**2024 GRADE 7 MATHEMATICS SCHEMES OF WORK TERM 2**

TEACHER’S NAME……………………………………………………SCHOOL…………………………………………. TERM………….YEAR………….

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| **Week** | **Lesson** | **Strand** | **Sub-strand** | **Specific-Learning outcomes** | **Learning Experience** | **Key Inquiry Question(S)** | **Learning**  **Resources** | **Assessment Methods** | **Reflection** |
| **1** | **1** | Measurement; Length | Converting units of length | ***By the end of the lesson, the learner should be able to:***   1. Measure the length of their classroom using a tape measure. 2. Generate a conversation table involving units of length. 3. Have fun and enjoy measuring the length of their classroom. | In groups, learners are guided to measure the length of their classroom using a tape measure.  In groups, learners are guided to generate a conversation table involving units of length | What is length? | Place value chart  Ruler  Digital devices  ***Spark; Story moja Mathematics***  ***Learner’s Book Grade 7 pg. 80-81*** | Oral questions Oral Report Observation  Written exercise |  |
|  | **2** | Measurement; Length | Operation involving units of length | By the end of the lesson, the learner should be able to:   1. Measure the width of their classroom using a metre rule. 2. Work out addition involving length. 3. Appreciate the use of addition and subtraction . | In groups, learners are guided to measure the width of their classroom using a metre rule  In pairs, learners to work out addition and subtraction of length | The length of 2 ropes is 98m 62cm and 33m 66dm 12cm. What is the total length of the ropes? | Place value chart  Ruler  Digital devices ***Spark; Story moja Mathematics***  ***Learner’s Book Grade 7 pg. 81-82*** | Oral questions Oral Report Observation  Written exercise |  |
|  | **3** | Measurement; Length | Operation involving units of length | By the end of the lesson, the learner should be able to:   1. Measure the length of their classroom using a metre ruler. 2. Work out subtraction involving length. 3. Appreciate the use of subtraction. | In groups, learners to measure the length of their classroom using a metre ruler  Individually, learners to work out subtraction involving length | What is 4m 6dm 8cm - 2m 4dm 9cm? | Place value chart  Ruler  Digital devices ***Spark; Story moja Mathematics***  ***Learner’s Book Grade 7 pg. 81-82*** | Oral questions Oral Report Observation  Written exercise |  |
|  | **4** | Measurement; Length | Multiplication and division of length | By the end of the lesson, the learner should be able to:   1. Make or cut 5m 24cm of thread/string. 2. Cut the thread/string into 4 equal parts. 3. Outline the procedure to work out multiplication of length. 4. Work out multiplication of length. 5. Appreciate the use of multiplication. | In groups, learners are guided to make or cut 5m 24cm of thread/string  In groups, learners are guided to cut the thread/string into 4 equal parts.  Learners are guided to outline the procedure to work out multiplication of length.  Learners are guided to work out multiplication of length. | How do you work out multiplication involving length? | Place value chart  Ruler  Digital devices  ***Spark; Story moja Mathematics***  ***Learner’s Book Grade 7 pg. 83-84*** | Oral questions Oral Report Observation  Written exercise |  |
|  | **5** | Measurement; Length | Multiplication and division of length | By the end of the lesson, the learner should be able to:   1. Make or cut 5m 24cm of thread/string. 2. Cut the thread/string into 4 equal parts. 3. Outline the procedure to work out division of length. 4. Work out division of length. 5. Appreciate the use of division. | In groups, learners are guided to make or cut 5m 24cm of thread/string  In groups, learners are guided to cut the thread/string into 4 equal parts.  Learners are guided to outline the procedure to work out division of length.  Learners are guided to work out division of length. | How do you work out division? | Place value chart  Ruler  Digital devices ***Spark; Story moja Mathematics***  ***Learner’s Book Grade 7 pg. 83-84*** | Oral questions Oral Report Observation  Written exercise |  |
| **2** | **1** | Measurement; Length | Multiplication and division of length | By the end of the lesson, the learner should be able to:   1. Watch a video on relays, use the link in leaner’s book. 2. Discuss how the race takes place. 3. Identify the field events that make use of length to determine a winner. 4. Appreciate the use of digital resources. | Learners to watch a video on relays, use the link in leaner’s book  In groups, learners are guided to discuss how the race takes place  In groups, learners are guided to identify the field events that make use of length to determine a winner | How would you measure the lengths for the participants in various events? | Place value chart  Ruler  Digital devices ***Spark; Story moja Mathematics***  ***Learner’s Book Grade 7 pg. 84*** | Oral questions Oral Report Observation  Written exercise |  |
