GRADE 10 MASTER CORE MATHEMATICS SCHEMES OF WORK TERM 2

SCHOOL…… TEACHERS NAME…….

WK	LSN	STRAND	SUB-STRAND	LESSON LEARNING OUTCOMES	LEARNING EXPERIENCES	KEY INQUIRY QUESTIONS	LEARNING RESOURCES	ASSESSMENT METHODS	REF
2	1	Measurement and Geometry	Reflection and Congruence - Lines of symmetry in plane figures Reflection and Congruence - Properties of reflection	By the end of the lesson, the learner should be able to: - Identify lines of symmetry in plane figures - Determine the number of lines of symmetry in different shapes - Recognize symmetry in everyday objects such as letters of the alphabet, leaves and building designs	- Collect and observe different objects from the immediate environment and illustrate the lines and planes of symmetry - Fold paper to identify lines of symmetry in different plane figures	How do we use reflection in day-to-day life?	Master Core Mathematics Grade 10 pg. 79 -81 Plane figures Rectangular paper Rulers Plane mirrors	Observation Oral questions Written assignments	
	2	Measurement and Geometry	Reflection and Congruence - Drawing an image on a plane surface	By the end of the lesson, the learner should be able to: - Draw an image given an object and a mirror line on a plane surface - Use the properties of reflection to construct images accurately - Relate reflection on a plane surface to real-world uses such as fabric pattern design and tiling	- Draw on plain paper a given object and a mirror line and use the properties of reflection to locate the corresponding image - Use construction methods (arcs) to reflect objects accurately on a plane surface	How do we use reflection in day-to-day life?	Master Core Mathematics Grade 10 pg. 82 Rulers and geometrical set Plain paper Compasses	Observation Oral questions Written assignments	
	3	Measurement and Geometry	Reflection and Congruence - Reflection along a line on the Cartesian plane	By the end of the lesson, the learner should be able to: - Draw an image given an object and a mirror line on the Cartesian plane - Plot objects and their images after reflection on the Cartesian plane - Connect Cartesian plane reflection to coordinate geometry applications in navigation and design	- Draw on a Cartesian plane given objects and mirror lines, and use the properties of reflection to draw the corresponding images - Use construction methods to reflect objects on the Cartesian plane	How do we use reflection in day-to-day life?	Master Core Mathematics Grade 10 pg. 84 Graph papers Rulers and geometrical set	Observation Oral questions Written assignments	
	4	Measurement	Reflection	By the end of the lesson, the	- Reflect objects in the y-axis	How do we	Master Core		

		ts and Geometry	and Congruence - Special reflections (x-axis and y-axis) Reflection and Congruence - Special reflections (lines y = x and y = -x)	learner should be able to: - Reflect objects in the y-axis (line x = 0) and x-axis (line y = 0) - Determine coordinates of images after reflection in the x-axis and y-axis - Relate reflection in axes to real-life applications such as mirror images in driving mirrors for road safety	and determine the relationship between coordinates of the object and image - Reflect objects in the x-axis and determine the relationship between coordinates of the object and image	use reflection in day-to-day life?	Mathematics Grade 10 pg. 86 -88 Graph papers Rulers Squared books	Observation Oral questions Written tests	
	5	Measure men ts and Geometry	Reflection and Congruence - Equation of the mirror line	By the end of the lesson, the learner should be able to: - Determine the equation of the mirror line given an object and its image - Use midpoints and gradients to derive the equation of the mirror line - Solve problems involving finding mirror lines in coordinate geometry	- Construct a mirror line given an object and its image on a Cartesian plane - Work out the equation of the mirror line using midpoint and gradient of perpendicular lines	How do we use reflection in day-to-day life?	Master Core Mathematics Grade 10 pg. 90 Graph papers Rulers and geometrical set Calculators	Observation Oral questions Written tests	
3	1	Measure men ts and Geometry	Reflection and Congruence Determining and describing mirror line transformatio ns Reflection and Congruence - Congruence tests for triangles (SSS, SAS, AAS, RHS)	By the end of the lesson, the learner should be able to: - Determine the equation of the mirror line for various object-image pairs - Describe fully a reflection transformation by stating the mirror line equation - Relate mirror line determination to practical applications such as locating the position of a mirror for optimal reflection	- Work out more examples of finding the equation of the mirror line - Describe single transformations that map objects onto images	How do we use reflection in day-to-day life?	Master Core Mathematics Grade 10 pg. 92 -94 Graph papers Rulers and geometrical set Paper cutouts Protractors	- Observation - Oral questions - Written tests	