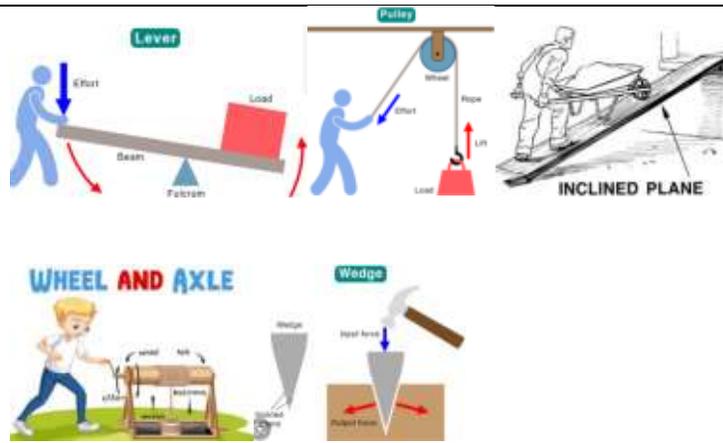


TERM THREE
WEEKLY LESSON NOTES
WEEK 5

Week Ending: 14 th OCT, 2022	DAY:	Subject: Science
Duration: 100mins		Strand: Forces & Energy
Class: B7	Class Size:	Sub Strand: Simple Machine
Content Standard: B7.4.4.2 Recognize some simple machines, and show understanding of their efficiency in doing work.	Indicator: B7.4.4.2.1 Identify simple machines	Lesson: 1 of 2
Performance Indicator: Learners can identify simple machines and categorize them.		Core Competencies: DL 5.3: CI 6.8: DL 5.1: CI 6.6:
References: Science Curriculum Pg. 38-39		
New words: Pulley, lever, machine, efficiency, fulcrum , force, weight , moments, watts, work input, work, output		
Phase/Duration	Learners Activities	Resources
PHASE 1: STARTER	<p>Task learners to mention some simple machines they use in their machines.</p> <ul style="list-style-type: none"> • What machines do you have in your homes? • Why do you call these equipment machines? <p>Write learners responses on the board and discuss with them.</p> <p>Share learning indicators and introduce the lesson.</p>	
PHASE 2: NEW LEARNING	<p>Brainstorm learners for the meaning of machine. <i>A simple machine is any device that allows work to be done easier and faster.</i></p> <p>In groups learners give examples of simple machines and describe its uses. For example, a pair of scissors can be used to cut a piece of cloth easier and faster than tearing it with your hands. The use of the scissors saves us time and energy that can be used for other things as well.</p> <p>Other examples include plier, spanner, hammer, wheelbarrow, screw driver, crow bar, etc.</p> <p>Engage learners to draw some simple machines in their workbooks.</p> <p style="text-align: center;"> <small>1.Hammer 2.Crowbar 3.Wheelbarrow 4.Screw driver 5.Plier 6.Spanner</small>  </p> <p>Have learners group simple machines into the following categories. <i>Lever, inclined Plane, Wedge, Pulley, Wheel and axle, Gears, Screws.</i></p> <p>In groups, learners discuss the various categories.</p>	Seesaw, crowbar, a pair of scissors, wheel barrow, shovel, spoon, pliers, knife



Assessment

Define simple machines and give five examples.

**PHASE 3:
REFLECTION**

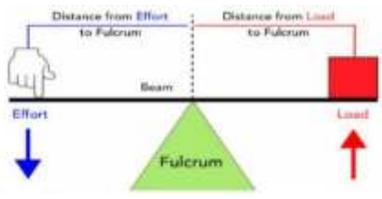
Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.

Take feedback from learners and summarize the lesson.

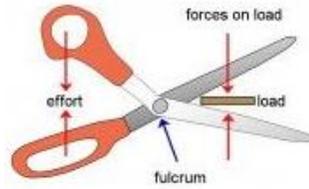
Homework

Explain how levers function as simple machines

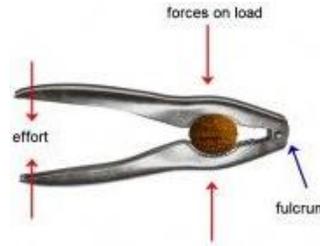
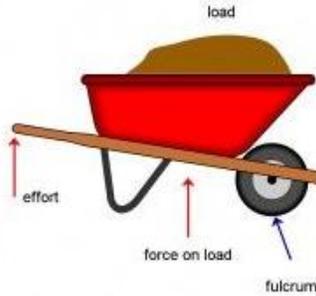
Week Ending: 14 th OCT, 2022	DAY:	Subject: Science
Duration: 100mins		Strand: Forces & Energy
Class: B7	Class Size:	Sub Strand: Simple Machine
Content Standard: B7.4.4.2 Recognize some simple machines, and show understanding of their efficiency in doing work.	Indicator: B7.4.4.2.2 Describe the types and functions of levers	Lesson: 2 of 2
Performance Indicator: Learners can describe the types and functions of levers.		Core Competencies: DL 5.3: CI 6.8: DL 5.1: CI 6.6:
References: Science Curriculum Pg. 38-39		
New words: Pulley, lever, machine, efficiency, fulcrum , force, weight , moments, watts, work input, work, output		

Phase/Duration	Learners Activities	Resources
PHASE 1: STARTER	<p>Revise with learners on the previous lesson.</p> <p>Share learning indicators and introduce the lesson.</p>	
PHASE 2: NEW LEARNING	<p>Brainstorm learners for the meaning of lever. A lever is any rigid bar, which rotate at a certain fixed point called a pivot or fulcrum.</p> <p>Learners give examples of lever and relate to them. Examples bottle opener, a pair of scissors and wheelbarrow.</p> <p>Guide learners to identify and discuss the parts of lever.</p> <ul style="list-style-type: none"> • The effort is the force applied to the lever to lift the load(weight). • The load is weight which is to be lifted. • The pivot is the fixed point about which the lever rotates. <p>Learners to note that; The distance from the pivot to the effort is called the effort distance The distance from the pivot to the load is called the load distance. The closer the pivot is to the load; the less force is needed to lift the load and vice versa.</p>  <p>Learners to classify levers into first, second and third classes and demonstrate how the principals involved in each class make work easier in everyday life.</p> <ul style="list-style-type: none"> • First class lever In the first-class lever, the pivot (P) is between the effort (E) and the load (L) Examples of first class levers are 	Seesaw, crowbar, a pair of scissors, wheel barrow, shovel, spoon, pliers, knife

a pair of scissors, see-saw, pliers, pick axe, shovel, crowbar, shears, and claw hammer



- Second class lever In a second-class lever, the load(L) is between the pivot(P) and the effort (E). Examples of second class levers are wheel barrow, nutcracker and bottle opener



- Third class lever In a third-class lever, the effort(E) is between the pivot (P) and the load (L). Examples of third class levers are cutlass, hoe, forceps, fishing rod, sugar tongs, nail clippers, forearm of a human body, etc.



Assessment

Explain how levers function as simple machines

**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.

Homework

Find out why the efficiency of simple machines is less than 100%..