|  | **2** | Measurement; Length | Perimeter of plane figures | By the end of the lesson, the learner should be able to:   1. Define a perimeter. 2. Make cutouts of a square, a rectangle and a triangle from a manilla paper. 3. Measure the distance round each shape using a ruler. 4. Appreciate the use of perimeters. | Learners to define a perimeter.  In groups, learners are guided to make cutouts of a square, a rectangle and a triangle from a manilla paper.  In groups, learners to measure the distance round each shape using a ruler | What is perimeter? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 84-85  Place value chart  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
|  | **3** | Measurement; Length | Perimeter of plane figures | By the end of the lesson, the learner should be able to:   1. Use a tape measure to measure the distance round their classroom. 2. Outline the procedure to work out the perimeter of various figures. 3. Have fun and enjoy working out perimeters of various figures. | In groups, learners to use a tape measure to measure the distance round their classroom.  Learners are guided to outline the procedure to work out the perimeter of various figures. | How do you determine the perimeter of a triangle with sides of lengths 3m, 4m and 5m? | Place value chart  Ruler  Digital devices ***Spark; Story moja Mathematics***  ***Learner’s Book Grade 7 pg. 85*** | Oral questions Oral Report Observation  Written exercise |  |
|  | **4** | Measurement; Length | Circumference of a circle | By the end of the lesson, the learner should be able to:   1. Draw various circles using a compass. 2. Use a string/thread and a ruler to measure the length around the circle. 3. Identify the diameter of the circle. 4. Measure the diameter of the circle. 5. Have fun and enjoy using a mathematical set. | In groups, learners to draw various circles using a compass.  In groups, learners are guided to use a string/thread and a ruler to measure the length around the circle.  Learners to identify the diameter of the circle.  Learners to measure the diameter of the circle. | What is circumference?  What is diameter? | Place value chart  Ruler  Digital devices ***Spark; Story moja Mathematics***  ***Learner’s Book Grade 7 pg. 86*** | Oral questions Oral Report Observation  Written exercise |  |
|  | **5** | Measurement; Length | Circumference of a circle | By the end of the lesson, the learner should be able to:   1. Identify four circular objects in their school, for example a wall clock. 2. Measure the circumference and diameter of the objects. 3. Have fun and enjoy measuring circumference and diameter of the objects. | In groups, learners to identify four circular objects in their school, for example a wall clock.  In groups, learners to measure the circumference and diameter of the objects | What is the circumference of your classroom wall clock? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 86-87  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
| **3** | **1** | Measurement; Length | Circumference of a circle | By the end of the lesson, the learner should be able to:   1. Identify the procedure to work out circumference of a circle and diameter. 2. Work out various questions involving circumference of a circle and diameter. 3. Enjoy doing calculations using a calculator. | Learners to identify the procedure to work out circumference of a circle and diameter.  Individually, learners to work out various questions involving circumference of a circle and diameter | The distance round a circular centre of a football pitch is 44m. What is its radius? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 87  Assessment books  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
|  | **2** | Measurement; Length | Perimeter of combined shapes | By the end of the lesson, the learner should be able to:   1. Study the figure in learner’s book. 2. Use a ruler, measure the length of the sides of the figures. 3. Work out the sum of the edges of the sides. 4. Appreciate the importance of combined shapes. | In groups, learners are guided to study the figure in learner’s book.  In groups, learners to use a ruler, measure the length of the sides of the figures.  In groups, learners to work out the sum of the edges of the sides | What are combined shapes? | Ruler  Digital devices ***Spark; Story moja Mathematics***  ***Learner’s Book Grade 7 pg. 88*** | Oral questions Oral Report Observation  Written exercise |  |
|  | **3** | Measurement; Length | Perimeter of combined shapes | By the end of the lesson, the learner should be able to:   1. Determine the perimeter of a combined shape. 2. Calculate the perimeter of the various figures. 3. Enjoy calculating perimeter of a combined shapes. | Individually, learners to determine the perimeter of a combined shape.  Individually, learners to calculate the perimeter of the various figures | What have you learnt about combined shapes? | Ruler  Digital devices ***Spark; Story moja Mathematics***  ***Learner’s Book Grade 7 pg. 88-90*** | Oral questions Oral Report Observation  Written exercise |  |
