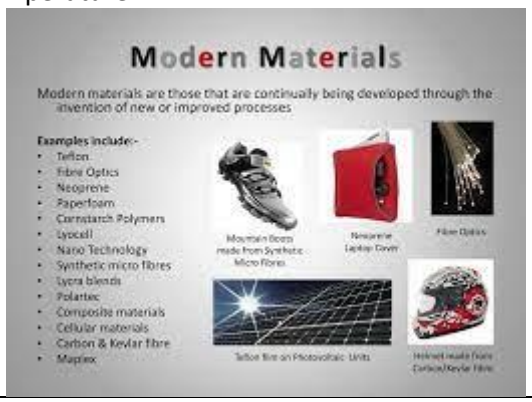
BASIC 8

WEEKLY LESSON PLAN – WEEK 2

Strand:	Material for Production		**Sub-Strand:**	Smart and Modern Materials	
Content Standard:	B8.2.3.1 Demonstrate understanding and the use of smart and modern materials				
Indicator (s)	B8.2.3.1.1: Discuss smart and modern materials		**Performance Indicator:** Learners can use Smart and Modern Materials.		
Week Ending	19-01-2024				
Class	B.S.8	**Class Size:**		**Duration:**	
Subject	Career Technology				
Reference	Career Technology Curriculum, Teachers Resource Pack, Learners Resource Pack, Textbook.				
Teaching / Learning Resources	Sand, Stone, Cement, Pictures, Poster, Video.		**Core Competencies:**	• Communication and Collaboration Critical Thinking and Problem Solving.	

DAY/DATE	**PHASE 1 : STARTER**	**PHASE 2: MAIN**	**PHASE 3: REFLECTION**
MONDAY	Learners brainstorm to explain the meaning of Smart and Modern Materials.	1. Assist Learners to identify 5 examples of Smart and Modern Materials. 2. Discuss with Learners area where Smart and Modern Materials are in use. 3. Demonstrate on how to use examples of Smart and modern materials. **TYPES OF SMART MATERIALS** • Piezoelectric materials. • Shape memory materials. • Chromoactive materials. • Magnetorheological materials. • Photoactive materials. **Modern Materials** **Graphene**: Developed from the same lead that is in your pencils Graphene is a super thin layer of graphite which provides a light weight, super strong, flexible material which is also a great conductor of heat and electricity. It is a fairly new material which is being developed into a wide variety of products such as vehicles, aeroplanes and sports racquets. **Nano materials**: tiny particles (nano) are woven into fibres to solve a whole range of problems. Deodorant in sports socks, antibacterial into wound dressings and	Through questions and answers, conclude the lesson. **Exercise;** State examples each; i. Smart materials ii. Modern Materials.

		Teflon onto things like school uniforms to help keep them clean are just a few examples. These microscopic capsules are also called micro encapsulation. Technical textiles are functional modern materials being developed all the time to help make fabrics.	
FRIDAY	Review Learners knowledge on the previous lesson.	1. With the use of Personal Computers connected to the internet, Learners practice searching for examples of Smart and modern materials. 2. Individual Learners to report on their searches. 3. Discuss with Learners using other ICT tools to search on the internet examples of Smart and Modern materials. **Properties of Smart and Modern Materials;** Smart materials are 'reactive materials'. Their properties can be changed by exposure to stimuli, such as electric and magnetic fields, stress, moisture and temperature. 	Summarize the lesson. **Exercise;** Mention 5 ICT tools that can be used to search on the internet for information on smart and modern materials.

Name of Teacher: **School:** **District:**