SECOND TERM
WEEKLY LESSON NOTES
WEEK 1

Week Ending: 06-04-2023	**Day:**	**Subject:** Career Technology	
Duration: 60MINS		**Strand:** Tools, Equipment & Processes	
Class: B8	**Class Size:**	**Sub Strand:** Care For Cutting & Shaping Tools	
Content Standard: B8.3.2.1 Demonstrate understanding of cutting and shaping tools and equipment for making artefacts/products	**Indicator:** B8.3.2.1.3: Demonstrate how to care for and maintain shaping and cutting tools and equipment		**Lesson:** 1 of 1
Performance Indicator: Learners can demonstrate how to care for and maintain shaping and cutting tools and equipment		**Core Competencies:** CP 6.5: CI 5.4: CI 5.2: CI 6.10:	
Reference: Career Technology Curriculum Pg. 56			

Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Revise with learners to review their understanding in the previous lesson. Share performance indicators with learners.	
PHASE 2: **NEW LEARNING**	Revise with learners on the different types of cutting and shaping tools in the wood and metal workshop. ***Hand saws**: Hand saws are used for cutting wood and metal by hand. There are different types of hand saws available, such as crosscut saws, rip saws, and hacksaws, each designed for specific types of cuts.* ***Power saws**: Power saws are motorized cutting tools used for cutting wood and metal. Examples include circular saws, jigsaws, and band saws.* ***Chisels**: Chisels are cutting tools with a sharpened edge used for shaping and carving wood and metal. They come in different shapes and sizes to create various cuts and shapes.* ***Planes**: Planes are tools used for shaping and smoothing wood. They are used to remove small amounts of wood to achieve a flat, even surface. Files: Files are cutting tools used to shape and smooth metal. They come in different shapes and sizes to create various cuts and shapes.* ***Grinders**: Grinders are power tools used for shaping and smoothing metal. They use an abrasive wheel to remove excess metal and create a smooth surface.* ***Welding torches**: Welding torches are used to heat and melt metal to join two pieces together. They are commonly used in metal fabrication.* Discuss how to care for and maintain cutting and shaping tools and equipment used in the wood and metal workshop. • *Store the tools in a dry and clean place to prevent rust, moisture, or damage.*	Pictures and charts of food

	• *After use, wipe the tools with a clean cloth to remove any dirt or debris.* • *Keep the tools organized and in their designated places to prevent them from getting lost or damaged.* • *Avoid dropping or banging the tools as they may become damaged or lose their accuracy.* • *Sharpen and clean cutting tools such as scissors and rotary cutters regularly to maintain their sharpness and prevent snagging fabric*. • *Lubricate any moving parts of the tools such as the measuring tape, seam gauge, or ruler to keep them moving smoothly*. • *Replace any broken or damaged tools immediately to avoid any mishaps during sewing projects*. <u>Assessment</u> What is a hand saw used for in a wood and metal workshop? What are power saws, and what makes them different from hand saws? What is the purpose of chisels in a wood and metal workshop? What are planes, and what are they used for in woodworking? What is a file, and how is it used in metalworking? What is the function of a welding torch in metal fabrication?	
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. Ask learners how the lesson will benefit them in their daily lives.	

SECOND TERM
WEEKLY LESSON NOTES
WEEK 2

Week Ending: 14-04-2023	**Day:**	**Subject:** Career Technology	
Duration: 60MINS		**Strand:** Tools, Equipment & Processes	
Class: B8	**Class Size:**	**Sub Strand:** Joining & Assembling Materials	
Content Standard: B8.3.3.1 Demonstrate understanding of joining and assembling materials, tools and equipment used for making artefacts/ products	**Indicator:** B8.3.3.1.1: Identify joining and assembling materials, tools and equipment used for making artefacts/products	**Lesson:** 1 of 2	
Performance Indicator: Learners can identify joining and assembling materials, tools and equipment		**Core Competencies:** CP 6.5: CI 5.4: CI 5.2: CI 6.10:	
Reference: Career Technology Curriculum Pg. 56			

Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Revise with learners to review their understanding in the previous lesson. Share performance indicators with learners.	
PHASE 2: **NEW LEARNING**	Brainstorm learners to mention some joining and assembling tools used in the wood workshop. Paste a chart of pictures of joining and assembling tools used in the wood workshop. Have learners identify the tools and relate to them. Identify materials, tools and equipment used for joining and assembling and their uses. • Hammer: Used to drive nails into wood. • Nail gun: A tool that uses compressed air to shoot nails into wood quickly. • Power drill: Used for drilling holes in wood and for driving screws. • Screwdriver: Used for tightening or loosening screws. • Jigsaw: A saw with a fine blade used for making curved cuts in wood. • Table saw: A saw with a circular blade used for making straight cuts in wood. • Clamps: Used to hold wood in place while gluing or joining pieces together. • Router: A tool used to carve and shape wood. Guide learners to sketch and label some tools in each of the trade areas. Have learners to display sketches for appraisal	Pictures and charts of food

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. Ask learners how the lesson will benefit them in their daily lives.	

Week Ending: 14-04-2023	**Day:**	**Subject:** Career Technology
Duration: 60MINS		**Strand:** Tools, Equipment & Processes
Class: B8	**Class Size:**	**Sub Strand:** Joining & Assembling Materials

Content Standard: B8.3.3.1 Demonstrate understanding of joining and assembling materials, tools and equipment used for making artefacts/ products	**Indicator:** B8.3.3.1.1: Identify joining and assembling materials, tools and equipment used for making artefacts/products	**Lesson:** 2 of 2
Performance Indicator: Learners can identify joining and assembling materials, tools and equipment		**Core Competencies:** CP 6.5: CI 5.4: CI 5.2: CI 6.10:
Reference: Career Technology Curriculum Pg. 56		

Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Revise with learners to review their understanding in the previous lesson. Share performance indicators with learners.	
PHASE 2: **NEW LEARNING**	Brainstorm learners to mention some joining and assembling tools used in the metal workshop. Paste a chart of pictures of joining and assembling tools used in the metal workshop. Have learners identify the tools and relate to them. Identify materials, tools and equipment used for joining and assembling and their uses. • Welding machine: Used for joining metal pieces together by melting and fusing them. • Angle grinder: Used for cutting and shaping metal. • Drill press: Used for drilling holes in metal. • Taps and dies: Used for threading metal rods and bolts. • Vice: Used for holding metal pieces in place while working on them. Guide learners to sketch and label some tools in each of the trade areas. Have learners to display sketches for appraisal	Pictures and charts of food
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. Ask learners how the lesson will benefit them in their daily lives.	

