| 9. | $46-19=(27)$ | 2 | 0 |
| 10. | $50-21=(29)$ | 2 | 0 |
|  | Jumla ya Alama |  |  |

Maoni ya msimamizi
Weka alama ya vema ( $)$ ) iwapo mwanafunzi:
$\square$ ametumia vidole au kutali.
$\square$ ametumia karatasi na penseli.
$\square$ amejibu maswali yote kwa kichwa.

## Appendix 3: Writing Skill Assessment Paper

Jina la Mwanafunzi
Namba ya Mwanafunzi

## JAMHURI YA MUUNGANO WA TANZANIA BARAZA LA MITIHANI LA TANZANIA UPIMAJI WA DARASA LA PILI

## Muda: Dakika 40 Alhamisi, 30 Januari 2020 asubuhi

Maelekezo

1. Karatasi hil ina maswali matatu. (3).
2. Jibu maswali yote.
3. Andika majibu yako yote kwa kutumia penseli.
4. Andika Jina lako na Namba yako katika kila ukurasa.

| KWA MATUMIZI YA MPIMAJI TU |  |  |
| :---: | :---: | :---: |
| Namba <br> ya Swali | Alama | Saini ya Mpimaji |
| 1. |  |  |
| 2. |  |  |
| 3. |  |  |
| Jumla |  |  |

Ukurasa wa 1 kati ya 4

Jina la Mwanafunzi Namba ya Mwanafunzi

1. Tazama kwa makini picha zifuatazo kisha andika majina yake katika nafasi zilizo wazi.


Ukurasa wa 2 kati ya 4

Jina la Mwanafunzi
Namba ya Mwanafunzi


Ukurasa wa 3 kati ya 4
2. Pigia mstari maneno yyaliyoandikwa kwa herufi ndogo.
(a) MVULANA, msichana, BABU, bibi
(b) NYANYA, KAROTI, pilipili, kitunguu
(c) dawati, KITI, meza, KABATI
(d) PAPAI, pera, NANASI, fenesi
(e) fisi, MBUZI, twiga, SUNGURA
3. Nakill kifungu cha maneno kifuatacho na kisha weka alama za uandishi yaani: nukta (), mkato (), alama ya kushangaa (1), na alama ya kuuliza (?) mahali panapostahili.

Umeiona ile bustani yenye maua mazuri _ Looh _ inapendeza sana _ pamoja na kuwa inahitaji kumwagiliwa maji mengi $\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Ukurasa wa 4 kati ya 4

## Appendix 4: Arithmetic Skill Assessment Paper

> Jina la Mwanafunzi
> Namba ya Mwanafunzi
> JAMHURI YA MUUNGANO WA TANZANIA BARAZA LA MITIHANI LA TANZANIA UPIMAJI WA KITAIFA WA DARASA LA PILI

## Muda: Dakika 50 Alhamisi, 30 Januari 2020 asubuhi

Maelekezo

1. Karatasi hiit ina maswali kumi (10).
2. Jibu maswali yote.
3. Andika majibu yote kwa penseli.

| KWA MATUMIZI YA MPIMAI TU |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Namba ya <br> Swali | Alama | Saini ya <br> Mpinali | Namba ya <br> Swali | Alama | Saini ya <br> Mpimaji |  |  |  |  |
| 1. |  |  | 6. |  |  |  |  |  |  |
| 2. |  |  | 7. |  |  |  |  |  |  |
| 3. |  |  | 8. |  |  |  |  |  |  |
| 4. |  |  | 9. |  |  |  |  |  |  |
| 5. | Jumla ya Alama |  |  |  |  |  | 10 |  |  |
|  |  |  |  |  |  |  |  |  |  |

Ukurasa wa 1 ya kat 3

Andika namba inayokosekana katika nafasi iliyoachwa wazi.

1. $3,4,5, \ldots 7,8$.
2. $27,26,25,24$, $\qquad$ -
3. $54,56,58$, $\qquad$ 62.
4. $10, \ldots 30,40,50$.
5. 40,45 , $\qquad$ 55, 60.
6. Kikapu kina machungwa 3. Iwapo yataongezwa machungwa 2, kikapu hicho kitakuwa na machungwa mangapi?
$\qquad$
$\longrightarrow$
$\qquad$
7. Juma alikuwa na pipi 7. Alimpa rafiki yake pipi 4. Je, alibakiwa na pipi ngapi?
$\qquad$
8. Daftari langu la Kuandika lina kurasa 48. Ikiwa kurasa 32 zimejaa, je, zimebaki kurasa ngapi ambazo hazijaandikwa?
$\qquad$
$\qquad$
$\qquad$

Ukurasa wa 2 ya kati 3
9. Musa alinunua mayai 33 siku ya kwanza. Siku ya pili alinunua mayai 19. Je, jumla alinunua mayai mangapi?
10. Mwalimu alikuwa na penseli 51. Aliwapa wanafunzi penseli 17. Je, alibakiwa na penseli ngapi?
$\qquad$
$\qquad$
$\qquad$

