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1. **WHOLE NUMBERS**

**Activity 1**

Circle the letter of the correct answer.

1. 14 is a multiple of:
   A. 2  
   B. 8  
   C. 28

2. 1 876 is a multiple of:
   A. 9 380  
   B. 28  
   C. 76

3. 8 is a factor of:
   A. 35  
   B. 57  
   C. 208

4. 96 is a factor of:
   A. 5 769  
   B. 12  
   C. 576

5. Which is a sequence of prime numbers?
   A. 7; 11; 13; 19  
   B. 29; 31; 37; 39  
   C. 57; 59; 61; 67

6. What is the place value of the 7 in 237 892 319?
   A. hundred thousands  
   B. ten millions  
   C. millions

7. 9 999 999 + 10 =?
   A. 10 000 009  
   B. 9 000 009  
   C. 19 999 909

8. 236 917 215 + 50 000 =?
   A. 236 922 215  
   B. 241 922 215  
   C. 236 967 215

9. 39 569 has been rounded off to 40 000. To which of the following numbers was it rounded off to?
   A. nearest 5  
   B. nearest 10  
   C. nearest 1 000

10. 100 000 000 – 1?
    A. 100 999 999  
    B. 99 999 999  
    C. 999 999 999
Activity 2

Complete the following sentences.

2.1 If you multiply a number by 1, the product is (a) _________. so we say that 1 is
   (b) ______________ for multiplication.

2.2 If you multiply a number by 0 the product is (a) ______________ 

2.3 If you add 0 to a number, the sum is (a) ______________ so we say 0 is 
   (b) ______________ for addition.

Activity 3

3.1 List the prime numbers between the following numbers
   (a) 4 and 25
   (b) 72 and 100

3.2 From the list below, write down:

   1; 2; 3; 4; 8; 9; 13; 15; 16; 25; 64

   (a) Square numbers
   (b) Cubed numbers
   (c) Prime numbers
   (d) Odd numbers
   (e) Composite numbers

3.3 From the group of numbers, choose one number that fits each of the descriptions.

   36  120  143

   19  8  87

   (a) A multiple of 11
   (b) Has 1, 2, 3, 4, 6, 9, 12 and 18 as factors
   (c) A prime number
   (d) A number divisible by 5
Activity 4

4.1 What is the value of the underlined digit?

(a) 20 140 086
(b) 246 52 173
(c) 4788
(d) 30 410 341

4.2 What is the place value of each of the underlined digits above?

(a) __________________________
(b) __________________________
(c) __________________________
(d) __________________________

Activity 5

5.1 Write the number in digits.

Four million, two hundred and eighty three thousand, one hundred and sixty four.

5.2 Round off the following numbers to the numbers indicated on the table

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>10</th>
<th>100</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 722</td>
<td>(a)</td>
<td>(b)</td>
<td>(c)</td>
<td>(d)</td>
</tr>
<tr>
<td>140 628</td>
<td>(e)</td>
<td>(g)</td>
<td>(h)</td>
<td>(i)</td>
</tr>
</tbody>
</table>

5.3 Arrange the following numbers in the descending order:

140 456; 986 456; 650; 560; 120 465

Activity 6

6.1 Calculate the following

(a) 478 924 − 289 123 + 289 123
(b) 4591 + 67823 − 4591
(c) 9256 − 9256 + 87238
6.2 Replace * with > or < or =

(a) \(23 + 56 + 45 \quad * \quad 56 + 23 + 45\)

(b) \(300 \,000 + 40 \,000 + 1 \,000 + 800 + 70 + 1 \quad * \quad 341 \,871\)

**Activity 7**

Calculate:

(a) \(7 \,142 \times 334\)

(b) \(8 \,145 \times 247\)

(c) \(9 \,327 \div 34\)

(d) \(5 \,219 \div 124\)

**Activity 8**

Solve the following

8.1 56 magazines cost R 1 540. How much will one magazine cost?

8.2 A new school has been built. 1 785 learners enrolled at this school.

(a) If there is one teacher for every 35 learners, how many teachers would there be?

(b) How many more teachers are needed if they allocate 1 teacher for every 31 learners?

8.3. A man has a fencing business, and is doing some fencing in a housing complex. He has a roll of 3 650m of fencing. If he needs 231m per house, how many houses can he fence with that roll?

**Activity 9**

Complete the following magic square, using the numbers given

4; 5; 6; 7; 8; 9; 10; 11; 12
2. COMMON FRACTIONS

Activity 1

Match the words in column A with the correct meaning in B

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Numerator</td>
<td>Indicates how many parts are coloured in/taken</td>
</tr>
<tr>
<td>1.2 Denominator</td>
<td>Numerator is smaller than denominator</td>
</tr>
<tr>
<td>1.3 Equivalent fractions</td>
<td>Consists of a whole number and a proper fraction and is always bigger than 1</td>
</tr>
<tr>
<td>1.4 Proper fraction</td>
<td>Indicates the number of equal parts into which the whole has been divided</td>
</tr>
<tr>
<td>1.5 Improper fraction</td>
<td>Fractions are equal size</td>
</tr>
<tr>
<td>1.6 Mixed number</td>
<td>The numerator is bigger than the denominator and the fraction is always bigger than 1</td>
</tr>
</tbody>
</table>

Activity 2

Complete the table

<table>
<thead>
<tr>
<th>E.g.</th>
<th>IMPROPER FRACTION</th>
<th>MIXED NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>thirteen fifths</td>
<td>$\frac{13}{5}$</td>
<td>$2\frac{3}{5}$</td>
</tr>
<tr>
<td>2.1</td>
<td>fourteen quarters</td>
<td>(a)</td>
</tr>
<tr>
<td>2.2</td>
<td>nineteen sixths</td>
<td>(a)</td>
</tr>
<tr>
<td>2.3</td>
<td>fifteen sevenths</td>
<td>(a)</td>
</tr>
<tr>
<td>2.4</td>
<td>eleven eighths</td>
<td>(a)</td>
</tr>
<tr>
<td>2.5</td>
<td>nine halves</td>
<td>(a)</td>
</tr>
</tbody>
</table>
Activity 3

Four learners have been rewarded with a chocolate for their good work. They don’t eat it up immediately, but only the section that has been coloured in.