SECOND TERM
WEEKLY LESSON NOTES
WEEK 3

Week Ending: 21-04-2023	**Day:**	**Subject:** Career Technology
Duration: 60MINS		**Strand:** Tools, Equipment & Processes
Class: B8	**Class Size:**	**Sub Strand:** Joining & Assembling Materials

Content Standard: B8.3.3.1 Demonstrate understanding of joining and assembling materials, tools and equipment used for making artefacts/ products	**Indicator:** B8.3.3.1.1: Identify joining and assembling materials, tools and equipment used for making artefacts/products	**Lesson:** 1 of 2
Performance Indicator: Learners can identify joining and assembling materials, tools and equipment		**Core Competencies:** CP 6.5: CI 5.4: CI 5.2: CI 6.10:
Reference: Career Technology Curriculum Pg. 56		

Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Revise with learners to review their understanding in the previous lesson. Share performance indicators with learners.	
PHASE 2: **NEW LEARNING**	Brainstorm learners to mention some joining and assembling tools used in block work. Paste a chart of pictures of joining and assembling tools used in the block work. Have learners identify the tools and relate to them. Identify materials, tools and equipment used for joining and assembling and their uses. *Trowels: Trowels are used to spread mortar evenly and apply it to the blocks. A pointing trowel may also be used to apply mortar to the joints between the blocks.* *Mortar mixer: A mortar mixer is used to mix mortar quickly and efficiently. This tool is particularly useful for larger projects where a lot of mortar is needed.* *Spirit level: A spirit level is used to ensure that the blocks are level and plumb. This tool is essential for ensuring that the finished wall is structurally sound.* *Brick hammer: A brick hammer is used to trim and shape blocks to fit around obstacles or to create a specific shape or size.* *Chisel: A chisel is used to cut and shape blocks as needed. This tool can be particularly useful when trying to make precise cuts or shapes.*	Pictures and charts of food

	Mason's line: A mason's line is used to ensure that the blocks are laid in a straight line. This tool is particularly useful for ensuring that the finished wall looks neat and tidy. *Jointer: A jointer is used to finish the joints between the blocks. This tool can be used to create different textures and finishes on the mortar.* *Power tools: Power tools, such as grinders or saws, may be used to cut or shape blocks quickly and accurately.* Guide learners to sketch and label some joining and assembling tools used in the block work. Have learners to display sketches for appraisal	
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. Ask learners how the lesson will benefit them in their daily lives.	

Week Ending: 21-04-2023	**Day:**	**Subject:** Career Technology
Duration: 60MINS		**Strand:** Tools, Equipment & Processes
Class: B8	**Class Size:**	**Sub Strand:** Joining & Assembling Materials

Content Standard: B8.3.3.1 Demonstrate understanding of joining and assembling materials, tools and equipment used for making artefacts/ products	**Indicator:** B8.3.3.1.3: Demonstrate how to care for and maintain tools and equipment used for joining and assembling	**Lesson:** 21 of 2

Performance Indicator: Learners can demonstrate how to care for and maintain tools and equipment used for joining and assembling	**Core Competencies:** CP 6.5: CI 5.4: CI 5.2: CI 6.10:

Reference: Career Technology Curriculum Pg. 58

Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Revise with learners to review their understanding in the previous lesson. Share performance indicators with learners.	
PHASE 2: **NEW LEARNING**	Revise with learners on tools and equipment used for joining and assembling in the various trade areas. Let learners sketch and label some tools and equipment used for joining and assembling in the various trade areas. Demonstrate how to care for and maintain tools and equipment used for joining and assembling the following: *Clean the tools and equipment regularly: After every use, clean the tools and equipment thoroughly. Use a dry cloth or brush to remove any debris or dirt that may have accumulated on them. Avoid using water to clean tools unless they are specifically designed for use with water.* *Lubricate moving parts: Moving parts of tools, such as hinges or joints, should be lubricated regularly to prevent rust and wear. Use a small amount of oil or grease to lubricate the parts as recommended by the manufacturer.* *Store the tools and equipment properly: Store the tools and equipment in a dry and secure place to protect them from moisture, dust, and other contaminants that can damage them. Hang the tools on hooks or store them in a toolbox to keep them organized and easily accessible.* *Sharpen cutting tools: Cutting tools such as saw blades and drill bits should be sharpened regularly to maintain their effectiveness. Use a sharpening stone or file to sharpen the blades.*	Pictures and charts of food

	Replace damaged parts: If any part of the tool or equipment is damaged, replace it as soon as possible. Using damaged tools or equipment can result in poor performance and can even be dangerous. *Follow manufacturer's instructions: Always follow the manufacturer's instructions for using and maintaining the tools and equipment. This will help ensure that they perform effectively and last a long time.* <u>Assessment</u> State and explain four ways how to care for and maintain tools and equipment used for joining and assembling.	
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. Ask learners how the lesson will benefit them in their daily lives.	

