# **GRADE 1**

# **TERM 1 WORD PROBLEMS (ENGLISH)**

# EXAMPLES OF APPROACH TO WORD PROBLEMS TAKEN FROM CAPS

- 1. ADDITION
- 2. SUBTRACTION
- 3. GROUPING AND SHARING

$$6 - 3 = 3$$

## List of Word Problems Grade 1 Term 1

#### Addition (up to 5)

#### CHANGE:

- 1. I have one egg. My brother gave me two eggs. How many eggs do I have altogether?
- 2. Noluthando had two apples. Silo gave her three apples. How many apples does she have now? (from CAPS)

#### COMBINE:

- 1. Nosisi has two green and two blue marbles. How many marbles does she have? (from CAPS)
- 2. There are three boys and two girls doing extra art lessons at a school. How many learners are there in the art class? (from CAPS)

#### Subtraction (up to 5)

#### CHANGE:

- 1. There are four taxis at the rank. Two taxis drive off. How many taxis are left at the rank?
- 2. Noluthando had five apples. She gave four apples to Silo. How many apples does she have now? (from CAPS)

#### COMBINE:

- 1. There are five children on the see-saw. Three of them are on one side. How many are on the other side? (from CAPS)
- 2. Nosisi has four marbles. Three are green and the rest are blue. How many blue marbles does Nosisi have? (from CAPS)

#### COMPARE to see difference:

1. Nosisi has five bananas. Themba has one banana. How many more bananas does Nosisi have than Themba? (from CAPS)

#### Grouping

GROUPING, DISCARDING THE REMAINDER:

- 1. Stella has five squashes. She puts two squashes in each bag. How many bags of 2 squashes does she have? (similar to CAPS)
- 2. Mr. Moyane has five chocolate bars. He gives his two daughters two chocolate bars each. How many chocolate bars does he have left?

GROUPING, INCORPORATING THE REMAINDER IN THE ANSWER:

- 1. There are four marbles. How many bags of two marbles can be filled? (from CAPS)
- 2. There are three chairs in a room. One person takes one chair. How many people can sit down in the room?

#### Sharing

SHARING, INCORPORATING THE REMAINDER IN THE ANSWER:

1. How many oranges can I have if I share four oranges equally with my brother?

SHARING, DISCARDING THE REMAINDER:

2. Share five chocolate bars among three friends so that they all get the same number of chocolate bars. (similar to CAPS)

## TERM 1 ADDITION

#### First steps to introduce a word problem:

- A. Learners are not informed which operation to do (Adding or subtracting). First of all, they have to think independently.
- B. Teacher writes the problem on the chalkboard.
- C. Teacher reads the problem aloud once or twice clearly and slowly.
- D. Teacher reads the word problem with the learners aloud, ensuring that the learners read every word.
- E. Teacher lets learners read the whole problem on their own aloud.

\*It is recommended to provide concrete materials (counters, number block, etc.) to support Grade 1 learners with problem solving.

#### Addition (up to 5)

I have one egg.

My brother gave me two eggs.

How many eggs do I have altogether?

\*When the teacher gives learners a word problem, it is useful to write the word problem in separate rows as shown below in order to help learners to read it

I have one egg.

My brother gave me two eggs.

How many eggs do I have altogether?

1. To help the learners find the numbers given in a word problem, the teacher should underline the numbers in the word problem.

I have <u>one</u> egg.

My brother gave me two eggs.

How many eggs do I have altogether?

- 2. To make learners understand the story of the word problem, Teacher should ask, e.g.
- Who are the people in the word problem? ---- my brother and I
- What do I have? ----- one egg
- How many eggs do I have? ----1
- How many eggs did my brother give me? ----2



3. Teacher draws eggs and writes the number symbols on the chalk board, and shows learners one egg (or other concrete materials) in one hand and two eggs in other hand.



- 4. Teacher pairs the learners. One learner in each pair plays the role of, I and the other one, **brother**.
- 5. To make learners understand the question then Teacher draws wavy lines under the question.

I have <u>one</u> egg.

My brother gave me two eggs.

How many eggs do I have altogether?

- 6. Teacher gets learners to role-play the word problem. Each pair acts out the word problem. One learner in the pair is I and the other is **brother**. I has 1 object and **brother** has 2.
- 7. Teacher acts out the word problem with concrete objects and each pair follows the teacher.
- 8. As Teacher reads out each sentence, s/he draws a balloon and writes each sentence in the balloon and illustrates the word problem. Learners say the words shaded in yellow.



- 9. Learners look at the illustration and think and work out the answer.
  - e.g. (Number of eggs that I have now)

Teacher should ask learners how they got the answer.

