

# Mathematics Grade 2

**By:**  
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# Mathematics Grade 2

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**Online:**

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**C O N N E X I O N S**

Rice University, Houston, Texas

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# Chapter 1

## Term 1

### 1.1 Friends<sup>1</sup>

#### 1.1.1 MATHEMATICS

#### 1.1.2 Mathematics in the world around us

#### 1.1.3 EDUCATOR SECTION

#### 1.1.4 Memorandum

#### 1.1.5 Critical and developmental outcomes:

The learners must be able to:

1. identify and solve problems and make decisions using critical and creative thinking;
2. work effectively with others as members of a team, group, organisation and community;
3. organise and manage themselves and their activities responsibly and effectively;
4. collect, analyse, organise and critically evaluate information;
5. communicate effectively using visual, symbolic and/or language skills in various modes;
6. use science and technology effectively and critically, showing responsibility towards the environment and the health of others;
6. demonstrate an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation;
7. reflect on and explore a variety of strategies to learn more effectively;
8. participate as responsible citizens in the life of local, national, and global communities;
9. be culturally and aesthetically sensitive across a range of social contexts;
10. explore education and career opportunities; and develop entrepreneurial opportunities.

#### MODULE 1

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<sup>1</sup>This content is available online at <<http://cnx.org/content/m22584/1.1/>>.

Critical and developmental outcomes:	Pages:
CO 1	E-4, 10, 11, 14, 18, 19, 20, 21, 24
CO 2	E-1, E-5, 15, 25
CO 3	3, 4, E-2, 16, 17
CO 4	5
CO 5	1, 7, 8, 9, 12,13, 22
CO 6	28
CO 7	5, 6, 27, 28, 29
CO 8	26, E-9

Table 1.1

- **Integration of Themes:** Friends
- **Inclusively:** Although we are all unique, we share many similarities; appearance, sport, education etc.
- **Social Justice:** Friends and their expected behaviour towards one another.
- **A healthy environment:** This is our responsibility – what can we do about keeping our environment healthy?

Educator's page

- Each learner has page 2 which they can colour and put into a plastic sleeve until the completion of page 6.
- Discussion of the friends will follow
- Who are they? Names? How many?
- Who is first? second? third? etc.
- Who comes after Mo, etc?before Pat, etc.? between Sisulu and Ann?
- Are they all the same - Why not?
- Are they different? How do you know? Give reasons. Here are some clues to help you.
- Look at their hair - long/short. Clothes. Lengths - tall/short.
- There are some things that are the same.
- Clues:

Look at eyes/each one has 2 eyes.

- Count the eyes in two's.
- Ears? Count the ears in two's.
- Hands? Count in two's.
- Feet? Count in two's.
- Shoes? Count in two's.
- Legs? Count in two's.
- Arms? Count in two's.
- Noses? Count in \_\_?
- Mouth? Count in \_\_?
- Fingers on one hand / count in 5's.
- Fingers on 2 hands / count in 10's.
- Toes on one foot / count in 5's.
- Toes on two feet / count in 10's.



**1.1.6**

LO 1.2	
--------	--

**Table 1.2****1.1.7 LEARNER SECTION****1.1.8 Content****1.1.8.1 ACTIVITY: Friends [LO 1.4, LO 1.1]**

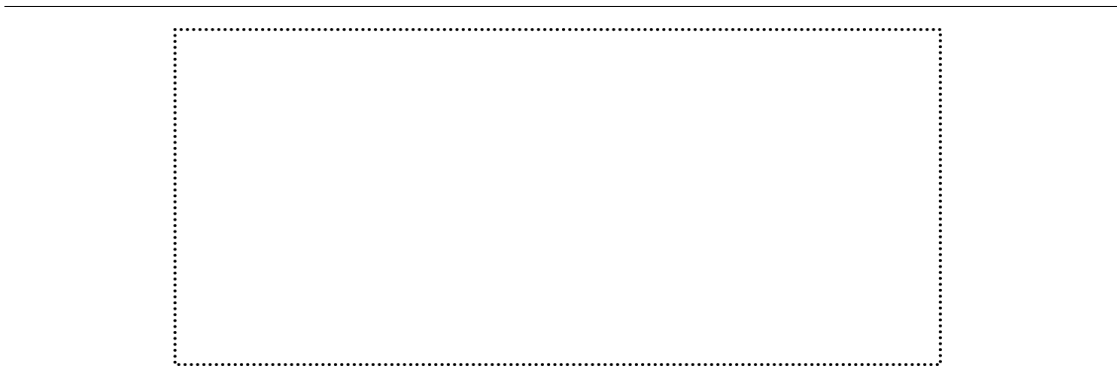
- Tell your friends who you are.