SECOND TERM
WEEKLY LESSON NOTES
WEEK 4

Week Ending: 28-04-2023	**Day:**	**Subject:** Career Technology	
Duration: 60MINS		**Strand:** Tools, Equipment & Processes	
Class: B8	**Class Size:**	**Sub Strand:** Finishes & Finishing	
Content Standard: B8.3.5.1 Demonstrate understanding of application of finishes	**Indicator:** B8.3.5.1.1: Demonstrate how to mix the various finishes		**Lesson:** 1 of 2
Performance Indicator: Learners can demonstrate how to mix the various finishes		**Core Competencies:** CP 6.5: CI 5.4: CI 5.2: CI 6.10:	
Reference: Career Technology Curriculum Pg. 60			

Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Revise with learners to review their understanding in the previous lesson. Share performance indicators with learners.	
PHASE 2: **NEW LEARNING**	Brainstorm learners for the meaning of Finishes and finishing in wood and metal work. *Finishes and finishing in wood and metal work refer to the process of applying a protective or decorative coating to the surface of the material to enhance its appearance, durability, and resistance to wear and tear*. Guide learners to discuss the reasons for Finishes and finishing in wood and metal work. *In woodwork, finishes can be applied to the surface of the wood to protect it from moisture, insects, and other environmental factors.* *In metalwork, finishes can be applied to the surface of the metal to enhance its appearance, prevent corrosion, and improve its resistance to wear and tear.* Learners in their groups identify some common finishes in wood and metal work. *Common finishes include varnish, lacquer, shellac, and oil-based stains. Common finishes include plating, painting, and powder coating*. Guide learners to identify tools used for mixing finishes. E.g., containers, stirring rod	Pictures and charts of food
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.	

	Ask learners how the lesson will benefit them in their daily lives.	

Week Ending: 28-04-2023	**Day:**	**Subject:** Career Technology	
Duration: 60MINS		**Strand:** Tools, Equipment & Processes	
Class: B8	**Class Size:**	**Sub Strand:** Finishes & Finishing	
Content Standard: B8.3.5.1 Demonstrate understanding of application of finishes	**Indicator:** B8.3.5.1.2 Demonstrate skills of applying finishes in wood and metal work	**Lesson:** 2 of 2	
Performance Indicator: Learners can demonstrate skills of applying finishes in wood and metal work		**Core Competencies:** CP 6.5: CI 5.4: CI 5.2: CI 6.10:	
Reference: Career Technology Curriculum Pg. 61			

Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Revise with learners to review their understanding in the previous lesson. Share performance indicators with learners.	
PHASE 2: **NEW LEARNING**	Demonstrate the procedure for mixing lacquer. E.g., lacquer is diluted with thinner about 10-15% Demonstrate the procedure for mixing emulsion paint. E.g., add water bit by bit and stir with stirring rod Demonstrate the procedure for mixing oil paint. E.g., dilute oil paint with turpentine between 10-30% and stir. Demonstrate skills of applying finishes in wood and metal work. <u>Applying finishes in woodwork</u>: • Sand the wood surface to a smooth finish. Begin with a coarse grit sandpaper and gradually move to a finer grit for a smooth finish. • Choose the type of finish you want to apply. Common finishes include varnish, lacquer, shellac, and oil-based stains. • Apply the finish using a brush, spray, or rag. Apply the finish in thin, even coats, and allow it to dry completely between coats. • Sand the surface lightly between coats with a fine grit sandpaper. • Apply additional coats until you achieve the desired depth and sheen. • After the final coat has dried, polish or buff the surface to enhance the shine and smoothness. <u>Applying finishes in metalwork</u>:	Pictures and charts of food

	• Clean the metal surface thoroughly to remove any dirt, grease, or rust. • Choose the type of finish you want to apply. Common finishes include plating, painting, and powder coating. • Allow the finish to dry completely according to the manufacturer's instructions. • For plating, polishing and buffing can be used to enhance the shine and smoothness of the surface. • For painting and powder coating, polishing and buffing are not necessary. Display specimens/food products for appraisal.	
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. Ask learners how the lesson will benefit them in their daily lives.	

SECOND TERM
WEEKLY LESSON NOTES
WEEK 5

Week Ending: 05-05-2023	**Day:**	**Subject:** Career Technology	
Duration: 60MINS		**Strand:** Technology	
Class: B8	**Class Size:**	**Sub Strand:** Simple Structures	
Content Standard: B8.4.1.1 Demonstrate understanding of application of principles of forces acting on structures.	**Indicator:** B8.4.1.1.1: Perform experiments of principles of forces on structures		**Lesson:** 1 of 2
Performance Indicator: Learners can perform experiments of principles of forces on structures		**Core Competencies:** CP 6.5: CI 5.4: CI 5.2: CI 6.10:	
Reference: Career Technology Curriculum Pg. 60			

Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Revise with learners to review their understanding in the previous lesson. Share performance indicators with learners.	
PHASE 2: **NEW LEARNING**	Learners in their groups research for types of forces that can act on structural members in construction. *1. Compression: Compression is a force that tends to squeeze or compress a structural member, reducing its length. It is commonly seen in columns and beams that support loads from above.* *2. Tension: Tension is a force that tends to stretch or elongate a structural member, increasing its length. It is commonly seen in cables and suspension bridges.* *3. Shear: Shear is a force that tends to cut or slice through a structural member, causing it to bend or break. It is commonly seen in beams and girders that support loads from the sides.* *4. Bending: Bending is a combination of compression and tension that occurs when a structural member is subjected to a load that causes it to bend. It is commonly seen in beams, trusses, and arches.* *5. Torsion: Torsion is a twisting force that causes a structural member to twist or distort. It is commonly seen in shafts, axles, and bridges with curved decks.* *6. Fatigue: Fatigue is a type of force that occurs when a structural member is subjected to repeated cycles of stress over time. It can cause the material to weaken and eventually fail.* *7. Impact: Impact is a sudden force that occurs when a structural member is hit by a moving object. It can cause the material to deform or fracture.*	Pictures and charts of food

