

# COMPETENCE BASED CURRICULUM SCHEME OF WORK

**TERM: .1., 2024 SCHOOL: ..... CLASS: .S.3.. SUBJECT: ...PHYSICS... TEACHER: .....**

WEEK	PERIODS	THEME	TOPIC	SUB TOPIC	LEARNING AREA	COMPETENCY	LEARNING OUTCOME	METHODOLOGY	TEACHING AND LEARNING AID	COMMENT	
1	03	MECHANICS AND PROPERTIES OF MATTER	LINEAR AND NON LINEAR MOTION	VECTOR AND SCALAR QUANTITIES	<ul style="list-style-type: none"><li>• CONCEPT OF VECTOR AND SCALAR QUANTITIES.</li><li>• ADDITION OF VECTORS.</li><li>• RESULTANT OF VECTORS.</li><li>• COMPOSITION AND RESOLUTION OF VECTORS.</li></ul>	THE LEARNER SHOULD BE ABLE TO:  THE LEARNER SHOULD BE ABLE TO DEVISE ACTIVITIES TO MEASURE DISTANCE AND SHORT TIME INTERVALS AND SHOULD BE ABLE TO CALCULATE SPEED AND ACCELERATION OF A MOVING OBJECT AND EXPLAIN THEIR IMPLICATIONS	THE LEARNER SHOULD BE ABLE TO: <ul style="list-style-type: none"><li>• UNDERSTAND THE TERMS LINEAR MOTION, DISTANCE, DISPLACEMENT, SPEED, VELOCITY AND ACCELERATION.</li><li>• UNDERSTAND AND APPLY THE RELATIONSHIP BETWEEN DISPLACEMENT OR DISTANCE AND TIME.</li><li>• UNDERSTAND AND APPLY THE RELATIONSHIP BETWEEN SPEED OR VELOCITY AND TIME.</li><li>• KNOW AND APPLY THE EQUATIONS OF UNIFORMLY ACCELERATED MOTION.</li><li>• UNDERSTAND THE ACCELERATION OF BODIES MOVING IN A CIRCLE AND THE EFFECT OF GRAVITY AND AIR RESISTANCE ON MOVING BODIES.</li><li>• UNDERSTAND LINEAR MOMENTUM AND THAT IT IS CONSERVED DURING COLLISIONS.</li><li>• UNDERSTAND AND APPLY NEWTON'S LAWS OF MOTION.</li><li>• UNDERSTAND THE DIFFERENCES BETWEEN SCALAR AND VECTOR QUANTITIES, GIVING EXAMPLES.</li><li>• UNDERSTAND THAT A SYSTEM OF FORCES ACTING ON A BODY CAN BE REPRESENTED BY A SINGLE RESULTANT FORCE.</li></ul>	<ul style="list-style-type: none"><li>• GROUP DISCUSSION</li><li>• GROUP RESEARCH</li><li>• QUESTION AND ANSWER</li><li>• DEMONSTRATION</li><li>• PROBLEM SOLVING</li><li>• QUIZ</li><li>• SIMULATION</li><li>• OBSERVATION</li><li>• ROLE PLAY</li><li>• PROJECT</li></ul>	<ul style="list-style-type: none"><li>• LIBRARY RESOURCE</li><li>• PICTURES</li><li>• PROJECTOR</li><li>• DICTIONARY</li><li>• MANILA PAPER</li><li>• INTERNET</li></ul>		
	03			LINEAR MOTION	<ul style="list-style-type: none"><li>• CONCEPT OF DISTANCE, DISPLACEMENT, SPEED, AVERAGE SPEED.</li><li>• TREATMENT OF DISPLACEMENT, VELOCITY AND ACCELERATION IN A STRAIGHT LINE.</li><li>• UNIFORM VELOCITY AND UNIFORM ACCELERATION.</li><li>• GRAPHS OF DISPLACEMENT-TIME AND VELOCITY-TIME FOR LINEAR MOTION.</li><li>• AREA UNDER VELOCITY-TIME GRAPH.</li><li>• EQUATIONS OF MOTION.</li><li>• TICKER-TIMER.</li><li>• FREE FALL.</li></ul>						
2	05			NON LINEAR MOTION	<ul style="list-style-type: none"><li>• PROJECTILE MOTION.</li><li>• CIRCULAR MOTION.</li><li>• CENTRIPETAL ACCELERATION AND FORCE.</li><li>• APPLICATION OF CENTRIFUGES.</li></ul>						
	01										
3	01			LINEAR MOMENTUM	<ul style="list-style-type: none"><li>• CONCEPT OF LINEAR MOMENTUM.</li><li>• LAW OF CONSERVATION OF LINEAR MOMENTUM.</li><li>• NUMERICAL PROBLEMS</li><li>• APPLICATION LIKE TURBINES, JET ENGINES, ROWING A BOAT, ROCKETS.</li></ul>						
	05										