My name is \_\_\_\_\_

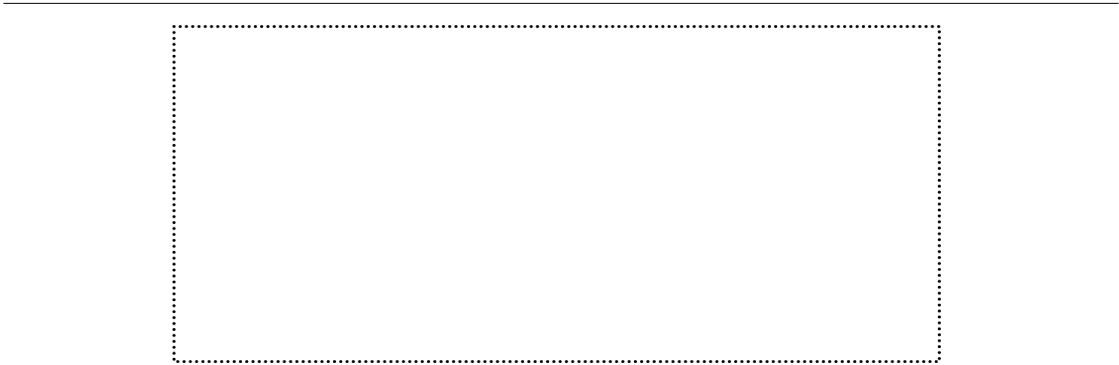
I am \_\_\_\_\_  
years old.

It is my first day in Grade \_\_\_\_\_

- Draw a picture in each block.

**Figure 1.1**

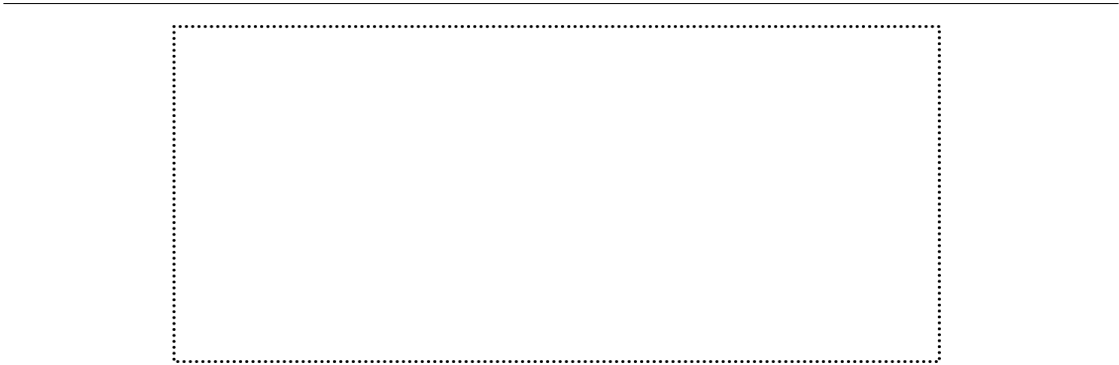
Yesterday



**Figure 1.2**

---

Today



**Figure 1.3**

---

Tomorrow

LO 4.4	
--------	--

**Table 1.3**

My friends



Figure 1.4

---

These are my friends.

---



Figure 1.5

---

- I have \_\_\_\_\_ friends.

- There are \_\_\_\_\_ boys and \_\_\_\_\_ girls.

- There are \_\_\_\_\_ boys than girls.

more/less/the same number of

- They all have names.

First is Liz, second is \_\_\_\_\_,  
 third is \_\_\_\_\_, fourth is \_\_\_\_\_,  
 \_\_\_\_\_,

fifth is \_\_\_\_\_, sixth is \_\_\_\_\_,  
 seventh is \_\_\_\_\_, eighth is \_\_\_\_\_,  
 ninth is \_\_\_\_\_ and last is \_\_\_\_\_  
 \_\_\_\_\_



Figure 1.6

Sally comes after \_\_\_\_\_  
 Mike comes before \_\_\_\_\_  
 Tom is between \_\_\_\_\_ and \_\_\_\_\_  
 1st 2nd 3rd 4th \_\_\_\_\_

LO 1.1		LO 1.4	
--------	--	--------	--

Table 1.4

Numbers also have names.

- Write their names:

1 \_\_\_\_\_  
 2 \_\_\_\_\_  
 3 \_\_\_\_\_  
 4 \_\_\_\_\_  
 5 \_\_\_\_\_  
 6 \_\_\_\_\_  
 7 \_\_\_\_\_  
 8 \_\_\_\_\_  
 9 \_\_\_\_\_  
 10 \_\_\_\_\_

- Seven comes after \_\_\_\_\_
- Three comes before \_\_\_\_\_
- Five comes between \_\_\_\_\_ and \_\_\_\_\_

- Fill in the missing numbers.