	Make sketches and notes of the types of forces acting on structural members. E.g., tension, compression, shear, torsion and bending Identify suitable resistant materials that can be used to perform the experiments: Forces acting on structural members. E.g., wood, metal, plastic, brick. Guide learners to perform experiments to show the following: - how tension force can force a member to 'stretch' *Tension is a force that tends to pull or stretch a structural member, increasing its length. When a structural member is subjected to a tensile force, the forces acting on the member are distributed along its length, causing it to elongate. This elongation occurs due to the separation of atoms or molecules within the material of the member, which allows it to stretch*. - how compression force can cause a member to 'squash' or 'buckle' *When a compressive force is applied to a member, the material within the member experiences a force that tries to compress it. This force is distributed along the length of the member, causing the material to deform and buckle if the compressive force is large enough. The amount of deformation and the load capacity of the member depend on its cross-sectional area, length, and material properties, such as its compressive strength*. - how shear force can cause a material to slide over each other. *When a structural member is subjected to a shear force, the forces acting on the member are parallel to the cross-sectional area of the member, causing it to deform and potentially fail. In a material, shear forces cause adjacent layers or particles to slide over each other, leading to deformation or failure of the material. The amount of deformation or failure depends on the magnitude of the shear force, the shape and size of the cross-sectional area of the member, and the properties of the material, such as its shear strength*. - how torsion force can cause a member to twist *When a torsional force is applied to a member, the material within the member experiences a force that tries to twist it around its longitudinal axis. This force is distributed around the cross-sectional area of the member, causing it to deform and twist if the torsional force is large enough. The amount of deformation and the load capacity of the member depend on its cross-sectional shape, size, and material properties, such as its torsional strength*. - how a bending force which acts at an angle to a member tends to make it bend Write their observations and discuss in class, in groups. <u>Assessment</u>	

	How can shear forces lead to failure in structural members, and what measures can be taken to prevent such failures? What is the difference between tension and compression forces, and how do they affect the behavior and design of structural members in construction?	
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. Ask learners how the lesson will benefit them in their daily lives.	

Week Ending: 05-05-2023	**Day:**	**Subject:** Career Technology	
Duration: 60MINS		**Strand:** Technology	
Class: B8	**Class Size:**	**Sub Strand:** Simple Structures	
Content Standard: B8.4.1.1 Demonstrate understanding of application of principles of forces acting on structures.	**Indicator:** B8.4.1.1.1.2: Design and make simple school technology projects		**Lesson:** 1 of 2
Performance Indicator: Learners can design and make simple school technology projects		**Core Competencies:** CP 6.5: CI 5.4: CI 5.2: CI 6.10:	
Reference: Career Technology Curriculum Pg. 60			
Phase/Duration	Learners Activities		Resources
PHASE 1: **STARTER**	Revise with learners to review their understanding in the previous lesson. Share performance indicators with learners.		
PHASE 2: **NEW LEARNING**	Take learners out of the classroom to identify simple school technology projects. E.g., see-saw, pushchair for babies, cantilever, beams, types of roof, mobile stage, bridge. Let learners explain reasons for choosing the project. E.g., availability of materials and tools, preference, skills Guide learners to identify suitable materials, tools and equipment for making the project. E.g., cardboard, empty tins, plastic bottles Learners in their groups prepare a folio for the project. Remind learners to follow the design process: Have learners display their projects to class for appreciation.		Pictures and charts of food

	Test and evaluate the project indicating the strengths and weaknesses. Make modifications where needed.	
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. Ask learners how the lesson will benefit them in their daily lives.	

SECOND TERM

WEEKLY LESSON NOTES

WEEK 6

Week Ending: 12-05-2023	**Day:**	**Subject:** Career Technology	
Duration: 60MINS		**Strand:** Technology	
Class: B8	**Class Size:**	**Sub Strand:** Draw plane figures	
Content Standard: B8.5.1.1 Demonstrate understanding of drawing plane figures and solid objects using drawing instruments.	**Indicator:** B8.5.1.1.1: Draw plane figures using instruments	**Lesson:** 1 of 2	
Performance Indicator: Learners can draw plane figures using instruments		**Core Competencies:** CP 6.5: CI 5.4: CI 5.2: CI 6.10:	
Reference: Career Technology Curriculum Pg. 60			

Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Revise with learners to review their understanding in the previous lesson. Share performance indicators with learners.	
PHASE 2: **NEW LEARNING**	Guide learners to identify two dimensional (2-D) figures/ objects E.g., circles, triangles, quadrilaterals, polygons Draw circles, triangles, quadrilaterals and polygons using instruments. <u>To draw a circle</u> • Select a point on your paper where you want the center of the circle to be located. • Choose the radius of your circle, which is the distance from the center point to any point on the edge of the circle. • Take a compass with the desired radius, and place its tip at the center point you have chosen. • Keeping the compass or circular object steady, rotate it 360 degrees around the center point. This will draw a complete circle <u>To draw a triangles</u> • Select a point on your paper where you want one of the corners of the triangle to be located. • Draw a line segment of your desired length in the direction you want the second corner of the triangle to be located. • From the endpoint of the first line segment, draw another line segment of your desired length to create a second side of the triangle. This line should be angled to meet the first line segment and form a point.	Pictures and charts of food

	• Finally, draw a third line segment to complete the triangle by connecting the endpoint of the second line segment to the starting point of the first line segment. Learners in their groups draw quadrilaterals and polygons. Have learners cut shapes of plane figures drawn and prepare an album. Use the cut-out shapes to make a game. E.g., flash cards Exhibit work for appraisal	
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. Ask learners how the lesson will benefit them in their daily lives.	

