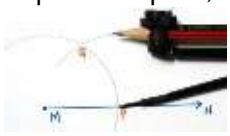
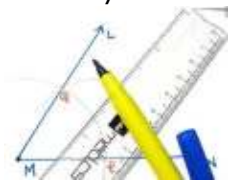
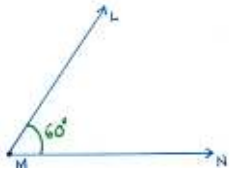
TERM THREE
WEEKLY LESSON NOTES – B7
WEEK 1

Date: 16th SEPT, 2022	**DAY:**	**Subject:** Mathematics
Duration: 60mins		**Strand:** Geometry & Measurement
Class: B7	**Class Size:**	**Sub Strand:** Shape and Space
Content Standard: B7.3.1.2 Demonstrate how to construct a perpendicular to a line from a given point	**Indicator:** B7.3.1.2.5 Construct angles of 60^{O} and 30^{O}	**Lesson:** 1 of 2
Performance Indicator: Learners can construct angles of 60^{O} and 30^{O}		**Core Competencies:** Communication and Collaboration (CC) Critical Thinking and Problem solving (CP)
References: Mathematics Curriculum Pg. 51-52		

Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Revise with learners on the previous lesson. Call volunteer learners to the board to solve sample questions. Show learners the pair of compasses and ask, what can we do with a pair of compasses? Allow learners to brainstorm. Introduce the lesson by sharing performance indicators.	
PHASE 2: **NEW LEARNING**	Guide learners to use a pair of compasses and a ruler to: a) *Construct an angle of 60° at a point on a given line and verify with the protractor.* Steps. 1. mark the vertex of your angle anywhere on the paper. Let us name this point as M.  2. draw a ray MN, extending in any direction and of any length. This will be one of the arms of our angle.  3. place the tip of the compass on point M and set its width to any measure less than the length of the ray MN.  4. with the tip of the compass still on M, draw an arc so as to cut the ray MN at some point, say P.	Rule, pencil , a pair of compass, a pair of divider and protractor.

	 5. keeping the width unchanged, place the tip of the compass on the point P and draw another arc cutting the arc drawn in the previous step at some point, say Q.  6. connect the points M and Q with straight line and extend it to form a ray ML.   How do we know that the angle we have drawn is accurate? Guide learners to verify the accurateness of the angle with a protractor. <u>Assessment</u> Construct an angle of 30˚ by bisecting an angle whose measure is 60˚	
PHASE 3: **REFLECTION**	Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson. Take feedback from learners and summarize the lesson. <u>Homework</u> Construct an angle of 15˚, 30o and 60˚	

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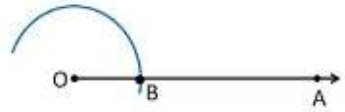
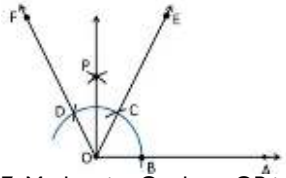
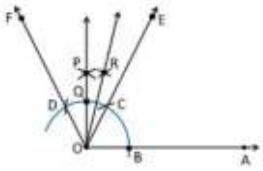
Content Standard: B7.3.1.2 Demonstrate how to construct a perpendicular to a line from a given point, bisect a line, bisect angles, and construct angles of the following sizes: 30˚, 45˚, 60˚, 75˚ and 90˚	**Indicator:** B7.3.1.2.6 Construct angles of 15^{O} and 75^{O}	**Lesson:** 2 of 2

Performance Indicator: Learners can Construct angles of 15^{O} and 75^{O}	**Core Competencies:** Communication and Collaboration (CC) Critical Thinking and Problem solving (CP)

References: Mathematics Curriculum Pg. 51-52

Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Revise with learners on the previous lesson. Call volunteer learners to the board to solve sample questions. Introduce the lesson by sharing performance indicators.	
PHASE 2: **NEW LEARNING**	Guide learners to use a pair of compasses and a ruler to construct an angle of 75˚ at a point on a given line segment. <u>Steps</u> 1. draw a ray OA. Taking O as center and any radius, draw and arc cutting OA at B. 2. Now, with B as center and same radius as before, draw an arc intersecting the previously drawn arc at point C.  3. Now, with C as center, and same radius, draw another arc intersecting the previously drawn arc at point D. 4. draw ray OE passing through C and ray OF passing through D. 5. taking C and D as center, with radius more than half of CD, draw arcs intersecting at P. 6. Join OP and mark point Q where OP intersects the arc.  7. Mark point Q where OP intersects the arc. Taking Q and C as center, with radius more than half of QC, draw arcs intersecting at R. 8. Join OR  Thus, ∠ AOR = 75° How do we know that the angle we have drawn is accurate? Guide learners to verify the accurateness of the angle with a protractor.	Rule, pencil , a pair of compass, a pair of divider and protractor.

	<u>Assessment</u> Guide learners to construct an angle of 45˚, 60˚, 75˚ .	
PHASE 3: **REFLECTION**	Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson. Take feedback from learners and summarize the lesson. <u>Assessment</u> Have learners to construct an angle of 45˚, 60˚, 75˚ .	