Strand:	Materials for Production	**Sub-Strand:**	Compliant Materials

BASIC 9

WEEKLY LESSON PLAN – WEEK 7

Content Standard:	B9.2.1.1 Demonstrate skills in selecting compliant materials for making products and artefacts				
Indicator (s)	B9.2.1.1.1: Discuss the factors that influence the selection of compliant materials		**Performance Indicator** Learners can identify factors to consider when choosing a compliant material to use.		
Week Ending	25-10-2024				
Class	B.S.9	**Class Size:**		**Duration:**	
Subject	Career Technology				
Reference	Career Technology Curriculum, Teachers Resource Pack, Learners Resource Pack, Textbook.				
Teaching / Learning Resources	Power point Presentation on the process of working with Compliant materials, Projector, Pictures showing compliant materials		**Core Competencies:**	• Communication and Collaboration. • Critical Thinking and Problem Solving. • Creativity and Innovation.	

DAY/DATE	**PHASE 1 : STARTER**	**PHASE 2: MAIN**	**PHASE 3: REFLECTION**
WEDNESDAY	Discuss with the Learners on the meanings of terminologies and keywords in the lesson. **Terminologies;** • Construction • Serviceability • Permeability • Shrinkage • Elasticity • Plasticity • Stiffness • Resilience • Toughness • Ductility • malleability • hardness.	1. Briefly explain the term "Compliant materials" to the Learners. 2. Assist Learners to identify examples of compliant materials. 3. Discuss the properties of compliant materials with the Learners. 4. Learners brainstorm to associate compliant materials with their correct practical applications. A compliant material is a material that conforms to regulations or even a building code. It is a material that has recognized, predictable and consistent properties. A material is a compliant material, if it conforms to a known performance criteria. **APPLICATION** / MODELLING / SKETCH DESIGNS / RENDERING WITH MARKERS / PACKAGING CLEAR WINDOW **COMPLIANT MATERIAL** / *Extruded polystyrene foam (Styrofoam)* / *Layout paper, Bleed proof paper* / *Layout paper, Bleed proof paper* / *Acetate Polypropylene*	Learners in small groups to discuss about the safe practices of working with compliant materials. **Exercise;** 1. What are compliant materials? 2. Give 5 examples of compliant materials.

THURSDAY	Review Learners knowledge on the previous lesson.	1. Discuss with the Learners about the factors to consider when choosing a compliant material to use. 2. Learners brainstorm to identify the factors that influence the selection of compliant materials. 3. Assist Learners to describe the processes involved in working with compliant materials. 4. Demonstrate on making artefacts from compliant materials. **Factors to consider when choosing Compliant Material to use;** a) Availability: Material should be available easily in the market. b) Cost: the material should be available at cheaper rate. c) Manufacturing Consideration: the manufacturing play a vital role in selection of material and the material should suitable for required manufacturing process. d) Physical properties: like colour, density etc. f) Mechanical properties: such as strength, ductility, Malleability etc. g) Corrosion resistance: it should be corrosion resistant. **Important Factors:** • Strength • Life of the material • Budget/Cost of material • Handling and Storage • Local availability • Climate • Skill required and its availability • Sustainability • Nature of project • Aesthetic appeal	Assist Learners to practice making artefacts from compliant materials. **Exercise;** 1. Describe the processes involved in working with compliant materials. 2. State 3 factors to consider when choosing compliant materials to work with.

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