COMPETENCE BASED CURRICULUM SCHEME OF WORK

TERM: ..1, 2024 SCHOOL: …… CLASS: ..S.2. SUBJECT: ….PHYSICS. TEACHER: …….

WEEK	PERIODS	THEME	TOPIC	SUB TOPIC	LEARNING AREA	COMPETENCY	LEARNING OUTCOME	METHODOLOGY	TEACHING AND LEARNING AID	COMMENT
1	06	MECHANICS AND PROPERTIES OF MATTER	WORK, POWER AND ENERGY	WORK	• THE MEANING OF WORK • FACTORS THAT DETERMINE THE AMOUNT OF WORK DONE • WORK DONE BY AN INCLINED FORCE • INSTANCES WHERE NO WORK IS DONE	THE LEARNER UNDERSTANDS AND USES THE RELATIONSHIP BETWEEN ENERGY, WORK DONE AND POWER IN THE OPERATION OF SIMPLE MACHINES	THE LEARNER SHOULD BE ABLE TO: • KNOW THE DIFFERENT SOURCES OF ENERGY AND THAT OF ALL THE SOURCES, THE SUN IS OUR MAJOR SOURCE OF ENERGY. • KNOW THAT ENERGY CAN BE CHANGED FROM ONE FORM TO ANOTHER AND UNDERSTAND THE LAW OF CONSERVATION OF ENERGY. • UNDERSTAND THE POSITIVE AND NEGATIVE EFFECTS OF SOLAR ENERGY. • UNDERSTAND THE DIFFERENCRE BETWEEN RENEWABLE AND NON RENEWABLE ENERGY RESOURCES WITH RESPECT TO UGANDA. • KNOW AND USE THE RELATIONSHIP BETWEEN WORKDONE, FORCE AND DISTANCE MOVED. • UNDERSTAND THAT POWER IS THE RATE OF DOING WORK. • UNDERSTAND THAT AN OBJECT MAY HAVE ENERGY DUE TO MOTION OR POSITION AND CHANGE BETWEEN KINETIC ENERGY AND POTENTIAL ENERGY. • UNDERSTAND THE MEANING OF MACHINES AND EXPLAIN HOW MACHINE SIMPLIFY WORK. • UNDERSTAND THE PRINCIPLE BEHIND THE OPERATION OF SIMPLE MACHINES.	• GROUP DISCUSSION • GROUP RESEARCH • QUESTION AND ANSWER • DEMONSTRATION • PROBLEM SOLVING • QUIZ • SIMULATION • OBSERVATION • EXPERIMENTATION • PROFECT • BRAIN STORMING	• LIBRARY RESOURCE • PICTURES • PROJECTOR • DICTIONARY • MANILA PAPER • INTERNET • LIBRARY RESOURCE • PICTURES • PROJECTOR • PENDULUM BOB • STRINGS • METRE RULE • LADDER • WEIGHING SCALE • WOODEN PLANK • TAPE MEASURE • STONES • STRONG THREAD • PULLEYS • NUTS • BOLTS • CAR JACK • WOODEN PLANKS • MARKERS	
2	02									
	04			POWER	• THE MEANING OF POWER • COMPARING RATE OF DOING WORK • ESTIMATING THE POWER OF A HUMAN BEING AND THAT OF A MACHINE					
3	02									
	04			ENERGY	• THE MEANING OF ENERGY • SOURCES OF ENERGY • DIFFERENT FORMS OF ENERGY • THE PRINCIPLE OF CONSERVATION OF ENERGY • MECHANICAL AND POTENTIAL ENERGY • ENERGY TRANSFORMATIONS • HARVESTING ENERGY					
4	06									
5	06			MACHINES	• THE MEANING OF A MACHINE • MECHANICAL ADVANTAGE AND VELOCITY RATIO OF A SIMPLE MACHINE • EFFICIENCY OF A SIMPLE MACHINE • TYPES OF SIMPLE MACHINES -LEVERS -PULLEY SYSTEMS -INCLINED PLANES -WHEEL AND AXLE -GEARS -SCREWS -WEDGES					
6	06									
7	04									
	02	ACTIVITY OF INTEGRATION (WORK POWER AND ENERGY)								