0	1		3				7			10
---	---	--	---	--	--	--	---	--	--	----

Table 1.5

10	9									
----	---	--	--	--	--	--	--	--	--	--

Table 1.6

LO 1.3		LO 1.10	
--------	--	---------	--

Table 1.7

All about my friends.



Figure 1.7

- We are all \_\_\_\_\_ (the same / different)
- \_\_\_\_\_ have long hair.
- \_\_\_\_\_ have short hair. (How many?)
- My graph

The length of my friends' hair											
Long hair											
Short hair											
friends	1	2	3	4	5	6	7	8	9	10	

Table 1.8

- Colour the blocks red to show the number of friends that have long hair.

- Colour the blocks blue to show the number of friends that have short hair.



Figure 1.8

---

Write:

- There are \_\_\_\_\_ with long hair. (more/less)
- There are \_\_\_\_\_ with short hair. (more/less)
- Count the children in the class with long hair. \_\_\_\_\_ have long hair.
- Count the children in the class with short hair. \_\_\_\_\_ have short hair.

LO 5.1		LO 5.2		LO 5.4		LO 5.5	
--------	--	--------	--	--------	--	--------	--

Table 1.9

- Count their eyes in 2's.

---





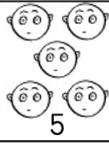
Friend/s					
	1	2	3	4	5
Eyes	.....	.....	.....	.....	.....

Figure 1.9

---

- Count their ears in 2's.

---






Friend/s					
	1	2	3	4	5
Ears	.....	.....	.....	.....	.....

Figure 1.10

- 
- Count their fingers in 10's.

---






Friend/s					
	1	2	3	4	5
Fingers	.....	.....	.....	.....	.....

Figure 1.11

- 
- Count their toes in 10's.

---






Friend/s					
	1	2	3	4	5
Toes	.....	.....	.....	.....	.....

Figure 1.12

- 
- Choose a friend. Each one takes some counters.

Guess \_\_\_\_\_  
Count \_\_\_\_\_

LO 1.2	
--------	--

Table 1.10

### 1.1.9 Assessment

**Learning Outcome 1:** The learner will be able to recognise, describe and represent numbers and their relationships, and to count, estimate, calculate and check with competence and confidence in solving problems.

**Assessment Standard 1.1:** We know this when the learner counts to at least 100 everyday objects reliably;

**Assessment Standard 1.2:** We know this when the learner counts forwards and backwards in:

- 1.2.1 ones from any number between 0 and 200;
- 1.2.2 tens from any multiple of 10 between 0 and 200;
- 1.2.3 fives from any multiple of 5 between 0 and 200;
- 1.2.4 twos from any multiple of 2 between 0 and 200;

**Assessment Standard 1.3:** We know this when the learner knows and reads number symbols from 1 to at least 200 and writes number names from 1 to at least 100;

**Assessment Standard 1.4:** We know this when the learner orders, describes and compares the following numbers:

- 1.4.1 whole numbers to at least 2-digit numbers;
- 1.4.2 common fractions including halves and quarters;

**Assessment Standard 1.10:** We know this when the learner uses the following techniques:

- 1.10.1 building up and breaking down numbers;
- 1.10.2 doubling and halving;
- 1.10.3 using concrete apparatus (e.g. counters);
- 1.10.4 number-lines;

**Learning Outcome 4:** The learner will be able to use appropriate measuring units, instruments and formulae in a variety of contexts.

**Assessment Standard 4.4:** We know this when the learner sequences events according to days, weeks, months and years;

**Learning Outcome 5:** The learner will be able to collect, summarise, display and critically analyse data in order to draw conclusions and make predictions, and to interpret and determine chance variation.

**Assessment Standard 5.1:** We know this when the learner collects data (alone and/or as a member of a group or team) in the classroom and school environment to answer questions posed by the teacher (e.g. ‘how many learners are there in each classroom?’);

**Assessment Standard 5.2:** We know this when the learner sorts physical objects to one attribute chosen by the teacher;

**Assessment Standard 5.4:** We know this when the learner draws pictures and constructs pictographs that have a 1-1 correspondence between own data and representations;

**Assessment Standard 5.5:** We know this when the learner describes own or a peer’s collection of objects, explains how it was sorted, and answers questions about it.



## 1.2 The calendar<sup>2</sup>

### 1.2.1 MATHEMATICS

#### 1.2.2 Mathematics in the world around us

### 1.2.3 EDUCATOR SECTION

#### 1.2.4 Memorandum

#### 1.2.5 Critical and developmental outcomes:

The learners must be able to:

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**Table 1.11**

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