(a) Carl  
\[ \ \ \ \ \ \ \ \ ]  
\[ \ \ \ \ \ \ \ \ ]  
\[ \ \ \ \ \ \ \ \ ]  
\[ \ \ \ \ \ \ \ \ ]

(b) Peter  
\[ \ \ \ \ \ \ \ \ ]  
\[ \ \ \ \ \ \ \ \ ]  
\[ \ \ \ \ \ \ \ \ ]

(c) Kayla  
\[ \ \ \ \ \ \ \ \ ]  
\[ \ \ \ \ \ \ \ \ ]  
\[ \ \ \ \ \ \ \ \ ]  
\[ \ \ \ \ \ \ \ \ ]  
\[ \ \ \ \ \ \ \ \ ]

(d) Vusi  
\[ \ \ \ \ \ \ \ \ ]  
\[ \ \ \ \ \ \ \ \ ]  
\[ \ \ \ \ \ \ \ \ ]  
\[ \ \ \ \ \ \ \ \ ]  
\[ \ \ \ \ \ \ \ \ ]

3.1 What fraction does each one eat?

3.2 What do you notice about the fractions eaten?

Activity 4

4.1 Write equivalent fractions for:

(a) \( \frac{1}{2} \)

(b) \( \frac{2}{8} \)

(c) \( \frac{10}{8} \)

4.2 Complete to make the fractions equivalent (Replace the □ with the correct number)

(a) \( \frac{1}{3} = \square \frac{\square}{6} \)

(b) \( \frac{2}{10} = \square \frac{\square}{5} \)

(c) \( \frac{6}{8} = \square \frac{\square}{4} \)
4.3 Fill in: <; > or =:

(a) \( \frac{5}{6} \square \frac{2}{3} \)  
(b) \( \frac{4}{5} \square \frac{9}{10} \)  
(c) \( \frac{7}{9} \square \frac{21}{27} \)  
(d) \( \frac{5}{8} \square \frac{21}{32} \)

(e) Explain how you find the answers

4.4 Write down the fractions indicated by the arrows.

![Fraction Indicators Diagram]

Activity 5

5.1 Calculate the following

(a) \( \frac{1}{8} + \frac{3}{4} \)
(b) \( \frac{4}{7} + \frac{2}{3} \)
(c) \( \frac{4}{5} - \frac{9}{5} \)
(d) \( \frac{2}{3} - \frac{1}{2} \)
(e) \( \frac{3}{5} + \frac{4}{5} + \frac{2}{5} \)

Activity 6

6.1 Refer to Grade 6 Workbook 2, pages 136 to 141.

6.2 Calculate the following:

(a) \( 7\frac{2}{3} + 4\frac{1}{7} \)
(b) \(5\frac{1}{4} - 2\frac{1}{9}\)
(c) \(6\frac{3}{4} - (2\frac{1}{2} + 1\frac{2}{3})\)
(d) \(9\frac{7}{8} - (3\frac{1}{4} + 1\frac{2}{3})\)

**Activity 7**

7.1. Mrs Samuels buys one third of a metre of pink material and five sixths of a metre of purple material. How many metres of material does she have to make cushions for her class?

7.2. The Jansen family is picnicking. If Dad eats a quarter of the food, Mom eats three eighths of it and Sarah two eighths, will there be any left for you to eat?

7.3. The Grade 6 learners have been asked to establish a vegetable garden at the school. If they plant half of the garden with carrots, two sixths with potatoes and one twelfth with spinach, what fraction of the whole garden has been planted?

7.4. Because they have worked so hard in the garden, the classes are rewarded. The 6A class drinks four and one fifth litres of cold drink; the 6B class drinks five and four tenths litres of cold drink and the 6C class drinks three and two thirds litres. How many litres of cold drink did the school provide for the learners?

7.5. There are 600 people in a concert audience. \(\frac{3}{10}\) are male and \(\frac{5}{6}\) are older than 10 years of age.
   (a) What fraction of the audience is female?
   (b) What fraction of the audience is younger than 10 years of age?
   (c) How many people in the audience are female?
   (d) How many people are younger than 10 years of age?

**Activity 8**

8.1. Mom uses \(2\frac{1}{2}\) cups of sugar in one recipe and \(3\frac{3}{4}\) cups of sugar in another. Altogether how many cups of sugar does she use?

8.2. At a birthday party, Rafiek and his friends eat one and five eighths of the ham and salami pizzas. They also eat two and two thirds of the ham and pineapple pizzas. What fraction of the pizzas did they eat altogether?
8.3 Rafiek and his friends also drank three and a quarter litres of Coke and two and one fifth litres of Cream Soda. What fraction of the cold drink did they drink?

Activity 9

Calculate the following

(a) \( \frac{3}{5} \) of 670

(b) \( \frac{4}{7} \) of 526

(c) \( \frac{3}{4} \) of 1,648 m

(d) \( \frac{5}{9} \) of 2.7 kl

Activity 10

(a) A school bus can only transport one quarter of the school’s 268 athletes at a time. How many passengers can fit into the bus?

(b) Two thirds of the 1 944 soccer supporters were men. How many women attended the soccer game?

(c) Mr Jackson wanted to save three eighths of his salary of R10 856. What amount did he save?

(d) Nino wanted to buy a new cell phone that cost R4 739. He has only managed to save two sevenths of this amount. How much money does he still need to buy the phone?

For more activities: Refer to Grade 6 Workbook 2, pages 146 to 149.