WEEK	PERIODS	THEME	TOPIC	SUB TOPIC	LEARNING AREA	COMPETENCY	LEARNING OUTCOME	METHODOLOGY	TEACHING AND LEARNING AID	COMMENT
4	03	MECHANICS AND PROPERTIES OF MATTER	LINEAR AND NON LINEAR MOTION	LINEAR MOMEMTUM	<ul style="list-style-type: none"><li>• CONCEPT OF LINEAR MOMENTUM.</li><li>• LAW OF CONSERVATION OF LINEAR MOMENTUM.</li><li>• NUMERICAL PROBLEMS</li><li>• APPLICATION LIKE TURBINES, JET ENGINES, ROWING A BOAT, ROCKETS.</li></ul>	THE LEARNER SHOULD BE ABLE TO DEVISE ACTIVITIES TO MEASURE DISTANCE AND SHORT TIME INTERVALS AND SHOULD BE ABLE TO CALCULATE SPEED AND ACCELERATION OF A MOVING OBJECT AND EXPLAIN THER IMPLICATIONS	THE LEARNER SHOULD BE ABLE TO: <ul style="list-style-type: none"><li>• UNDERSTAND THE TERMS LINEAR MOTION, DISTANCE, DISPLACEMENT, SPEED, VELOCITY AND ACCELERATION.</li><li>• UNDERSTAND AND APPLY THE RELATIONSHIP BETWEEN DISPLACEMENT OR DISTANCE AND TIME.</li><li>• UNDERSTAND AND APPLY THE RELATIONSHIP BETWEEN SPEED OR VELOCITY AND TIME.</li><li>• KNOW AND APPLY THE EQUATIONS OF UNIFORMLY ACCELERATED MOTION.</li><li>• UNDERSTAND THE ACCELERATION OF BODIES MOVING IN A CIRCLE AND THE EFFECT OF GRAVITY AND AIR</li><li>• RESISTANCE ON MOVING BODIES.</li><li>• UNDERSTAND LINEAR MOMEMTUM AND THAT IT IS CONSERVED DURING COLLISIONS.</li><li>• UNDERSTAND AND APPLY NEWTON'S LAWS OF MOTION.</li></ul>	<ul style="list-style-type: none"><li>• GROUP DISCUSSION</li><li>• GROUP RESEARCH</li><li>• QUESTION AND ANSWER</li><li>• DEMONSTRATION</li><li>• PROBLEM SOLVING</li><li>• QUIZ</li><li>• SIMULATION</li><li>• OBSERVATION</li><li>• ROLE PLAY</li><li>• PROJECT</li></ul>	<ul style="list-style-type: none"><li>• LIBRARY RESOURCE</li><li>• PICTURES</li><li>• PROJECTOR</li><li>• DICTIONARY</li><li>• MANILA PAPER</li><li>• INTERNET</li></ul>	
	03			NEWTON'S LAWS OF MOTION	<ul style="list-style-type: none"><li>• LAW 1: F = 0</li><li>• FORCE AND MASS</li><li>• LAW 2: F = MA</li><li>• DEFINITION OF THE NEWTON</li><li>• F AS A RESULTANT FORCE</li><li>• WEIGHT OF A BODY IN A LIFT</li><li>• LAW 3</li><li>• SIMPLE NUMERICAL PROBLEMS INCLUDING THOSE ON ACTION AND REACTION.</li></ul>					
5	04									
	02	ACTIVITY OF INTEGRATION (LINEAR AND NON LINEAR MOTION)								