Tips for thinking: Do I have more eggs or fewer eggs now?

10. Teacher draws what happens to me after my brother gave me 2 eggs.



Teacher writes slash on 2 eggs of my brother and draws 2 eggs to my side.

11. Using **number line** to work out the question:



- 12. Learners give the answer to *teacher* and *teacher* writes the answer **3** in the place of the **'?'** in the balloon.
- 13. In the learner's classwork book (learners are supposed to recognise three eggs at once and not by counting one by one)



- A. Learners are not informed which operation they do (addition or subtraction). First of all, they have to think on their own.
- B. Teacher writes the problem on the chalkboard.
- C. Teacher reads the problem aloud once or twice clearly and slowly.
- D. Teacher reads the word problem with the learners aloud, ensuring that the learners read every word.
- E. Teacher lets learners read the whole problem on their own aloud.

#### Addition (up to 5)

Nosisi has two green and two blue marbles. How many marbles does she have?

\*When teacher gives learners a word problem, it is useful to write the word problem in separate rows as shown below in order to help learners.

Nosisi has two green and two blue marbles.

How many marbles does she have?

1. To help the learners to find the numbers given in the word problem, then teacher should underline the numbers in the word problem.

Nosisi has two green and two blue marbles.

How many marbles does she have?

- 2. To summarise the story of the word problem with learners. e.g.
- Who appears in the word problem? ----Nosisi
- What does Nosisi have? -----Marbles
- How many green marbles Nosisi have? ----2
- How many blue marbles Nosisi have? ---2

Nosisi		
Green marbles	2	
Blue marbles	2	
1		

3. Teacher draws the marbles and writes the numbers on the chalk board letting the learner say words in the balloon. And allow another learner say words in the solid lined balloon.



- 4. Teacher shows learners two marbles in one hand and two marbles in other hand. If teacher does not have marbles she can use concrete objects.
- 5. Each learner takes 2 objects (bottle tops, blocks, beans, pebbles, marbles etc.) in each of their hands. Teacher checks that every learner has the correct number of objects, in each hand- 2 and 2
- 6. **Teacher lets learners find the question in the word problem,** then teacher draws wavy underline to the question.

Nosisi has <u>two</u> green and <u>two</u> blue marbles. How many marbles does she have?

e.g. Teacher prompts the learners to think and give responses. (number of all marbles), (altogether), (total number of marbles)

\*Teacher moves around and observes learners and supports them. e.g. (to put all marbles together), (to add/join blue marbles to green ones), (to combine green and blue marbles)

7. Teacher draws what happens to the marbles on the board.



8. Using **number line** for working out the question:

		The answer is 4				
0 1	2	3	4	5		
	``		.1			
Finding position "2" then	Cour	nting one	,two			

9. Learners give the answer to teacher and teacher lets one learner write the answer **4** next to the marbles.

10. In their classwork books (learners are supposed to recognise four marbles not counting one by one)



### TERM 1 SUBTRACTION

#### First steps to introduce a word problem:

- A. Learners are not informed which operation to do (addition or subtraction). First of all, they have to think independently.
- B. Teacher writes the problem on the chalkboard.
- C. Teacher reads the problem aloud once or twice clearly and slowly.
- D. Teacher and learners read the word problem aloud, ensuring that the learners read every word.
- E. Teacher allows learners to read aloud the whole problem on their own.

\*It is recommended to provide concrete materials (counters, number block, etc.) to support Grade 1 learners in problem solving.

#### Subtraction (up to 5)

There are four taxis at the rank. Two taxis drive off. How many taxis are left at the rank?

\*When teacher gives learners a word problem, it is useful to write the word problem in separate rows as shown below in order to help learners. \*

There are four taxis at the rank.

Two taxis drive off.

How many taxis are left at the rank?

1. Teacher lets learners to find the numbers given in the problem then Teacher underlines the numbers in the word problem.

There are four taxis at the rank.

Two taxis drive off.

How many taxis are left at the rank?

- 2. To make learners understand the story of the word problem teacher should ask e.g.
  - Where are we? ----at the taxi rank
  - What are there? ---taxis
  - How many taxis are there? ----4
  - What happened? ----2 of them drove off.



3. Teacher draws 4 objects, which are not necessarily the drawings of taxis and puts all of them in a box as if they are at the rank. Then teacher asks the learners to count the taxis and she writes the number on the chalkboard.

- 4. At the same time, each learner takes 4 objects (bottle tops, blocks, beans, pebbles, etc.) for taxis. Teacher checks that everyone has the correct number of objects, which are 4.
- 5. To let learners, find the question. Teacher draws wavy lines under the words.

There are four taxis at the rank.

Two taxis drive off.