Activity 11

One third \( \left( \frac{1}{3} \right) \) of a half \( \left( \frac{1}{2} \right) \) looks like this:

Thus \( \frac{1}{3} \times \frac{1}{2} = \frac{1}{6} \)

11.1 Make your own similar sketches for:

(a) \( \frac{1}{5} \times \frac{1}{2} \)

(b) \( \frac{3}{10} \times \frac{1}{2} \)
11.2 Calculate the following and simplify where possible:

(a) \( \frac{3}{4} \times \frac{4}{3} \)

(b) \( \frac{15}{8} \times \frac{4}{5} \)

(c) \( \frac{3}{4} \times 2\frac{2}{3} \)

(d) \( 8\frac{3}{4} \times \frac{16}{5} \)

(e) \( 7 \div \frac{3}{8} \)

(f) \( \frac{3}{4} \div 2 \)

(g) \( \frac{7}{9} \div \frac{5}{6} \)

(h) \( 2\frac{1}{4} \div \frac{3}{2} \)

(i) \( \frac{4}{5} \div 2\frac{1}{2} \)

Activity 12

Grade 6 Workbook 2:

12.1 pages 142 to 143
12.2 pages 70 to 73
3. NUMBER SENTENCES, PATTERNS, FUNCTIONS AND ALGEBRA

3.1 NUMBER SENTENCES

Term 1 focuses on properties of operations and Term 4 focuses is on the concept of equivalence

Activity 1

Complete the following number sentences.

(Learners should be encouraged to explain in their own words what they notice before they are told the property)

1.1
(a) \(92 \times 1 = \Delta\)
(b) \(18 \div 18 = \Delta\)
(c) \(67154 \div 67154 = \Delta\)
(d) \(\Delta \div 9 = 1\)

1.2
(a) \(79 - 4 + 4 = \Delta\)
(b) \(6123 + 9 - 9 = \Delta\)
(c) \(68 + 9 - \Delta = 68\)

(After completing the above examples, learners should be able to do the following and explain in their own words)

(d) \(62 + 5 = \Delta + 4\)
(e) \(67 + 7 - \Delta = 66\)
(f) \(45 - 15 = \Delta + 15 - 15\)

1.3
(a) \((8 \times 7) \times 3 = \Delta\)
(b) \(8 \times (7 \times 3) = \Delta\)

1.4 Grade 6 Workbook 2, Activity 130 Number 1 and Number 4

1.5 Grade 6 Workbook 2, Activity 128 (See Blue box and the orange one for extension)

1.6 Multiple operations NB: Learners should verbalise sentences before trying to solve them.

e.g. \(8 + 12 \times 4\) is read as ‘add twelve fours to eight’

\(8 + 12 \div 4\) is read as ‘add eight to twelve quarters’

(a) \(12 \div (4 + 2) \times 5\)
(b) \((23 - 7) \times (8 - 4)\)
(c) \((88 \div 4) - (88 \div 11)\)
(d) \((79 - 21) ÷ 2\)

1.7 Answer the following. (Grade 6 workbook 2 - activity 71 and 72b)
(a) There were 4 876 spectators at the Pirates soccer match and 6 973 spectators at the Chiefs soccer match. How many people watched these soccer matches?
(b) 1 018 people attended a school concert, 363 were adults. How many seats are left over for the children?
(c) There were 34 763 trees in a plantation. 14 999 trees fell during a storm. How many trees are still standing?
(d) Write an appropriate and interesting word problem for: 99 999 and 38 238. Solve it.

Activity 2

NB: In term 1 the focus was on properties of operations and in term 4 the focus is on the concept of equivalent.

Choose the correct option from those given below.

2.1 For which pair of numbers does the rule “multiply the first number by 7 and then subtract 5 to get the second number” apply?
(a) 11 → 2
(b) 5 → 30
(c) 30 → 5
(d) 3 → 10

2.2 Which of the following is NOT equivalent to 25 \(×\) 27?
(a) 25 \(×\) (20 \(×\) 7)
(b) (20 + 5) \(×\) (20 + 7)
(c) 25(20 + 7)
(d) 20(20 + 7) + 5(20 + 7)

2.3 39 \(×\) 14 is NOT equivalent to:
(a) (30 + 9) \(×\) (10 + 4)
(b) 39 \(×\) (10 \(×\) 4)
(c) 10(40 – 1) + 4(40 – 1)
(d) 14(40 – 1)

2.4 Which of the following statements below are equivalent to: 15 \(×\) (4 \(×\) 9) = ?
(a) (15 \(×\) 4) \(×\) 9
(b) 15 \(×\) 2 \(×\) 2 \(×\) 3 \(×\) 3
(c) (15 \(×\) 4) + (15 \(×\) 9)
(d) (10 – 1)(15 \(×\) 4)

2.5 Which of the following will always have the same value as 17 \(×\) \(Δ\)
(a) \(Δ + 17\)
(b) \(Δ − 17\)
(c) $\Delta \times 17$
(d) $\Delta \div 17$

2.6 $200 + 17 = 212 + 5$
(a) True
(b) False
(c) All of the above
(d) Neither true or false

2.7 Which statement below is NOT equivalent to: $(26 \times 39) + (26 \times 1)$?
(a) $1\,040$
(b) $26 \times (39 + 1)$
(c) $65 \times 27$
(d) $26 \times 40$

2.8 By how much is $34 \times 17$ less than $35 \times 17$
(a) 1
(b) 17
(c) 35
(d) 66

2.9 Choose the correct answer to $(48 \times 48) + (42 \times 2)$
(a) 2 400
(b) 4 000
(c) 4 800
(d) 9 600

2.10 Which of the following values will make the number sentence true: $4 \times \Delta < 17$?
(a) 7
(b) 6
(c) 5
(d) 4
3.2 FUNCTIONS AND RELATIONSHIPS

NB: Numeric patterns for grade 6 are covered by functions and relationships in grade 7. They only focus on whole numbers.