|  | **4** | Measurement; Area | Units of measuring area | By the end of the lesson, the learner should be able to:   1. Make 4 pegs using sticks. 2. Stick one peg on the ground by hitting using a stone or a hammer, tie a rope around the peg. 3. Using the procedure in learner’s book, measure the ground areas. 4. Enjoy learning outside the classroom. | Outside the classroom, learners are guided to make 4 pegs using sticks.  As a class, learners to stick one peg on the ground by hitting using a stone or a hammer, tie a rope around the peg.  As a class, learners to use the procedure in learner’s book, measure the ground areas | What is the area covered by the four pegs? | Ruler  Digital devices ***Spark; Story moja Mathematics***  ***Learner’s Book Grade 7 pg. 90-91*** | Oral questions Oral Report Observation  Written exercise |  |
|  | **5** | Measurement; Area | Units of measuring area | By the end of the lesson, the learner should be able to:   1. Study the shape representing a square piece of land. 2. Calculate the area of the plot of land. 3. State the relationship between metre squared and an acre. 4. Appreciate the relationship between metre squared and an acre. | In pairs, learners are guided to study the shape representing a square piece of land.  In pairs, learners are guided to calculate the area of the plot of land.  In pairs, learners are guided to state the relationship between metre squared and an acre | What is the relationship between metre squared and an acre? | Ruler  Digital devices ***Spark; Story moja Mathematics***  ***Learner’s Book Grade 7 pg. 91-92*** | Oral questions Oral Report Observation  Written exercise |  |
| **4** | **1** | Measurement; Area | Units of measuring area | By the end of the lesson, the learner should be able to:   1. Copy and complete the table in learner’s book. 2. Generate a conversation table for the units. 3. Discuss the relationship between hectare and acres. 4. Appreciate units of measuring area. | In groups, learners are guided to copy and complete the table in learner’s book.  In groups, learners are guided to generate a conversation table for the units.  In groups, learners are guided to discuss the relationship between hectare and acres | What is the relationship between hectare and acres? | Ruler  Digital devices ***Spark; Story moja Mathematics***  ***Learner’s Book Grade 7 pg. 92-93*** | Oral questions Oral Report Observation  Written exercise |  |
|  | **2** | Measurement; Area | Area of plane figures; Rectangle | By the end of the lesson, the learner should be able to:   1. Draw a rectangle. 2. State the formula for calculating the area of a rectangle. 3. Work out the area of various rectangles. 4. Have fun and enjoy calculating the area of a rectangle. | In pairs or individually, learners to draw a rectangle.  In pairs or individually, learners to state the formula for calculating the area of a rectangle.  In pairs or individually, learners to work out the area of various rectangles | What is the formula for calculating the area of a rectangle? | Ruler  Digital devices ***Spark; Story moja Mathematics***  ***Learner’s Book Grade 7 pg. 93-95*** | Oral questions Oral Report Observation  Written exercise |  |
|  | **3** | Measurement; Area | Parallelogram | By the end of the lesson, the learner should be able to:   1. Trace or draw a parallelogram on a piece of paper. 2. State the formula for calculating the area of a parallelogram. 3. Work out the area of various parallelogram. 4. Have fun and enjoy calculating the area a parallelogram. | In pairs or individually, learners to trace or draw a parallelogram on a piece of paper  In pairs or individually, learners to state the formula for calculating the area of a parallelogram  In pairs or individually, learners to work out the area of various parallelogram | What is the formula for calculating the area of a parallelogram? | Ruler  Digital devices ***Spark; Story moja Mathematics***  ***Learner’s Book Grade 7 pg. 96-98*** | Oral questions Oral Report Observation  Written exercise |  |
|  | **4** | Measurement; Area | Rhombus | By the end of the lesson, the learner should be able to:   1. Trace or draw a rhombus on a piece of paper. 2. State the formula for calculating the area of a rhombus. 3. Work out the area of various rhombus. 4. Have fun and enjoy calculating the area a rhombus. | In pairs or individually, learners to trace or draw a rhombus on a piece of paper  In pairs or individually, learners to state the formula for calculating the area of a rhombus.  In pairs or individually, learners to work out the area of various rhombus. | What is the formula for calculating the area of a rhombus? | Ruler  Digital devices ***Spark; Story moja Mathematics***  ***Learner’s Book Grade 7 pg. 98-101*** | Oral questions Oral Report Observation  Written exercise |  |