WEEK	PERIODS	THEME	TOPIC	SUB TOPIC	LEARNING AREA	COMPETENCY	LEARNING OUTCOME	METHODOLOGY	TEACHING AND LEARNING AID	COMMENT		
6	06	LIGHT	REFRACTION, DISPERSION AND COLOUR	REFRACTION OF LIGHT AT A PLANE SURFACE	<ul style="list-style-type: none"><li>STATE THE LAWS OF REFRACTION</li><li>VERIFY LAWS OF REFRACTION USING GLASS BLOCK AND A TRIANGULAR PRISM</li><li>NUMERICAL PROBLEMS INVOLVING REFRACTIVE INDEX</li><li>EXPLAIN SOME EFFECTS OF REFRACTION</li><li>QUALITATIVELY EXPLAIN THE PHENOMENA OF REAL AND APPARENT DEPTH</li><li>DEFINE CRITICAL ANGLE AND EXPLAINS TOTAL INTERNAL REFLECTION</li><li>CALCULATE CRITICAL ANGLE OF A MEDIUM</li><li>TRACE A MONOCHROMATIC RAY OF LIGHT THROUGH A PRISM</li><li>DESCRIBE THE USE OF TOTAL INTERNAL REFLECTION IN PRISMS.</li><li>EXPLAIN HOW A MIRAGE IS FORMED.</li><li>DESCRIBE APPLICATIONS OF TOTAL INTERNAL REFLECTION.</li></ul>	THE LEARNER SHOULD KNOW AND UNDERSTAND HOW MAGNETIC FIELDS INTERACT WITH ELECTRIC FIELDS AND THE APPLICATIONS OF THIS PHENOMENON	THE LEARNER SHOULD BE ABLE TO: <ul style="list-style-type: none"><li>UNDERSTAND THAT LIGHT MAY BE REFRACTED AS IT PASSES FROM ONE MEDIUM TO ANOTHER AND THAT THIS HAS BOTH CONSEQUENCES AND APPLICATIONS.</li><li>UNDERSTAND THE CONCEPT OF REFRACTIVE INDEX.</li><li>UNDERSTAND THE CONCEPT OF TOTAL INTERNAL REFLECTION.</li><li>KNOW THAT LIGHT RESULTS FROM THE SUPERIMPOSITION OF LIGHT OF ALL COLOURS<ul style="list-style-type: none"><li>OF THE VISIBLE SPECTRUM.</li></ul></li><li>DETERMINE THE REFRACTIVE INDEX OF GLASS.</li></ul>	<ul style="list-style-type: none"><li>GROUP DISCUSSION</li><li>GROUP RESEARCH</li><li>QUESTION AND ANSWER</li><li>DEMONSTRATION</li><li>PROBLEM SOLVING</li><li>QUIZ</li><li>SIMULATION</li><li>OBSERVATION</li><li>ROLE PLAY</li><li>EXPERIMENTATION</li><li>PROJECT</li></ul>	<ul style="list-style-type: none"><li>LIBRARY RESOURCE</li><li>PICTURES</li><li>PROJECTOR</li><li>DICTIONARY</li><li>MANILA PAPER</li><li>INTERNET</li></ul>			
7	04				DISPERSION OF LIGHT THROUGH A GLASS PRISM AND APPEAERANCE OF OBJECTS IN COLOURED LIGHT					<ul style="list-style-type: none"><li>PERFORM AN EXPERIMENT TO DEMONSTRATE PASSAGE OF WHITE LIGHT THROUGH A PRISM</li><li>DRAW RAYS OF LIGHT TO SHOW PASSAGE OF LIGHT THROUGH A PRISM AND LABEL THE SPECTRUM</li><li>PERFORM AN EXPERIMENT TO PRODUCE A PURE SPECTRUM</li><li>INVESTIGATES THE APPEARANCE OF OBJECTS IN COLOURED LIGHT.</li><li>INVESTIGATE THE EFFECT OF LIGHT FILTERS AND MIXING COLOURED LIGHTS.</li><li>MENTION THE PROPERTIES AND USES OF THE COMPONENTS OF THE ELECTROMAGNETIC SPECTRUM</li></ul>		
										8	03	LENSES AND OPTICAL INSTRUMENTS
	02			ACTIVITY OF INTEGRATION (REFRACTION, DISPERSION AND COLOUR)								
9	06											
10	06											
11	04											
	02			ACTIVITY OF INTEGRATION (REFRACTION, DISPERSION AND COLOUR)								
12	END OF TERM 1 ASSESSMENT											

**REFERENCE:**

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10. <https://digitalteaccers.co.ug>.
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