<table>
<thead>
<tr>
<th>GRADE 6</th>
<th>GRADE 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMERIC PATTERNS</td>
<td>FUNCTIONS AND RELATIONSHIPS</td>
</tr>
<tr>
<td>TERM 1: Flow diagrams</td>
<td>TERM 2: Operations with whole numbers, common fractions and decimal fractions as input values OR include whole numbers, common fractions and decimal fractions in the rules for finding output values.</td>
</tr>
<tr>
<td>Multiplication and division as inverse operations</td>
<td>TERM 3: Learners are expected to use formulae</td>
</tr>
<tr>
<td>Multiplication of units by multiples of 10, 100 &amp; 1 000.</td>
<td>TERM 4: Addition and multiplication of integers</td>
</tr>
<tr>
<td>Associative property of whole numbers and its use when multiplying numbers</td>
<td></td>
</tr>
<tr>
<td>TERM 3</td>
<td></td>
</tr>
<tr>
<td>The focus is on finding the rule</td>
<td></td>
</tr>
</tbody>
</table>

Activity 3

4.1 CAPS Intermediate Phase page 235 – 238 (Fill in all the missing input and output values)
4.2 CAPS Senior Phase page 54 - Number a, b, c and d.
4.3 Grade 7 Workbook 2 - Activity 134, 134b and 135
4.4 Complete the flow diagrams and the tables next to them. In the last block, determine the rules

(a)

(b)
4.5 Determine rule for the following flow diagrams

(a)

(b)

4.6 Represent the following table as a flow diagram

<table>
<thead>
<tr>
<th>Input</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output</td>
<td>14</td>
<td>2n+4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.7 Use the formula for the area of a rectangle $A = l \times b$ to calculate the following: *(taken from CAPS, page 62)*

(a) The area, if the length is 4 cm and the width is 2 cm.

(b) The length, if the area is 30 cm$^2$ and the width is 5 cm

(c) The width, if the area is 24 cm$^2$ and the length is 8 cm.
3.3 NUMERIC AND GEOMETRIC PATTERNS

Learners should show the same pattern in different ways: in a diagram, as a verbal description, as a flow diagram, a table and in a number sentence (general rule)

NOTES:  
CAPS Intermediate Phase, pages 247 – 249  
CAPS Senior Phase, pages 58 – 60

<table>
<thead>
<tr>
<th>GRADE 6</th>
<th>GRADE 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>TERM 1: Numeric patterns</td>
<td>TERM 3:</td>
</tr>
<tr>
<td>Flow diagrams</td>
<td>Patterns are restricted to using whole numbers, numbers in exponential form, common fractions and decimal fractions as input values</td>
</tr>
<tr>
<td>Multiplication and division as inverse operations</td>
<td></td>
</tr>
<tr>
<td>Multiplication of units by multiples of 10, 100 &amp; 1 000.</td>
<td>TERM 4:</td>
</tr>
<tr>
<td>Associative property of whole numbers and its use when multiplying numbers</td>
<td>The focus is on patterns with integers</td>
</tr>
<tr>
<td>TERM 2: Geometric patterns</td>
<td></td>
</tr>
<tr>
<td>The focus is on geometric patterns with a constant difference. Number sentences may have a constant ratio.</td>
<td></td>
</tr>
<tr>
<td>TERM 3: Numeric pattern</td>
<td></td>
</tr>
<tr>
<td>The focus is on finding the rule</td>
<td></td>
</tr>
</tbody>
</table>

Activity 4  
4.1 Grade 7 Workbook 2 – Activity 81, 82 and 83

4.2 Give the rule to describe the relationship between the numbers in the sequences below. Use the rule to give the next three numbers in the sequence:
(a) 3; 7; 11; 15; ____; ____; ____  
(b) 120; 115; 110; 105; ____; ____  
(c) 2; 4; 8; 16; ____; ____; ____  
(d) 1; 2; 4; 7; 11; 17; ____; ____; ____

4.3 Grade 7 Workbook 2 – Activity 84 and 85.

4.4 Provide a rule to describe the relationship between the numbers in the sequence. Use the rule to find the 20th term in this sequence.  
4; 7; 10; 13; ____; ____; ____
4.5 Provide a rule to describe the relationship between the numbers in this sequence. Use the rule to find the 10th term in this sequence.

1; 4; 9; 16; ____; ____; ____

<table>
<thead>
<tr>
<th>Position in sequence</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term</td>
<td>1</td>
<td>4</td>
<td>9</td>
<td>16</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.6 Provide a rule to describe the relationship between the numbers in this sequence. Use the rule to find the 10th term in this sequence. HINT: Compare with the previous sequence.

2; 5; 10; 17; ____; ____; ____

<table>
<thead>
<tr>
<th>Position in sequence</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term</td>
<td>2</td>
<td>5</td>
<td>10</td>
<td>17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.7 Grade 7 Workbook 2 - Activity 85, 86, 87 and 87b

4.8 The rule for the sequence: 4; 7; 10; 13; … can be described in four different ways. List them below. (CAPS – page 61)
3.4 ALGEBRAIC EXPRESSIONS

Term 3: The focus is on the use of symbolic language to develop an understanding of variables.

Term 4: The focus is on rules and relationships that include integers.

Activity 1

Grade 7 Workbook 2 – activity 90

<table>
<thead>
<tr>
<th>ALGEBRAIC REPRESENTATION</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2x + 7$</td>
<td>Expression</td>
</tr>
<tr>
<td>+</td>
<td>Operation sign in $2x + 7$</td>
</tr>
<tr>
<td>$2x$ and 7</td>
<td>Two terms of $2x + 7$ (terms separated by a + sign)</td>
</tr>
<tr>
<td>2</td>
<td>Coefficient of $x$ in the term $2x$</td>
</tr>
<tr>
<td>$x$</td>
<td>Variable in the expression $2x + 7$</td>
</tr>
<tr>
<td>7</td>
<td>Constant in the expression $2x + 7$</td>
</tr>
</tbody>
</table>

Activity 2

2.1 Write these phrases as expressions (write the unknown number as $x$).
   (a) Seven added to a certain number
   (b) Twelve less than a number
   (c) Fifteen divided by a number
   (d) A number is increased by seven
   (e) Nine is added to the square of a number
   (f) The product of 6 and a number is increased by 10.
   (g) 3 less than the product of a number and 8.
   (h) Half a number is added to one third of that number.
   (i) The cube root of 64 added to the square of a number.
   (j) A number multiplied by two and the product is subtracted from 11.