|  | **5** | Measurement; Area | Trapezium | By the end of the lesson, the learner should be able to:   1. Trace or draw a trapezium on a piece of paper. 2. State the formula for calculating the area of a trapezium. 3. Work out the area of various trapezium. 4. Have fun and enjoy calculating the area a trapezium. | In pairs or individually, learners to trace or draw a trapezium on a piece of paper  In pairs or individually, learners to state the formula for calculating the area of a trapezium.  In pairs or individually, learners to work out the area of various trapezium. | What is the formula for calculating the area of a trapezium? | Ruler  Digital devices ***Spark; Story moja Mathematics***  ***Learner’s Book Grade 7 pg. 101-103*** | Oral questions Oral Report Observation  Written exercise |  |
| **5** | **1** | Measurement; Area | Circle | By the end of the lesson, the learner should be able to:   1. Watch a video from the link in learner’s book. 2. Draw a circle as shown in learner’s book. 3. Do Activity 8 in learner’s book and determine the area of the rectangle. 4. Appreciate the use of digital devices. | In groups, learners to watch a video from the link in learner’s book.  In groups, learners to draw a circle as shown in learner’s book  In groups, learners to do Activity 8 in learner’s book and determine the area of the rectangle | What do you notice between the width and the radius of a circle? | Ruler  Digital devices ***Spark; Story moja Mathematics***  ***Learner’s Book Grade 7 pg. 103-104*** | Oral questions Oral Report Observation  Written exercise |  |
|  | **2** | Measurement; Area | Circle | By the end of the lesson, the learner should be able to:   1. State the formula for calculating the area of a circle. 2. Work out the area of various circles. 3. Have fun and enjoy calculating the area a circles. | Learners to state the formula for calculating the area of a circle.  Learners to work out the area of various circles. | What is the formula for calculating the area of a circle? | Ruler  Digital devices ***Spark; Story moja Mathematics***  ***Learner’s Book Grade 7 pg. 104-106*** | Oral questions Oral Report Observation  Written exercise |  |
|  | **3** | Measurement; Area | Area of borders | By the end of the lesson, the learner should be able to:   1. Trace or draw a picture frame on a piece of paper. 2. State the formula for calculating the area of boarders. 3. Work out the area of various borders. 4. Have fun and enjoy calculating the area boarders. | In pairs or individually, learners to trace or draw a picture frame on a piece of paper  In pairs or individually, learners to state the formula for calculating the area of boarders.  In pairs or individually, learners to work out the area of various boarders. | What is the formula for calculating the area of a boarder? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 106-107  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
|  | **4** | Measurement; Area | Area of combined shapes | By the end of the lesson, the learner should be able to:   1. Draw and make cutouts of different shapes. 2. State the formula for calculating the area of combined shapes. 3. Work out the area of various combined shapes. 4. Have fun and enjoy calculating the area combined shapes. | In groups, learners to draw and make cutouts of different shapes, such as, squares, rectangles and circles.  In groups, learners to state the formula for calculating the area of combined shapes.  In groups, learners to work out the area of various combined shapes | What is the formula for calculating the area of combined shapes? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 108-110  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
|  | **5** | Volume and capacity | Measurement and volume | By the end of the lesson, the learner should be able to:   1. Define volume. 2. Do Activity 1 in learner’s book pg. 111 3. Have fun and enjoy the activity. | Learners to define volume.  In groups or in pairs, learners are guided to do Activity 1 in learner’s book pg. 111 | What is volume? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 111-112  Pieces of paper  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
| **6** | **1** | Volume and capacity | Converting units of measuring volume | By the end of the lesson, the learner should be able to:   1. State the relationship between centimetres cuboid and metres cuboid. 2. Identify the formula of converting cube to centimeter. 3. Convert metres to centimetres and vice versa. 4. Appreciate the relationship between centimetres cuboid and metres cuboid. | Individually, learners to state the relationship between centimetres cuboid and metres cuboid  Individually, learners to identify the formula of converting cube to centimeter  Individually, learners to convert metres to centimetres and vice versa | What is the relationship between centimetres cuboid and metres cuboid? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 112  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
