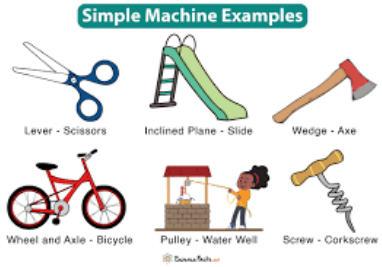
WEEK ENDING.....02/12/2022.....

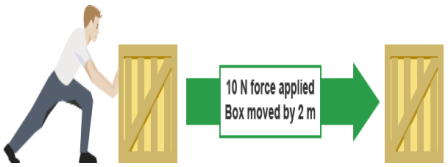
SUBJECT...INTEGRATED SCIENCE

REFERENCE...SYLLABUS(CRDD,2007), SCIENCE FOR JHS .....

FORM.....BASIC 8.....WEEK.....12.....

DAY/DURATION	***TOPIC/SUB-TOPIC/ASPECT***	***OBJECTIVES/R.P.K***	***TEACHER-LEARNER ACTIVITIES***	**T/L MATERIALS**	**CORE POINTS**	**EVALUATION AND REMARKS**
TUESDAY **29-11-2022** **1:20PM – 2:40PM** **80min**	**Topic;** Machines **Sub-Topic;** Meaning of Machine and examples of Simple machines.	By the end of the lesson the Pupil will be able to; i. explain the term machine. ii. give examples of simple machines **RPK** Pupils use simple machines at home and in school.	**Introduction;** Review Pupils knowledge on the previous lesson. **Activities;** 1. Pupils in small groups to discuss the meaning of Machine. 2. Assist Pupils to mention examples of simple machines. **Closure** Through questions and answers, conclude the lesson.	**Pair of Scissors, Wheel barrow, knife, Pictures.**	The definition of a simple machine is any device with little or no moving parts that are used to modify both motion and magnitude of force applied to an object to perform work. **There are six simple machines;** 1. Planes 2. levers 3. wheel 4. axles 5. pullies 6. wedges 7. screws. 	**Exercise;** 1. What is a Machine? 2. State 5 examples of Simple Machines.

THURSDAY **01-12-2022** **8:05AM – 9:15AM** **70min**	**Topic;** Machines **Sub-Topic;** Work, Energy and Power.	**Objective;** By the end of the lesson the Pupil will be able to; i. explain the terms work, energy and power. ii. explain Work Input, Work Output and Efficiency" as they apply to machines. iii. outline how to care for machines. **RPK** Pupils were taught lessons on Work in basic 6.	**Introduction;** Pupils brainstorm to explain the meanings of work, energy and Power. **Activities;** 1. Discuss the meanings of Work input, work output and Efficiency. 2. Pupils brainstorm to explain how to care for machines. 3. Pupils individually brainstorm to state the formula for calculating Work. **Closure** Pupils in groups to practice calculating for work done using formula.		**Energy and work** When a force causes a body to move, work is being done on the object by the force. Work is the measure of energy transfer when a force (*F*) moves an object through a distance (*d*). So when work is done, energy has been transferred from one energy store to another, and so: energy transferred = work done Energy transferred and work done are both measured in joules (J). **Calculating work done** The amount of work done when a force acts on a body depends on two things: • the size of the force acting on the object • the distance through which the force causes the body to move in the direction of the force The equation used to calculate the work done is: work done = force × distance W=F×d This is when: • work done (*W*) is measured in joules (J)	**Exercise;** 1. Explain the meanings of the following; i. Work ii. Energy iii. Power. 2. State the formular for calculating Work, energy and Power. **REMARKS**

					• force (*F*) is measured in newtons (N) • distance (*d*) is in the same direction as the force and is measured in metres (m)  In this example, a force of 10 N causes the box to move a horizontal distance of 2 m, so: W=F×d W=10×2 W=20 J W= F x d W=10- x 2 W= 20J	