2.2 In each of the following expressions identify the coefficients, variable and constant term.
   (a) $5p + 2$
   (b) $m + 4$
   (c) $3 + 8x$
   (d) $\frac{x}{3}$
   (e) $2x - 7$

2.3 Describe the following expressions in words.
   (a) $5p + 2$
   (b) $m + 4$
   (c) $3 + 8x$
   (d) $\frac{x}{3}$
   (e) $2x - 7$
2.4 What does the rule to $2 \times n - 1$ mean for the following number sequence: 1; 3; 5; 7; 9; …?

*Learners should recognise that $2 \times n - 1$ represents the general term in this sequence, where $n$ represents the position of the term in the sequence. It can be used to find any term in the given sequence.*

2.5 The relationship between a boy’s age ($x$ years old) and his mother’s age is given as $25 + x$. How can this relationship be used to find the mother’s age when the boy is 11 years old?

*To find the mother’s age, one needs to substitute the boy’s given age into the rule $25 + x$. The given rule means the mother is 25 years older than the boy.*

2.6 Grade 7 workbook 2, Activity 91 and 92.
3.5 ALGEBRAIC EQUATIONS

Term 3: The focus is on number sentences with whole numbers, common fractions, decimal fractions and exponents.

Term 4: The focus is on number sentences that include integers.

Learners should solve equations by inspection or determine the numeric value of expressions by substitution.

<table>
<thead>
<tr>
<th>ALGEBRAIC REPRESENTATION</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>2m – 7 = 13</td>
<td>Equation or number sentence</td>
</tr>
<tr>
<td>+ and =</td>
<td>Operation sign and equal sign in the equation 2m – 7 = 13</td>
</tr>
<tr>
<td>2m, 7 and 13</td>
<td>Terms of the equation (separated by the – and = signs)</td>
</tr>
<tr>
<td>2</td>
<td>Coefficient of 2m</td>
</tr>
<tr>
<td>m</td>
<td>Variable</td>
</tr>
<tr>
<td>7 and 13</td>
<td>Constants</td>
</tr>
<tr>
<td>7 and 13</td>
<td>Like terms</td>
</tr>
</tbody>
</table>

Activity 1

1.1 Work out the following.
   (a) Solve for x if x + 4 = 7, where x is a natural number. (What number is added to 4 to give 7 as the answer?)
   (b) Solve for x if x + 4 = -7, where x is an integer. (What number is added to 4 to give -7?)
   (c) Solve for x if 2x = 30, where x is a natural number. (What number is multiplied by 2 to give 20?)
   (d) Write a number sentence to find the area of a rectangle with length 4.5 cm and breadth 2 cm.
   (e) If y = x² + 1, calculate the value of y when x = 3.

1.2 Grade 7 Workbook 2, Activity 93 and 94.

1.3 Write down a number sentence for each of the following problems and solve for the unknown number. Let x be the unknown. Check your solutions.
   (a) If 12 is added to a certain number, the answer is 35.
   (b) If 45 is subtracted from a certain number, the answer is 52.
   (c) A certain number is divided by 12. The answer is 7.
   (d) When 6 is multiplied by a certain number, the answer is 54.
   (e) 3 is multiplied by a certain number. 4 is added to this product. The answer is 19.
   (f) Lulu earns R200 an hour. Calculate how many hours he must work to earn R1 200.
   (g) Sashen buys four cans of cool drink for R28.80. Calculate the cost of each can.
   (h) Piet packs eggs into 52 boxes. Each box can hold 12 eggs. In total, how many eggs did she pack?
   (i) A school has 182 Grade 7 learners. A bus transporting 52 of the grade 7 learners to school broke down and the learners could not attend school for the day. How many learners were present?
(j) An article in the supermarket is marked $x$ cents. VAT on the article is 12c, and altogether I pay R1, 32. Calculate $x$.

1.4 Grade 7 Workbook 2, Activity 95

1.5 Substitute the value for $x$ in order to find the value of $y$ in the following:

(a) $y = 3x + 2$ if $x = 8$
(b) $y = 4x - 1$ if $x = \frac{1}{4}$
(c) $y = 0.2x + 5$ if $x = 10$
(d) $y = 10x + 12$ if $x = 0.3$

1.6 Are the following number sentences true or false?

(a) $9 \times n + 6 = 6 + 9n$
(b) $8 \times n + 4 = 4(2n + 1)$
(c) $6 \times n - 2 = 3(2n - 1)$
(d) $10 \div 2 + 2 \times 2n = 5 + 4n$
### 4. SPACE AND SHAPE

#### Activity 1

<table>
<thead>
<tr>
<th>FACILITATOR</th>
<th>PARTICIPANTS</th>
<th>SKILLS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction</strong>: The facilitator highlights the concepts and skills for grade 6 and 7 as per CAPS document</td>
<td>Participants note the key concepts and skills for grade 6 and 7 from the CAPS document</td>
<td></td>
</tr>
</tbody>
</table>

#### Activity 2

<table>
<thead>
<tr>
<th>FACILITATOR</th>
<th>PARTICIPANTS</th>
<th>SKILLS</th>
</tr>
</thead>
</table>
| The facilitator provides an A4 size paper and demonstrate folding the A4 paper for at least 4 or 5 times | Participants fold the paper (in no particular order) 4 to 5 times | Recognize, visualize and name 2-D shapes focusing on:  
- regular and irregular polygons  
- triangles, squares, rectangles, parallelograms, other  
- quadrilaterals, pentagons, hexagons, heptagons, octagons |
| The facilitator asks educators to unfold the paper and then outline different shapes that were formed. | Participants use a pen to outline different 2Ds that were formed | Describe, sort and compare 2-D shapes in terms of:  
- number of sides  
- lengths of sides  
- sizes of angles |
| The facilitator leads a discussion of properties of different 2Ds that formed from paper folding. | Whole group discussion | Describe, sort and compare 2-D shapes and 3-D objects |
| The facilitator leads a whole group discussion on the classification of different 2Ds with reference to:  
- CAPS (IP) page 230  
- Table A | Whole group discussion | |