|  | **2** | Volume and capacity | Volume of a cube | By the end of the lesson, the learner should be able to:   1. Make or draw a cube. 2. Measure the length, width and height of the cube using a ruler. 3. Calculate the volume of the cube formed using the measurements. 4. Enjoy calculating the volume of cube. | In groups, learners to make or draw a cube.  In groups, learners to measure the length, width and height of the cube using a ruler.  Learners to calculate the volume of the cube formed using the measurements. | What is a cube?  How do you calculate the volume of a cube? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 113  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
|  | **3** | Volume and capacity | Volume of a cuboid | By the end of the lesson, the learner should be able to:   1. Make or draw a cuboid. 2. Measure the length, width and height of the cuboid using a ruler. 3. Calculate the volume of the cuboid formed using the measurements. 4. Enjoy calculating the volume of cuboid. | In groups, learners to make or draw a cuboid.  In groups, learners to measure the length, width and height of the cuboid using a ruler.  Learners to calculate the volume of the cuboid formed using the measurements. | What is a cuboid?  How do you calculate the volume of cuboid? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 36-37  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
|  | **4** | Volume and capacity | Volume of a cylinder | By the end of the lesson, the learner should be able to:   1. Draw a cylinder in their exercise books. 2. State the formula to calculate the volume of a cylinder. 3. Calculate the volume of a cylinder. 4. Enjoy working out volume of various cylinders. | In groups, learners to draw a cylinder in their exercise books.  Individually, learners to state the formula to calculate the volume of a cylinder.  Learners to calculate the volume of a cylinder. | What is a cylinder?  How do you calculate the volume of cylinder? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 114-115  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
|  | **5** | Capacity | Relationship between volume and capacity | By the end of the lesson, the learner should be able to:   1. Define capacity. 2. State the relationship between volume and capacity. 3. Outline the formula of converting volume and capacity. 4. Convert volume to capacity and vice versa. 5. Appreciate the relationship between volume and capacity. | Learners to define capacity.  In groups or in pairs, learners are guided to state the relationship between volume and capacity.  In groups, in pairs or individually, learners are guided to outline the formula of converting volume and capacity  In groups, in pairs or individually, learners are guided to convert volume to capacity and vice versa | What is the relationship between volume and capacity?  How do you convert volume to capacity and vice versa? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 115-118  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
| **7** | **1** | Time, distance and speed | Time | By the end of the lesson, the learner should be able to:   1. Draw a clock as shown in learner’s book. 2. Tell the current time using their classroom clock. 3. List the units used for measuring time. 4. Appreciate the importance of reading time. | Individually, learners to draw a clock as shown in learner’s book  Individually, learners to tell the current time using their classroom clock  Individually, learners to list the units used for measuring time | What is the time now? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 119  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
|  | **2** | Time, distance and speed | Conversion of units of time | By the end of the lesson, the learner should be able to:   1. Create a conversion table on units of time. 2. Convert hours into minutes and vice versa. 3. Appreciate the importance of reading time. | Learners to create a conversion table on units of time.  Learners to convert hours into minutes and vice versa. | 1 hour has how many minutes? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 119-120  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
|  | **3** | Time, distance and speed | Distance | By the end of the lesson, the learner should be able to:   1. Discuss and estimate distances between two or more points. 2. State the importance of converting distance from metres to km and vice versa. 3. Convert the distance from km to metres and vice versa. 4. Appreciate the importance of converting distance from metres to km and vice versa. | In groups, learners to discuss and estimate distances between two or more points.  Learners to state the importance of converting distance from metres to km and vice versa.  Learners to convert the distance from km to metres and vice versa | What is the formula of converting distance from km to metres and vice versa? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 121-122  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
|  | **4** | Time, distance and speed | Speed | By the end of the lesson, the learner should be able to:   1. Discuss how long it will take him/her to reach their school. 2. Estimate the distance from their school to his/her home. 3. Calculate the speeds in km/h or m/s 4. Enjoy calculating speed in km/h or m/s. | In groups, learners to discuss how long it will take him/her to reach their school.  In groups, learners to estimate the distance from their school to his/her home.  Learners to calculate the speeds in km/h or m/s | What is the distance covered by a bus travelling at the speed of 80km/h and takes 3 hours? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 123-124  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