Week Ending: 12-05-2023	**Day:**	**Subject:** Career Technology	
Duration: 60MINS		**Strand:** Technology	
Class: B8	**Class Size:**	**Sub Strand:** Draw plane figures	
Content Standard: B8.5.1.1 Demonstrate understanding of drawing plane figures and solid objects using drawing instruments.	**Indicator:** B8.5.1.1.1: Draw plane figures using instruments		**Lesson:** 2 of 2
Performance Indicator: Learners can draw plane figures using instruments		**Core Competencies:** CP 6.5: CI 5.4: CI 5.2: CI 6.10:	
Reference: Career Technology Curriculum Pg. 60			

Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Revise with learners to review their understanding in the previous lesson. Share performance indicators with learners.	
PHASE 2: **NEW LEARNING**	Guide learners to identify two dimensional (2-D) figures/ objects E.g., circles, triangles, quadrilaterals, polygons Draw circles, triangles, quadrilaterals and polygons using instruments. <u>To draw a circle</u> • Select a point on your paper where you want the center of the circle to be located. • Choose the radius of your circle, which is the distance from the center point to any point on the edge of the circle. • Take a compass with the desired radius, and place its tip at the center point you have chosen. • Keeping the compass or circular object steady, rotate it 360 degrees around the center point. This will draw a complete circle <u>To draw a triangles</u> • Select a point on your paper where you want one of the corners of the triangle to be located. • Draw a line segment of your desired length in the direction you want the second corner of the triangle to be located. • From the endpoint of the first line segment, draw another line segment of your desired length to create a second side of the triangle. This line should be angled to meet the first line segment and form a point. • Finally, draw a third line segment to complete the triangle by connecting the endpoint of the second line segment to the starting point of the first line segment. Learners in their groups draw quadrilaterals and polygons.	Pictures and charts of food

	Have learners cut shapes of plane figures drawn and prepare an album. Use the cut-out shapes to make a game. E.g., flash cards Exhibit work for appraisal	
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. Ask learners how the lesson will benefit them in their daily lives.	

SECOND TERM

WEEKLY LESSON NOTES

WEEK 7

Week Ending: 19-05-2023	**Day:**	**Subject:** Career Technology	
Duration: 60MINS		**Strand:** Technology	
Class: B8	**Class Size:**	**Sub Strand:** Draw plane figures	
Content Standard: B8.5.1.1 Demonstrate understanding of drawing plane figures and solid objects using drawing instruments.	**Indicator:** B8.5.1.1.1: Draw plane figures using instruments	**Lesson:** 1 of 2	
Performance Indicator: Learners can draw plane figures using instruments		**Core Competencies:** CP 6.5: CI 5.4: CI 5.2: CI 6.10:	
Reference: Career Technology Curriculum Pg. 60			

Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Revise with learners to review their understanding in the previous lesson. Share performance indicators with learners.	
PHASE 2: **NEW LEARNING**	Guide learners to identify two dimensional (2-D) figures/ objects E.g., circles, triangles, quadrilaterals, polygons Draw circles, triangles, quadrilaterals and polygons using instruments. <u>To draw a circle</u> • Select a point on your paper where you want the center of the circle to be located. • Choose the radius of your circle, which is the distance from the center point to any point on the edge of the circle. • Take a compass with the desired radius, and place its tip at the center point you have chosen. • Keeping the compass or circular object steady, rotate it 360 degrees around the center point. This will draw a complete circle <u>To draw a triangles</u> • Select a point on your paper where you want one of the corners of the triangle to be located. • Draw a line segment of your desired length in the direction you want the second corner of the triangle to be located. • From the endpoint of the first line segment, draw another line segment of your desired length to create a second side of the triangle. This line should be angled to meet the first line segment and form a point.	Pictures and charts of food

	• Finally, draw a third line segment to complete the triangle by connecting the endpoint of the second line segment to the starting point of the first line segment. Learners in their groups draw quadrilaterals and polygons. Have learners cut shapes of plane figures drawn and prepare an album. Use the cut-out shapes to make a game. E.g., flash cards Exhibit work for appraisal	
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. Ask learners how the lesson will benefit them in their daily lives.	

Week Ending: 19-05-2023	**Day:**	**Subject:** Career Technology	
Duration: 60MINS		**Strand:** Technology	
Class: B8	**Class Size:**	**Sub Strand:** Draw plane figures	
Content Standard: B8.5.1.1 Demonstrate understanding of drawing plane figures and solid objects using drawing instruments.	**Indicator:** B8.5.1.1.1: Draw plane figures using instruments		**Lesson:** 2 of 2
Performance Indicator: Learners can draw plane figures using instruments		**Core Competencies:** CP 6.5: CI 5.4: CI 5.2: CI 6.10:	
Reference: Career Technology Curriculum Pg. 60			

Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Revise with learners to review their understanding in the previous lesson. Share performance indicators with learners.	
PHASE 2: **NEW LEARNING**	Guide learners to identify two dimensional (2-D) figures/ objects E.g., circles, triangles, quadrilaterals, polygons Draw circles, triangles, quadrilaterals and polygons using instruments. <u>To draw a circle</u> • Select a point on your paper where you want the center of the circle to be located. • Choose the radius of your circle, which is the distance from the center point to any point on the edge of the circle. • Take a compass with the desired radius, and place its tip at the center point you have chosen. • Keeping the compass or circular object steady, rotate it 360 degrees around the center point. This will draw a complete circle <u>To draw a triangles</u> • Select a point on your paper where you want one of the corners of the triangle to be located. • Draw a line segment of your desired length in the direction you want the second corner of the triangle to be located. • From the endpoint of the first line segment, draw another line segment of your desired length to create a second side of the triangle. This line should be angled to meet the first line segment and form a point. • Finally, draw a third line segment to complete the triangle by connecting the endpoint of the second line segment to the starting point of the first line segment. Learners in their groups draw quadrilaterals and polygons.	Pictures and charts of food

	Have learners cut shapes of plane figures drawn and prepare an album. Use the cut-out shapes to make a game. E.g., flash cards Exhibit work for appraisal	
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. Ask learners how the lesson will benefit them in their daily lives.	

SECOND TERM

WEEKLY LESSON NOTES

WEEK 8

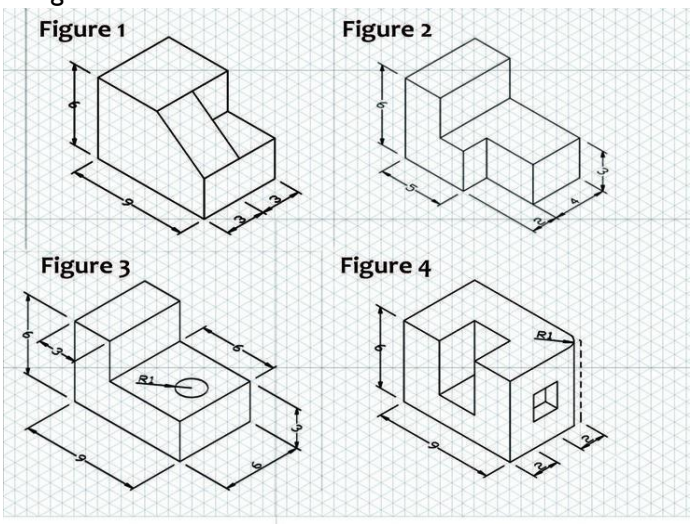
Week Ending: 26-05-2023	**Day:**	**Subject:** Career Technology	
Duration: 60MINS		**Strand:** Technology	
Class: B8	**Class Size:**	**Sub Strand:** Pictorial Drawing	
Content Standard: B8.5.1.1 Demonstrate understanding of drawing plane figures and solid objects using drawing instruments.	**Indicator:** B8.5.1.1.2: Draw objects in pictorial using instruments	**Lesson:** 1 of 2	
Performance Indicator: Learners can draw plane figures using instruments		**Core Competencies:** CP 6.5: CI 5.4: CI 5.2: CI 6.10:	
Reference: Career Technology Curriculum Pg. 64			

Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Revise with learners to review their understanding in the previous lesson. Share performance indicators with learners.	
PHASE 2: **NEW LEARNING**	Explain what is meant by pictorial drawing. E.g., Drawing objects to show the three dimensions i.e., length, breath and width/thickness Identify methods of drawing objects in pictorial form. E.g.: Isometric, oblique and perspective Illustrate the techniques of drawing objects in isometric, oblique and perspective. Draw objects in isometric, oblique and perspective using instruments. Display drawings for appraisal.	Pictures and charts of food
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. Ask learners how the lesson will benefit them in their daily lives.	

SECOND TERM
WEEKLY LESSON NOTES
WEEK 9

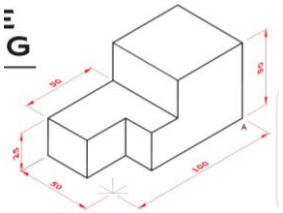
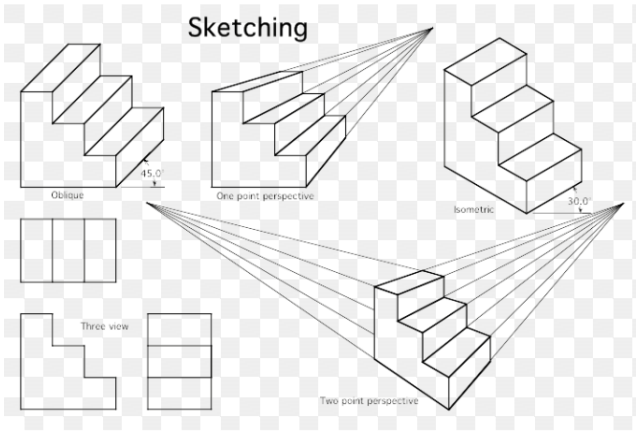
Week Ending: 02-06-2023	**Day:**	**Subject:** Career Technology	
Duration: 60MINS		**Strand:** Technology	
Class: B8	**Class Size:**	**Sub Strand:** Pictorial Drawing	
Content Standard: B8.5.1.1 Demonstrate understanding of drawing plane figures and solid objects using drawing instruments.	**Indicator:** B8.5.1.1.2: Draw objects in pictorial using instruments	**Lesson:** 1 of 2	
Performance Indicator: Learners can draw plane figures using instruments		**Core Competencies:** CP 6.5: CI 5.4: CI 5.2: CI 6.10:	
Reference: Career Technology Curriculum Pg. 64			

Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Revise with learners to review their understanding in the previous lesson. Share performance indicators with learners.	
PHASE 2: **NEW LEARNING**	Explain what is meant by pictorial drawing. E.g., Drawing objects to show the three dimensions i.e., length, breath and width/thickness Identify methods of drawing objects in pictorial form. E.g.: Isometric, oblique and perspective Illustrate the techniques of drawing objects in isometric. *1. Isometric Projection: Isometric projection is a method of representing objects in a three-dimensional space on a two-dimensional plane. In isometric drawing, all three axes (x, y, and z) are drawn at 120-degree angles to each other, resulting in equal foreshortening along each axis. This creates the illusion of a 3D object.* *2. Equal Measurements: In isometric drawing, equal measurements are used for all three dimensions. This means that the lengths, widths, and heights of objects are represented proportionally. The isometric scale is often used to ensure accurate measurements and maintain consistency in the drawing.* *3. Parallel Lines: In isometric drawing, parallel lines in the object remain parallel in the drawing. This principle helps maintain the correct perspective and depth perception. Horizontal and vertical lines in the object are drawn at 30-degree angles to the horizontal plane.* *4. Foreshortening: Isometric drawing uses foreshortening to represent the depth of objects. Objects that are closer to the*	Pictures and charts of food

	viewer appear larger, while objects that are farther away appear smaller. Foreshortening helps create the illusion of depth and spatial relationships in the drawing. *5. Tangent Circles: Circles and curved lines in isometric drawing are drawn as tangent circles. Tangent circles are circles that are tangent to each of the three isometric axes. This technique ensures that circles and curved lines are correctly represented in the isometric drawing.* *6. Hidden Lines: In isometric drawing, hidden lines are not shown. Only visible edges and surfaces of the object are drawn. This simplifies the drawing and enhances clarity.* *7. Shading and Texturing: Shading and texturing techniques can be applied in isometric drawing to enhance the visual appearance and convey depth. Light and shadow are used to create a sense of form and volume in the drawing.* Demonstrate to learners by drawing objects in isometric using instruments.  Display drawings for appraisal.	
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. Ask learners how the lesson will benefit them in their daily lives.	

Week Ending: 02-06-2023	**Day:**	**Subject:** Career Technology	
Duration: 60MINS		**Strand:** Technology	
Class: B8	**Class Size:**	**Sub Strand:** Pictorial Drawing	
Content Standard: B8.5.1.1 Demonstrate understanding of drawing plane figures and solid objects using drawing instruments.	**Indicator:** B8.5.1.1.2: Draw objects in pictorial using instruments	**Lesson:** 2 of 2	
Performance Indicator: Learners can draw plane figures using instruments		**Core Competencies:** CP 6.5: CI 5.4: CI 5.2: CI 6.10:	
Reference: Career Technology Curriculum Pg. 64			

Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Revise with learners to review their understanding in the previous lesson. Share performance indicators with learners.	
PHASE 2: **NEW LEARNING**	Illustrate the techniques of drawing objects in oblique and perspective. <u>Oblique Drawing</u>: *1. Receding Lines: In oblique drawing, receding lines are used to represent the depth of an object. These lines are drawn at an angle from the front of the object to the back, giving the appearance of distance and depth. Typically, they converge towards a vanishing point.* *2. Foreshortening: Foreshortening is a technique used in oblique drawing to depict objects that are closer to the viewer. It involves shortening or compressing the dimensions of the object along the depth axis to create a realistic representation.* *3. Scale: Oblique drawings often employ a scale to ensure accurate proportions and dimensions. The scale helps maintain consistency and enables viewers to understand the relative sizes of different elements in the drawing.* *4. Parallel Projection: Unlike perspective drawing, oblique drawing uses parallel projection, meaning that all lines remain parallel in the drawing. This technique simplifies the process and allows for easier construction of the drawing.* <u>Perspective Drawing</u>: *1. Horizon Line and Vanishing Points: Perspective drawing involves the use of a horizon line, which represents the eye level of the viewer. Vanishing points are points on the horizon line where parallel lines appear to converge. These points determine the direction and convergence of lines in the drawing.*	Pictures and charts of food

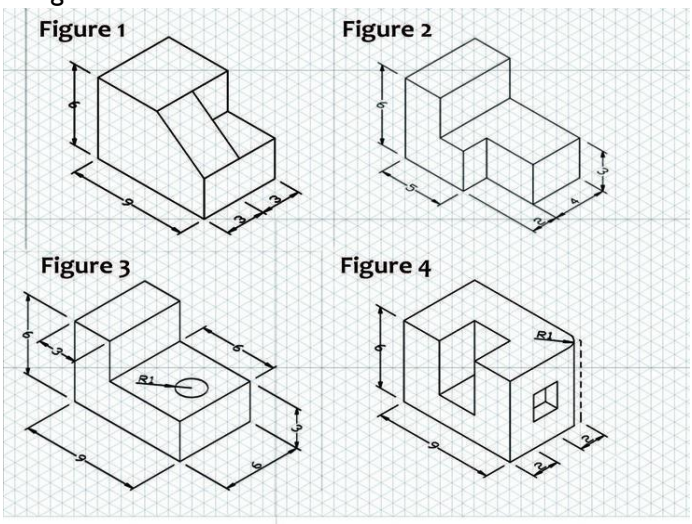
	2. One-Point Perspective: In one-point perspective, all receding lines in the drawing converge towards a single vanishing point on the horizon line. This technique is often used for drawing objects or scenes where the viewer is facing directly towards a single point. *3. Two-Point Perspective: Two-point perspective uses two vanishing points on the horizon line. This technique is suitable for drawing objects or scenes where the viewer is looking at an angle.* *4. Three-Point Perspective: Three-point perspective incorporates three vanishing points, with one vanishing point located above or below the horizon line. This technique is often used for drawing objects or scenes where the viewer has an extreme perspective angle.* *5. Foreshortening: Like in oblique drawing, foreshortening is also applied in perspective drawing to accurately represent objects that are closer to the viewer. It involves compressing or shortening the dimensions of the object along the depth axis to create a sense of depth and realism.* Demonstrate to learners by drawing objects in oblique and perspective using instruments.   Display drawings for appraisal.	
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.	

	Ask learners how the lesson will benefit them in their daily lives.	

SECOND TERM
WEEKLY LESSON NOTES
WEEK 10

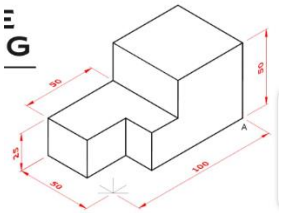
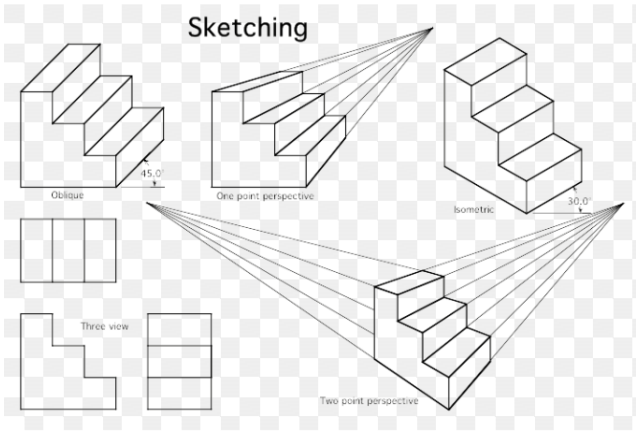
Week Ending: 09-06-2023	**Day:**	**Subject:** Career Technology	
Duration: 60MINS		**Strand:** Designing & Making Of Artefacts	
Class: B8	**Class Size:**	**Sub Strand:** Pictorial Drawing	
Content Standard: B8.5.1.1 Demonstrate understanding of drawing plane figures and solid objects using drawing instruments.	**Indicator:** B8.5.1.1.2: Draw objects in pictorial using instruments	**Lesson:** 1 of 2	
Performance Indicator: Learners can draw plane figures using instruments		**Core Competencies:** CP 6.5: CI 5.4: CI 5.2: CI 6.10:	
Reference: Career Technology Curriculum Pg. 64			

Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Revise with learners to review their understanding in the previous lesson. Share performance indicators with learners.	
PHASE 2: **NEW LEARNING**	Explain what is meant by pictorial drawing. E.g., Drawing objects to show the three dimensions i.e., length, breath and width/thickness Identify methods of drawing objects in pictorial form. E.g.: Isometric, oblique and perspective Illustrate the techniques of drawing objects in isometric. *1. Isometric Projection: Isometric projection is a method of representing objects in a three-dimensional space on a two-dimensional plane. In isometric drawing, all three axes (x, y, and z) are drawn at 120-degree angles to each other, resulting in equal foreshortening along each axis. This creates the illusion of a 3D object.* *2. Equal Measurements: In isometric drawing, equal measurements are used for all three dimensions. This means that the lengths, widths, and heights of objects are represented proportionally. The isometric scale is often used to ensure accurate measurements and maintain consistency in the drawing.* *3. Parallel Lines: In isometric drawing, parallel lines in the object remain parallel in the drawing. This principle helps maintain the correct perspective and depth perception. Horizontal and vertical lines in the object are drawn at 30-degree angles to the horizontal plane.* *4. Foreshortening: Isometric drawing uses foreshortening to represent the depth of objects. Objects that are closer to the*	Pictures and charts of food

	viewer appear larger, while objects that are farther away appear smaller. Foreshortening helps create the illusion of depth and spatial relationships in the drawing. *5. Tangent Circles: Circles and curved lines in isometric drawing are drawn as tangent circles. Tangent circles are circles that are tangent to each of the three isometric axes. This technique ensures that circles and curved lines are correctly represented in the isometric drawing.* *6. Hidden Lines: In isometric drawing, hidden lines are not shown. Only visible edges and surfaces of the object are drawn. This simplifies the drawing and enhances clarity.* *7. Shading and Texturing: Shading and texturing techniques can be applied in isometric drawing to enhance the visual appearance and convey depth. Light and shadow are used to create a sense of form and volume in the drawing.* Demonstrate to learners by drawing objects in isometric using instruments.  Display drawings for appraisal.	
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. Ask learners how the lesson will benefit them in their daily lives.	

Week Ending: 09-06-2023	**Day:**	**Subject:** Career Technology	
Duration: 60MINS		**Strand:** Technology	
Class: B8	**Class Size:**	**Sub Strand:** Pictorial Drawing	
Content Standard: B8.5.1.1 Demonstrate understanding of drawing plane figures and solid objects using drawing instruments.	**Indicator:** B8.5.1.1.2: Draw objects in pictorial using instruments	**Lesson:** 2 of 2	
Performance Indicator: Learners can draw plane figures using instruments		**Core Competencies:** CP 6.5: CI 5.4: CI 5.2: CI 6.10:	
Reference: Career Technology Curriculum Pg. 64			

Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Revise with learners to review their understanding in the previous lesson. Share performance indicators with learners.	
PHASE 2: **NEW LEARNING**	Illustrate the techniques of drawing objects in oblique and perspective. <u>Oblique Drawing</u>: *1. Receding Lines: In oblique drawing, receding lines are used to represent the depth of an object. These lines are drawn at an angle from the front of the object to the back, giving the appearance of distance and depth. Typically, they converge towards a vanishing point.* *2. Foreshortening: Foreshortening is a technique used in oblique drawing to depict objects that are closer to the viewer. It involves shortening or compressing the dimensions of the object along the depth axis to create a realistic representation.* *3. Scale: Oblique drawings often employ a scale to ensure accurate proportions and dimensions. The scale helps maintain consistency and enables viewers to understand the relative sizes of different elements in the drawing.* *4. Parallel Projection: Unlike perspective drawing, oblique drawing uses parallel projection, meaning that all lines remain parallel in the drawing. This technique simplifies the process and allows for easier construction of the drawing.* <u>Perspective Drawing</u>: *1. Horizon Line and Vanishing Points: Perspective drawing involves the use of a horizon line, which represents the eye level of the viewer. Vanishing points are points on the horizon line where parallel lines appear to converge. These points determine the direction and convergence of lines in the drawing.*	Pictures and charts of food

	2. One-Point Perspective: In one-point perspective, all receding lines in the drawing converge towards a single vanishing point on the horizon line. This technique is often used for drawing objects or scenes where the viewer is facing directly towards a single point. *3. Two-Point Perspective: Two-point perspective uses two vanishing points on the horizon line. This technique is suitable for drawing objects or scenes where the viewer is looking at an angle.* *4. Three-Point Perspective: Three-point perspective incorporates three vanishing points, with one vanishing point located above or below the horizon line. This technique is often used for drawing objects or scenes where the viewer has an extreme perspective angle.* *5. Foreshortening: Like in oblique drawing, foreshortening is also applied in perspective drawing to accurately represent objects that are closer to the viewer. It involves compressing or shortening the dimensions of the object along the depth axis to create a sense of depth and realism.* Demonstrate to learners by drawing objects in oblique and perspective using instruments.   Display drawings for appraisal.	
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	Ask learners how the lesson will benefit them in their daily lives.	