2.1 Grade 7 Workbook 1 – Activity 10a
Table A

2.2 Sort the figures according to the sides or faces. Write the letter only. Name them.

1. Quadrilaterals____________________________
2. 5 sides_________________________________
3. 6 sides_________________________________
4. 7 sides_________________________________
5. Circular sides/faces________________________
6. 8 Sides__________________________________
7. 3 D objects________________________________
8. 10 sides_________________________________
9. Other____________________________________

2.3 Grade 6 Workbook 1 – Activity 18a, 18b and 18c

2.4 Grade 7 Workbook 7 – Activity 44b
Activity 3

<table>
<thead>
<tr>
<th>FACILITATOR</th>
<th>PARTICIPANTS</th>
<th>SKILLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The facilitator groups participants according to grades</td>
<td>Participants form groups of six</td>
<td></td>
</tr>
<tr>
<td>The facilitator gives activities to different groups</td>
<td>Participants do the activities focusing on specific skills and HIT</td>
<td>Describe, sort and compare 2-D shapes with special focus on</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• number of sides</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• lengths of sides</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• sizes of angles</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grade 7- Special focus on triangles</td>
</tr>
</tbody>
</table>

3.1 Grade 7 Workbook 1 – Activity 43a and 43b
3.2 Grade 7 Workbook 1 – Activity 45

Activity 4

<table>
<thead>
<tr>
<th>FACILITATOR</th>
<th>PARTICIPANTS</th>
<th>SKILLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The facilitator gives activities to different groups on circles</td>
<td>Participants draw a variety of circles (patterns)</td>
<td>Grade 6- draw a variety of circles (patterns)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grade 7- draw and label circles indicating:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>diameter, radius, chords, segments and sectors</td>
</tr>
</tbody>
</table>

4.1 Grade 6 Workbook 1 – Activity 19a and 19b
4.2 Grade 7 Workbook 1 – Activity 42

Activity 5

<table>
<thead>
<tr>
<th>FACILITATOR</th>
<th>PARTICIPANTS</th>
<th>SKILLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The facilitator gives activities on problem solving relating to 2-Ds</td>
<td>Participants do an activity on page 47 of the CAPS document.</td>
<td>Grade 7- Solve simple geometric problems involving unknown sides and angles in triangles and quadrilaterals.</td>
</tr>
<tr>
<td>The facilitator allows time for feedback from groups and thereafter lead discussions based on feedback.</td>
<td>Feedback and discussion</td>
<td></td>
</tr>
</tbody>
</table>

5.1 ΔABC is an equilateral triangle, and side AB is 3cm, what is the length of BC?
5.2 If ABCD is a kite and BC = 2.5cm and BC = 4.5 cm, what is the length of AD and DC?
Activity 6

<table>
<thead>
<tr>
<th>FACILITATOR</th>
<th>PARTICIPANTS</th>
<th>SKILLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The facilitator gives activities on properties of 3Ds</td>
<td>Participants use 3D models to do the activity focusing on specific skills and HIT</td>
<td>Describe, sort and compare 3-D objects in terms of number and shape of faces, number of vertices, number of edges</td>
</tr>
<tr>
<td>The facilitator allows time for feedback from groups and thereafter leads discussions based on feedback.</td>
<td>Feedback and discussion</td>
<td></td>
</tr>
</tbody>
</table>

6.1 Use the geometric solids below to answer questions.

(a) Which geometric solids are polyhedra? Give a reason for your answer.
(b) Which geometric solids are prisms? Give a reason for your answer.
(c) Which geometric solids are pyramids? Give a reason for your answer.

6.2 Grade 6 Workbook 2 – Activity 121 and 122.
6.3 Grade 7 Workbook 2 – Activity 111, 112, 114, 115, 116, 117
6.4 Match representation of solids in column A to the nets in column B

<table>
<thead>
<tr>
<th>COLUMN A</th>
<th>COLUMN B</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Solid 1" /></td>
<td><img src="image2" alt="Net A" /></td>
</tr>
<tr>
<td><img src="image3" alt="Solid 2" /></td>
<td><img src="image4" alt="Net B" /></td>
</tr>
<tr>
<td><img src="image5" alt="Solid 3" /></td>
<td><img src="image6" alt="Net C" /></td>
</tr>
<tr>
<td><img src="image7" alt="Solid 4" /></td>
<td><img src="image8" alt="Net D" /></td>
</tr>
<tr>
<td><img src="image9" alt="Solid 5" /></td>
<td><img src="image10" alt="Net E" /></td>
</tr>
<tr>
<td><img src="image11" alt="Solid 6" /></td>
<td><img src="image12" alt="Net F" /></td>
</tr>
<tr>
<td><img src="image13" alt="Solid 7" /></td>
<td><img src="image14" alt="Net G" /></td>
</tr>
<tr>
<td><img src="image15" alt="Solid 8" /></td>
<td><img src="image16" alt="Net H" /></td>
</tr>
</tbody>
</table>

**Activity 7**

<table>
<thead>
<tr>
<th>FACILITATOR</th>
<th>PARTICIPANTS</th>
<th>SKILLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The facilitator gives grade 7 participants a grid to construct nets that will fold onto different 3-D objects</td>
<td>Cutting and folding of nets into 3-Ds</td>
<td>Grade 7- Constructing nets (not required to measure internal angles)</td>
</tr>
<tr>
<td>The facilitator provides nets of different polyhedra and instructs participants to make 3D models</td>
<td>Making of models</td>
<td><strong>Building 3-D models</strong></td>
</tr>
</tbody>
</table>

7.1 Grade 7 Workbook 2 – Activity 113, 118, 118b, 119 and 120
Activity 8

<table>
<thead>
<tr>
<th>FACILITATOR</th>
<th>PARTICIPANTS</th>
<th>SKILLS</th>
</tr>
</thead>
</table>
| The facilitator provides a grid or dotted paper for all the participants and instructs them to draw different 3D objects. | Participants:  
- Draw 3D objects, cut out and paste them on a blank page.  
- Write out their definition of the objects. (own dictionary) | Drawing and naming |

The diagrams below show how an isometric grid could be used to sketch geometric solids.
Activity 9

<table>
<thead>
<tr>
<th>FACILITATOR</th>
<th>PARTICIPANTS</th>
<th>SKILLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The facilitator puts different objects together and asks participants to draw what they see from different views.</td>
<td>Participants draw objects from different views</td>
<td>Link the position of viewer to views of simple or composite objects, or collections of objects, can include both every day and geometric objects</td>
</tr>
<tr>
<td>The facilitator gives activities on viewing (page 118, 119, 120 premier grade 6)</td>
<td>Participants do the activities</td>
<td></td>
</tr>
</tbody>
</table>

9.1 Grade 6 Workbook 2 – Activity 79a and 79b

9.2 Grade 7 Workbook 2 – Activity 118 and 118b
Activity 10

ACTIVITIES FROM ANA EXEMPLARS

10.1 What shape is the roof of this house?

A Triangle  
B Triangular prism  
C Square  
D Square pyramid

10.2

Circle the letter of the net that cannot be folded into a cube.