|  | **5** | Time, distance and speed | Conversion of units of speed | By the end of the lesson, the learner should be able to:   1. State the formula of converting km/h to m/s 2. Convert km/h to m/s and vice versa. 3. Enjoy converting km/h to m/s and vice versa. | Learners are guided to state the formula of converting km/h to m/s.  Learners are guided to convert km/h to m/s and vice versa. | How do you convert km/h to m/s and vice versa? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 124-126  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
| **8** |  |  |  | **HALF TERM BREAK** |  |  |  |  |  |
| **9** | **1** | Temperature | Establishing temperature as either hot, warm or cold | By the end of the lesson, the learner should be able to:   1. Define temperature. 2. Describe the temperature conditions of the immediate environment as warm, hot or cold. 3. Draw the images in learner’s book. 4. Appreciate different kind of temperature. | Learners to define temperature.  Learners are guided to describe the temperature conditions of the immediate environment as warm, hot or cold  Learners to identify the temperature in the images as either cold, warm or hot.  Learners to draw the images in learner’s book. | What is temperature? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 127-129  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
|  | **2** | Temperature | Measuring temperature | By the end of the lesson, the learner should be able to:   1. Identify the tools used to measure temperature. 2. Compare temperature using hotter, warmer, colder and same as in different situations. 3. Work out temperature in degree Celsius and kelvin. 4. Appreciate the tools used to measure temperature. | In groups, learners are guided to identify the tools used to measure temperature.  Learners to compare temperature using hotter, warmer, colder and same as in different situations  Learners to work out temperature in degree Celsius and kelvin | What is temperature? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 129-131  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
|  | **3** | Temperature | Conversion of units of temperature | By the end of the lesson, the learner should be able to:   1. Discuss the relationship between Kelvin and degrees Celsius. 2. Convert units of measuring temperature from degree Celsius to Kelvin and vice versa. 3. Appreciate the relationship between Kelvin and degrees Celsius. | In groups, learners are guided to discuss the relationship between Kelvin and degrees Celsius.  Learners are guided to convert units of measuring temperature from degree Celsius to Kelvin and vice versa.  Learners to recognise temperature changes in the environment. | What is the relationship between Kelvin and degrees Celsius? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 131-133  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
|  | **4** | Money | Profit | By the end of the lesson, the learner should be able to:   1. Define profit. 2. Select a retailer and a customer and role play the story in learner’s book. 3. Have fun and enjoy role playing. | Learners to define profit.  In groups or in pairs, learners to select a retailer and a customer and role play the story in learner’s book | What is profit? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 133-134  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
|  | **5** | Money | Profit | By the end of the lesson, the learner should be able to:   1. State the formula of working out profit. 2. Calculate the percentage profit. 3. Appreciate the importance of calculating profits in businesses. | Learners to state the formula of working out profit.  Learners to calculate the percentage profit | How do you calculate profit? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 134-135  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
| **10** | **1** | Money | Loss | By the end of the lesson, the learner should be able to:   1. Define the term loss. 2. Select a retailer and a customer and role play the story in learner’s book. 3. Have fun and enjoy role playing. | Learners to define loss.  In groups or in pairs, learners to select a retailer and a customer and role play the story in learner’s book | What is loss? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 136  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
|  | **2** | Money | Loss | By the end of the lesson, the learner should be able to:   1. State the formula of working out loss. 2. Calculate the percentage loss. 3. Appreciate the importance of calculating profits in businesses. | Learners to state the formula of working out profit.  Learners to calculate the percentage loss | How do you calculate loss? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 136-137  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
