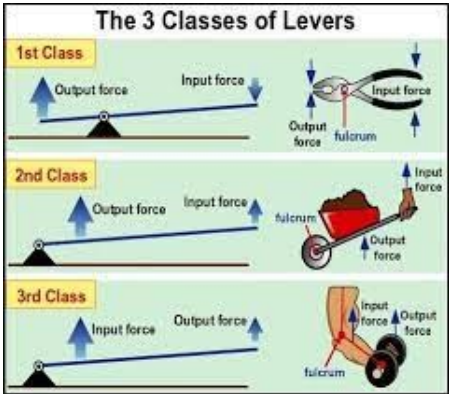


BASIC 7

WEEKLY LESSON PLAN – WEEK 6

Learning Indicator(s)	B7.4.4.2		
Performance Indicator	B7.4.4.2.2 Describe the types and functions of levers		
Week Ending	21-10-2022		
FORM	B.S.7		
Subject	Integrated Science		
Reference	Curriculum, Teachers Resource Pack, Learners Resource Pack.		
Teaching / Learning Resources	Textbook, Word Chart, Pictures.		
DAYS	PHASE 1 : STARTER	PHASE 2: MAIN	PHASE 3: REFLECTION
MONDAY 17-10-2022	Learners brainstorm to explain the meaning of a Lever.	<ol style="list-style-type: none"> 1. Assist Learners to identify the types of Lever. 2. Discuss the general functions of the types of Lever. 3. Assist Learners to classify Levers into First, Second and Third classes. <p>There are three types of lever.</p> <ul style="list-style-type: none"> • First class lever – the fulcrum is in the middle of the effort and the load. • Second class lever – the load is in the middle between the fulcrum and the effort. • Third class lever – the effort is in the middle between the fulcrum and the load. 	Core Competencies; <ol style="list-style-type: none"> 1. Explain ideas in a clear order with relevant detail 2. Ability to find and consume digital content 3. Ability to combine Information and ideas from several sources to reach a conclusion

THURSDAY 20-10-2022	Learners are to guided to explain the principles of the classes of Lever.	<ol style="list-style-type: none"> 1. Discuss the meanings of Work input, Work Output and Efficiency with the Learners. 2. Assist Learners to explain efficiency of a machine as the ratio of work output to work input expressed as a percentage. 3. Learners individually brainstorm to explain the concept of efficiency of a machine. 4. Learners in small groups to describe how efficiency of simple machines can be improved <div data-bbox="548 527 1174 882" data-label="Equation-Block"> <p style="text-align: center;">Efficiency Formula</p> $\text{EFFICIENCY} = \frac{W_{\text{out}}}{W_{\text{in}}} \times 100\%$ <ul style="list-style-type: none"> • W_{out} = work output (J) • W_{in} = work input (J) </div> <p>Work input is defined as the effort force multiplied by the distance across which the force is exerted to a machine. Work output is defined as the resistance force multiplied by the distance over which the force is applied. The work output of an ideal machine is equal to the work input, i.e. efficiency.</p> <p>How do you calculate work input and work output?</p> <p>The work efficiency formula is efficiency = output / input, and you can multiply the result by 100 to get work efficiency as a percentage.</p>	Core Competencies; <ol style="list-style-type: none"> 1. Ability to ascertain when information is needed and be able to identify, locate, evaluate and effectively use them to solve a problem 2. Recognise and generalise information and experience; search for trends and patterns 3. Being open-minded, adapting and modifying ideas to achieve creative results 4. Putting forward constructive comments, ideas, explanations