A  B  C  D

10.3

Six cubes are used to build the 3-D figure shown below. The view from the right is given next to it. Circle the letter showing the front view.

View from the right

A  B  C  D
10.4

Study the grid below and then answer the questions that follow.

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How many pentagons are there in this grid? __________________
Which shape is in block 8A? _____________________________
In which block will you find a rectangle? ________________

10.5 State if the triangles are similar or not. Give a reason for each answer.

1)  
\[ \triangle DSE \]

2)  
\[ \triangle ACH \]

3)  
\[ \triangle MVL \]

4)  
\[ \triangle VLU \]
Activity 1

Look carefully at the figure below.

The square at number 1 is 1 cm long and 1 cm wide.

It is therefore called ..........................................

It is written in the following way ......................

The area of the square is ..............................

1.1 Calculate the areas of the other three figures (Counting is a good way to start).

<table>
<thead>
<tr>
<th>Figure</th>
<th>Length</th>
<th>Width / Breath</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1 cm²</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>cm²</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>cm²</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>cm²</td>
</tr>
</tbody>
</table>

1.2 Can you describe a quick way to work out the area of those shapes without counting all the squares?
Activity 2

In the figure below you can see three different nets that can be made for a cube.

2.1 Calculate the areas for the different nets.

Net 1 = ............... cm\(^2\). Net 2 = ................. cm\(^2\). Net 3 = ................. cm\(^2\).

2.2 What do you notice about these areas and the shapes?

2.3 Draw three more different nets for a cube in the grid below.

2.4 Calculate the areas of the three figures you have drawn.

................ cm\(^2\). ................ cm\(^2\). ................ cm\(^2\).

2.5 Can you describe a quick way to work out the area of the shapes in question 2 (i) and (iii) without counting all the squares? Be careful!
Activity 3

Look at the nets for the following packaging materials. Calculate how many cm$^2$ of cardboard will be needed to make a net for the different containers. Assume the squares of the grid are 1 cm by 1 cm.

3.1 How much cardboard is needed for the 3 cm by 3 cm by 3 cm cube?

3.2 How much cardboard is needed to make the net for the cereal container?
3.3 How much cardboard is needed to make 2 butter containers?

3.4 How much cardboard is needed to make the container for the spaghetti box?
Activity 4

Take a careful look at the diagram below and answer the questions:

![Diagram of a rectangle and triangles]

4.1 The rectangle ABCD has an area of ............... cm$^2$.

4.2 The triangle ABC is half of the rectangle ABCD. What is the area of the triangle ABC ............... cm$^2$?

4.3 What does the triangle EFH consist of?

4.4 The area of right-angled triangle EFG is ............... cm$^2$.

4.5 The area of right-angled triangle EGH is ............... cm$^2$.

4.6 The area of right-angled triangle EFH is ............... cm$^2$.

4.7 Write in your own words what you have discovered about calculating the area of a right-angled triangle.

Activity 5

5.1 Calculate the area of a triangle with a base of 12 cm and a height of 8 cm.

$$\frac{1}{2} \times 12 \text{ cm} \times 8 \text{ cm} = ............... \text{ cm}^2.$$

5.2 Calculate the area of a triangle with a base of 15 cm and a height of 6 cm.

$$\frac{1}{2} \times 15 \text{ cm} \times 6 \text{ cm} = ............... \text{ cm}^2.$$

5.3 Calculate the area of a triangle with a base of 8 cm and a height of 5 cm.

$$\frac{1}{2} \times 8 \text{ cm} \times 5 \text{ cm} = ............... \text{ cm}^2.$$
5.4 Complete the following:

<table>
<thead>
<tr>
<th>Triangle</th>
<th>Base</th>
<th>Height</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC</td>
<td>12</td>
<td>13</td>
<td>(\frac{1}{2} \times 12 \times \ldots\ldots = \ldots\ldots \text{ cm}^2)</td>
</tr>
<tr>
<td>DEF</td>
<td>18</td>
<td>10</td>
<td>(\frac{1}{2} \times \ldots \times \ldots = \ldots\ldots \text{ cm}^2)</td>
</tr>
<tr>
<td>KLM</td>
<td>21</td>
<td>30</td>
<td>(\ldots \times \ldots \times \ldots = \ldots\ldots \text{ cm}^2)</td>
</tr>
<tr>
<td>PQR</td>
<td>26</td>
<td>41</td>
<td>(\ldots \times \ldots \times \ldots = \ldots\ldots \text{ cm}^2)</td>
</tr>
<tr>
<td>STU</td>
<td>40</td>
<td>50</td>
<td>(\ldots \times \ldots \times \ldots = \ldots\ldots \text{ cm}^2)</td>
</tr>
<tr>
<td>VWZ</td>
<td>13</td>
<td>8</td>
<td>(\ldots \times \ldots \times \ldots = \ldots\ldots \text{ cm}^2)</td>
</tr>
</tbody>
</table>
Activity 6

Calculate the areas of the following triangles:

6.1

6.2

6.3

6.4
Activity 7

Look at the following shapes. Change them into combinations of rectangles and right-angled triangles. Calculate the areas of the different shapes. Assume that each block represents one square centimetre.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Shape Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1</td>
<td>Area of Shape 1</td>
</tr>
<tr>
<td>7.2</td>
<td>Area of Shape 2</td>
</tr>
<tr>
<td>7.3</td>
<td>Area of Shape 3</td>
</tr>
<tr>
<td>7.4</td>
<td>Area of Shape 4</td>
</tr>
<tr>
<td>7.5</td>
<td>Area of Shape 5</td>
</tr>
</tbody>
</table>

Activity 8

If you measure along the outside of the net 1, you will find that it is a total distance of 14 cm.