|  | **3** | Money | Discount | By the end of the lesson, the learner should be able to:   1. Define the term discount. 2. Read and role play the dialogue between a shopkeeper and a customer. 3. Answer the questions that follow. 4. Have fun and enjoy role playing. | Learners to define term discount.  In groups, learners to read and role play the dialogue between a shopkeeper and a customer. Answer the questions that follow. | What is discount? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 139-140  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
|  | **4** | Money | Discount | By the end of the lesson, the learner should be able to:   1. State the formula to calculate discount and percentage discount. 2. Calculate the discount and percentage discount of various goods and services. 3. Enjoy calculating discount. | Learners to state the formula to calculate discount and percentage discount.  Learners to calculate the discount and percentage discount of various goods and services | What is the formula of calculating percentage discount? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 140-142  Assessment books  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
|  | **5** | Money | Commission | By the end of the lesson, the learner should be able to:   1. Define the term commission. 2. State the formula commission and percentage commission. 3. Calculate the commission and percentage commission. 4. Enjoy calculating commission and percentage commission. | Learners to define the term commission.  Learners are guided to state the formula commission and percentage commission.  Learners are guided to calculate the commission and percentage commission | What is the formula of calculating percentage commission? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 142-144  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
| **11** | **1** | Money | Bills | By the end of the lesson, the learner should be able to:   1. Define the term bills. 2. Draw the table in learner’s book and indicate the unit cost and total cost of each item. 3. Prepare bills in real-life situations 4. Have a desire to know the cost of different items. | Learners to define the term bill.  In groups, learners to draw the table in learner’s book and indicate the unit cost and total cost of each item.  Learners to prepare bills in real-life situations | What is a bill? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 144  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
|  | **2** | Postal charges | Inland postal charges | By the end of the lesson, the learner should be able to:   1. Visit the nearest post office. 2. List the services they offer. 3. Discuss the rates they charge for the services they offer. 4. Have fun and enjoy the visit to the nearest post office. | In groups, learners to visit the nearest post office.  In groups, learners to list the services they offer.  In groups, learners to discuss the rates they charge for the services they offer | Which post office have you visited? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 146  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
|  | **3** | Postal charges | Inland postal charges | By the end of the lesson, the learner should be able to:   1. Identify the formula of working out inland postal charges. 2. Work out inland postal charges. 3. Appreciate the formula of working out inland postal charges. | Learners are guided to identify the formula of working out inland postal charges.  Learners to work out inland postal charges | What is the formula of calculating inland postal charges? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 147-149  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
|  | **4** | International postal charges | Surface mail | By the end of the lesson, the learner should be able to:   1. Define the term surface mail. 2. Draw the table of the surface mail in learner’s book. 3. Calculate the surface mail. 4. Have fun and enjoy calculating surface mail. | Learners to define the term surface mail.  Learners are guided to draw the table of the surface mail in learner’s book.  Learners to calculate the surface mail. | What is surface mail? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 149-152  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
|  | **5** | International postal charges | Airmail | By the end of the lesson, the learner should be able to:   1. Define the term airmail. 2. Draw the table of the airmail in learner’s book. 3. Calculate the airmail. 4. Have fun and enjoy calculating airmail. | Learners to define the term airmail.  Learners are guided to draw the table of the airmail in learner’s book.  Learners to calculate the airmail. | What is airmail? | Spark; Story moja Mathematics  Learner’s Book Grade 7 pg. 152-154  Ruler  Digital devices | Oral questions Oral Report Observation  Written exercise |  |
| **12** |  |  |  | **REVISION** |  |  |  |  |  |
| **13-14** |  |  |  | **ASSESSEMENT** |  |  |  |  |  |