How many taxis are left at the rank?

#### 6. To let learners, think teacher writes '?' in the drawing

E.g. Number of taxis at the rank.

- 7. To let learners, think what they must do to get the answer.
- 8. Learners to show their 4 objects (pebbles or boxes etc.) and do the action of the problem.
- 9. Then teacher draws action letting each learner say the words in the balloon.



10. Using the **number line** to work out the question:



11. Learners give the answer to teacher and teacher writes the answer 2.

12. In learner's classwork book (learners are supposed to recognise two not counting one by one)



- A. Learners are not informed which operation they do (Adding or Subtracting). First of all, they have to think on their own.
- B. Teacher writes the problem on the chalkboard.
- C. Teacher reads the problem aloud once or twice clearly and slowly.
- D. Teacher reads the word problem with the learners aloud, ensuring that the learners read every word.
- E. Teacher lets learners read the whole problem on their own aloud.

#### Subtraction (up to 5)

There are five children on the see-saw.

Three of them are on one side.

How many are on the other side?

1. Teacher lets learners to find the numbers given in the problem then teacher underlines the numbers in the word problem.

There are five children on the see-saw.

Three of them are on one side.

How many are on the other side?

- To make children understand the story of the word problem teacher asks learners the following: e.g.
- Who appears in the word problem? ----children
- What are they doing? -----they are on the see-saw.
- How many children? -----5
- How many children on one side? ----3

On the see-saw								
Children	5							
On one side	3							

3. Teacher draws 5 objects, for the children in the problem and writes the number 5. Then Teacher draws a see-saw under five objects on the chalk board.



- 4. Each learner has 5 objects (bottle tops, blocks, beans, rocks, etc.) and takes one pencil or a ruler for the see-saw. Teacher checks everyone has the correct number of objects. At the same time, teacher prepares 5 bigger objects on his/her desk.
- 5. Teacher lets learners do what is happening on the see-saw and lets them move their objects to show their thinking.

Teacher observes learners, as they do the problem practically with their objects.

- 6. Teacher chooses one learner to come to demonstrate the movement of the objects on the see-saw to the class.
- 7. When all learners understand what is happening on the see-saw and can do the act the see-saw movement with their own objects, teacher draws what happens on the see-saw.
- There are <u>five</u> children on the see-saw.
  <u>5</u>

  <u>Three of them are on one side.
  </u>
  - 8. To make the learners understand the question teacher draws wavy lines under the words.

There are <u>five</u> children on the see-saw. <u>Three</u> of them are on one side. How many are on the other side?

9. Using **number line** for working out the question:

	The ans	The answer is 2					
		৵ৢৢৢ					
0	1	2	3	4	5		
		F.					
Finding position $"5"$ then			ting back	wards on	e,two,three		

10. Learners give the answer to Teacher and Teacher draws 2 circles on the other side and writes **2**.



11. In learner's classwork book (learners are supposed to recognise the number of children not counting one by one)



- A. Learners are not informed which operation they do (Adding or Subtracting). First of all, they have to think on their own.
- B. Teacher writes the problem on the chalkboard
- C. Teacher reads the problem aloud once or twice clearly and slowly.
- D. Teacher reads the word problem with the learners aloud, ensuring that the learners read every word.
- E. Teacher lets learners read the whole problem on their own aloud.

#### Subtraction (up to 5)

Nosisi has five bananas.

Themba has one banana.

How many more bananas does Nosisi have than Themba?

1. To let learners, find numbers given in a problem, then teacher underlines the numbers in the word problem.

Nosisi has <u>five</u> bananas.

Themba has <u>one</u> banana.

How many more bananas does Nosisi have than Themba?

- 2. To make learners understand the story of the word problem teacher asks; e.g.
  - Who are the people in the word problem? ----Nosisi and Themba
  - What do they have? -----bananas
  - How many bananas does Nosisi have? ----5
  - How many bananas does Themba have? ---1



3. Teacher draws the illustration to show the 2 children with bananas on the chalk board.

Nosisi has <u>five</u> bananas.			$\mathcal{I}$	5
Themba has <u>one</u> banana. (	$\odot$	1		
*It is important to draw bana	anas starting fr	om the same	place in order to	compare numbers of

- bananas later.
  - 4. Teacher organises learners in a pair. One of them plays a role of Nosisi and the other one Themba. **Nosisi** has 5 objects and **Themba** has 1.

#### 5. To make learners understand the problem teacher asks the following questions.

e.g. (Who has more bananas?) (How many more bananas?) (Difference between Nosisi and Themba) etc.

Nosisi has <u>five</u> bananas. Themba has <u>one</u> banana. <mark>How many more</mark> bananas does Nosisi have than Themba?