WEEK	PERIODS	THEME	TOPIC	SUB TOPIC	LEARNING AREA	COMPETENCY	LEARNING OUTCOME	METHODOLOGY	TEACHING AND LEARNING AID	COMMENT
8	06	MECHANICS AND PROPERTIES OF MATTER	THE TURNING EFFECT OF FORCES, CENTRE OF GRAVITY AND STABILITY	MOMENT OF A FORCE	• CENTRE OF GRAVITY • THE MEANING OF MOMENT OF A FORCE • THE RESULTANT MOMENT • THE PRINCIPLE OF MOMENTS • APPLICATION OF THE PRINCIPLE OF MOMENTS	THE LEARNER UNDERSTANDS AND USES THE RELATIONSHIP BETWEEN ENERGY, WORK DONE AND POWER IN THE OPERATION OF SIMPLE MACHINES	THE LEARNER SHOULD BE ABLE TO: • UNDERSTAND THE TURNING EFFECT OF FORCES AND ITS APPLICATIONS. • UNDERSTAND AND APPLY THE CONCEPT OF CENTRE OF GRAVITY.	• GROUP DISCUSSION • GROUP RESEARCH • QUESTION AND ANSWER • DEMONSTRATION • PROBLEM SOLVING • QUIZ • SIMULATION • OBSERVATION • EXPERIMENTATION • PROFECT • BRAIN STORMING	• LIBRARY RESOURCE • PICTURES • PROJECTOR • DICTIONARY • MANILA • PAPER • INTERNET • LIBRARY RESOURCE • PICTURES • PROJECTOR • THREADS • MASS HANGERS OF DIFFERENT MASS • HALF METRE RULE • PLASTICINE • SLOTTED MASSES • SPRING BALANCE • RETORT STAND • WEIGHING SCALE • OPTICAL PINS • MARKERS	
9	06									
10	06				• PARALLEL FORCES IN EQUILIBRIUM • COUPLES					
11	04			EQUILIBRIUM AND STABILITY	• THE CONCEPT OF EQULIBRIUM AND STABILITY • CONDITIONS FOR A BODY TO BE IN EQUILIBRIUM • TYPES OF EQUILIBRIUM					
	02	ACTIVITY OF INTEGRATION (THE TURNING EFFECT OF FORCES, CENTRE OF GRAVITY AND STABILITY)								
12	END OF TERM 1 ASSESSMENT									

REFERENCE:

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2. **ATIKINSON A (1993), COMPLETE JUNIOR PHYSICS, INTERNATIONAL EDITION, LONGMAN PUBLISHERS.**
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4. **TOM DUNCAN (2011), PHYSICS FOR TODAY AND TOMORROW, HODDER EDUCATION, UK.**
5. **L.E FOLIVI AND A GODMAN (1992), NEW CERTIFICATE PHYSICS, NEW EDITION, LONGMAN, ENGLAND.**
6. **NCDC REFERENCE BOOKS FOR THE COMPETENCE BASED CURRICULUM (S.2 LEANERS' BOOKS AND S.2 TEACHER' S GUIDES).**
7. **NELKON M (1990) PRINCIPLES PF PHYSICS, 8TH EDITION, LONGMAN PUBLISHERS**
8. **NEW LOWER SECONDARY CURRICULUM PHYSICS SYLLABUS.**
9. **WIKIPEDIA ONLINE ENCYCLOPEDIA**
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12. **https://researchguides.case.edu/physics.**
13. **https://scienceeducatorsuganda.com.**

PREPARED BY; **APPROVED BY;**

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SUBJECT TEACHER	**HOD**	**DOS**