We can now say that the perimeter of the net at 1 is 14 cm.

8.1 Calculate the perimeter of the other two nets as well (Net 2 and Net 3)
8.2 Look at the following shapes. Calculate the perimeter of the different shapes. (Use your ruler to measure the lengths). Assume that each block represents the one square centimetre.

(a) Perimeter of shape 1 = ________________________________
(b) Perimeter of shape 2 = ________________________________
(c) Perimeter of shape 3 = ________________________________
(d) Perimeter of shape 4 = ________________________________
(e) Perimeter of shape 5 = ________________________________

8.3 How many centimetres of wire will be needed to make the frame of the rectangular prism shown below? Show your workings.
Activity 9

Temperature
This table shows the minimum and maximum temperatures recorded in Durban and New York

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Durban</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Min</td>
<td>19°C</td>
<td>20°C</td>
<td>13°C</td>
<td>10°C</td>
<td>16°C</td>
</tr>
<tr>
<td>Max</td>
<td>32°C</td>
<td>37°C</td>
<td>27°C</td>
<td>22°C</td>
<td>34°C</td>
</tr>
<tr>
<td>New York</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Min</td>
<td>5°C</td>
<td>4°C</td>
<td>2°C</td>
<td>3°C</td>
<td>3°C</td>
</tr>
<tr>
<td>Max</td>
<td>17°C</td>
<td>13°C</td>
<td>10°C</td>
<td>15°C</td>
<td>11°C</td>
</tr>
</tbody>
</table>

9.3 What was the highest temperature recorded?
9.4 What was the lowest minimum temperature recorded?
9.5 What was the difference between the minimum and the maximum temperature in Durban on Friday?
9.6 In which city and on what day was the temperature recorded?
9.7 In which city and on what day was the lowest temperature recorded?
9.8 What season do you think Durban was experiencing? Why?

Activity 10

Mass

10.1 Convert the following to kilograms and grams: 1kg = 1000g

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1000 g =</td>
<td>kg</td>
<td>600 g =</td>
<td>kg</td>
</tr>
<tr>
<td>1kg =</td>
<td>g</td>
<td>0.5 kg =</td>
<td>g</td>
</tr>
</tbody>
</table>

10.2 Look at the pictures

(a) Name the heaviest item.
(b) Find the total of two packets of flour.
(c) Find the total mass of one packet of flour and one packet of sugar.
(d) Which will be heavier: two packets of flour or two packets of sugar?

Activity 11

11.1 This number line shows 100 g interval. There are ten spaces between each 100g, so each space is equal to 10g.

\[ \begin{array}{c|c|c|c|c|c|c|c|c|c|}
\hline
& 600g & A & B & 700g \\
\hline
\end{array} \]

11.2 What is the value of A and B?

Activity 12:

Look at the graph above and answer the questions that follow:

(a) Which learner is the lightest?
(b) Which learner is the heaviest?
(c) Which learners have the same mass?
(d) What is the difference between Siya’s mass and Oscar’s mass?
(e) What is the total mass of all five learners?
**Activity 13**

Length

13.1 Convert the following:

1km = 1000m = 100 000cm = 1 000 000mm

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>700 m</td>
<td>mm</td>
</tr>
<tr>
<td>(b)</td>
<td>200 mm</td>
<td>cm</td>
</tr>
<tr>
<td>(c)</td>
<td>13,25 km</td>
<td>m</td>
</tr>
<tr>
<td>(d)</td>
<td>48 500 m</td>
<td>km</td>
</tr>
</tbody>
</table>

13.2 What SI unit will you use when measuring the following

(a) A cow
(b) A baby
(c) Length of a book
(d) Height of the tree
# ANNEXURE 1

## PROPOSED 5-DAY PROGRAMMES FOR MATHEMATICS

### GRADE 6/7 PROGRAMME

<table>
<thead>
<tr>
<th>DAY</th>
<th>TIME</th>
<th>ACTIVITY / TOPIC</th>
<th>FACILITATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>09H00 – 12H00</td>
<td>Whole numbers – concepts and skills, teaching method, links to other topics</td>
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<tr>
<td></td>
<td>12H00 – 12H30</td>
<td>LUNCH</td>
<td></td>
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<td></td>
<td>12H30 – 15H00</td>
<td>Linking worksheet activities to CAPS, ATP and workbooks</td>
<td></td>
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<tr>
<td>2</td>
<td>09H00 – 12H00</td>
<td>Fractions – concepts and skills, teaching method, links to other topics</td>
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<td>12H00 – 12H30</td>
<td>LUNCH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12H30 – 15H00</td>
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<td></td>
</tr>
<tr>
<td>3</td>
<td>09H00 – 12H00</td>
<td>Patterns and algebra – concepts and skills, teaching method, links to other topics</td>
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<tr>
<td></td>
<td>12H00 – 12H30</td>
<td>LUNCH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12H30 – 15H00</td>
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<tr>
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<td>09H00 – 12H00</td>
<td>2D and 3D geometry – concepts and skills, teaching method, links to other topics</td>
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<tr>
<td></td>
<td>12H00 – 12H30</td>
<td>LUNCH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12H30 – 15H00</td>
<td>Linking worksheet activities to CAPS, ATP and workbooks</td>
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<tr>
<td>5</td>
<td>09H00 – 11H30</td>
<td>Measurement – concepts and skills, teaching method, links to other topics</td>
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<tr>
<td></td>
<td>12H00 – 13H00</td>
<td>Linking worksheet activities to CAPS, ATP and workbooks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>13H00</td>
<td>LUNCH</td>
<td></td>
</tr>
</tbody>
</table>