6. Teacher makes learners think about the answer by looking at their objects and the drawing on the chalkboard.

e.g. (Compare the number of bananas) (How do we compare the number of bananas?) Who has more/ who has less.

- 7. Teacher pairs the learners and gets each pair to start comparing the number of bananas using their objects. Teacher moves around and observes what pairs do.
- 8. Teacher asks many pairs to demonstrate and share their methods, about how they compared the number of bananas.
- 9. Teacher then draws the line on the chalk board to make comparison easier.



- 10. Learners give the answer to Teacher and teacher gets one learner to write the answer 4.
- 11. In learner's classwork book (learners are supposed to recognise the number of bananas not counting one by one)



## TERM 1 GROUPING AND SHARING

#### First steps to introduce a word problem:

- A. Learners are not informed which operation to do (addition or subtraction). First of all, they have to think on their own.
- B. Teacher writes the problem on the chalkboard
- C. Teacher reads the problem aloud once or twice clearly and slowly.
- D. Teacher reads the word problem with the learners aloud, ensuring that the learners read every word.
- E. Teacher lets learners read the whole problem on their own aloud.

\*It is recommended to provide concrete materials (counters, number block, etc.) to support Grade 1 learners with problem solving.

#### Grouping (up to 5)

GROUPING, DISCARDING THE REMAINDER

Stella has five squashes. She puts two squashes in each bag. How many bags of 2 squashes does she have?

\*When Teacher gives learners a word problem, it is useful to write each sentence in the word problem in separate rows as shown below in order to help learners understand the story clearly.

Stella has five squashes.

She puts two squashes in each bag.

How many bags of 2 squash does she have?

1. To let learners, find numbers given in a problem, then teacher underlines the numbers in the word problem.

Stella has five squashes.

She puts two squashes in each bag.

How many bags of 2 squashes does she have?

- 2. To make learners understand the story of the word problem teacher asks;
  - e.g.
    - Who has squash? -----Stella
  - How many squashes does she have? -----5

\*Each learner takes 5 objects.

• What is Stella doing? ----She is putting squashes in bags.

Stella Squashes 5 Putting 2 squashes in bags 3. Teacher draws 5 objects on the chalkboard and writes **5** then draws a big bag under the 5 objects.



4. **To let learners, find the question and think what is asked,** then teacher draws wavy lines under the question.



- e.g. (How many bags) (Number of bags)
- 5. Teacher asks learners how many squashes are in the bag. -----2 squashes
- 6. Teacher draws 2 objects in the bag and writes 2



- 7. Teacher tells the learners to do the same and continue with their objects until they cannot make more bags with 2 squashes.
- 8. Teacher asks learners; how many bags did you fill?
- 9. Learners give the answer to teacher and teacher changes drawing adding one more bag with 2 squashes.

Important! The answer is the number of bags. Teacher should confirm with learners the number of bags by counting the bags.



\*The remainder 1 should be confirmed with whole class, as well.

10. In learner's classwork book:



- A. Learners are not informed which operation they do (addition or subtraction). First of all, they have to think on their own.
- B. Teacher writes the problem on the chalkboard.
- C. Teacher reads the problem aloud once or twice clearly and slowly.
- D. Teacher reads the word problem with the learners aloud, ensuring that the learners read every word.
- E. Teacher lets learners read the whole problem on their own aloud.

#### Sharing (up to 5)

SHARING, DISCARDING THE REMAINDER

Share five chocolate bars among three friends

so that they all get the same number of chocolate bars.

1. Teacher lets learners to find the numbers given in the problem, then Teacher underlines the numbers in the word problem.

Share <u>five</u> chocolate bars amongst <u>three</u> friends so that they all get the same number of chocolate bars.

- 2. To make learners understand the story of the word problem teacher asks:
  - e.g.How many chocolate bars are there? -----5
  - How many friends are there? -----3

\*Teacher draws 5 chocolate bars on the chalk board and writes **5** then 3 friends under the chocolate bars.

					5

\*Learners will do the same drawing in their classwork books.

What are they doing? --They are sharing 5 chocolate bars. Three friends will have same number of chocolate bars.

3. To let learners, think how to share 5 chocolate bars amongst 3 friends considering all of them have the same number. Learners work in their exercise books.

Possible work of learners



4. When learners find they cannot give a whole chocolate bar to each friend anymore after giving them one bar, Teacher asks learners how we can share (divide) 2 chocolate bars into 3 friends.



**Important!** Drawing has to show the picture of the share that each friend has like above. Teacher does not leave arrows only on the drawing like below. It is very important to visualise the share of each friend for learners for their understanding of fraction in the future.



5. In learner's classwork book:

