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| **LESSON PLAN: Technology Grade 8** |
| Name of School: |  | Term: 2 | Week: 1 |
| Name of Teacher(s): |  | Date |  |
| **Focus**  | COMMUNICATION SKILLS |
| **Specific Aims** | * Develop and apply specific design skills to solve technological problems
* Understand the concepts and knowledge used in technology education and use them responsibly and purposefully
* Appreciate the interaction between people values and attitudes, technology, society and the environment
 |
| **CLASSROOM ACTIVITIES (generic planning):** |
| **Periods** | **1**  | **2** | **3** | **4** |
| Content, concepts and skills | CLASSIFICATION of materials for processing. -natural materials -synthetic materials | • Natural Materials that have been replaced in modern times by new or improved materials.   | – Case study 1: Impact of plastic shopping bags on the environment.  | Report: Class presentations by representatives of groups |
| Teacher’s Activities | Introduction:1. Introduces the context of the term. Most object are made of materials that need to be processed
2. A teacher introduces the scenarios for the PAT.
3. Q & A
 | Introduction:1. Emphasize on Environmentally friendly materials, bio-degradable and non-bio-degradable (photo degradable).
2. Lead class on discussion plastic shopping bags
 | * Explain: Impact can be positive or negative
* Give the worksheets of the scenarios.
* Learner will complete all the worksheets given to them.
 | -Facilitate the report backs (presentations) |
| Learners’ Activities | Participation * Learners respond to questions
* Responds to group discussion by writing answers down in exercise book
* Complete activity one on the scenario.
* Complete the activity 2 on generating ideas for the design.
 | Participation* Write notes
* Class discussion on environmentally friendly materials
 | * Discuss in groups
* Write in their classwork books.
* Homework on advantages of thicker biodegradable plastics
 | * Present in class their findings on use of thicker biodegradable plastics
 |
| Type of Assessment | Informal activity | Informal activity | Informal activity | Informal activity  |
| **Teaching and Learning Outcomes** | **Learners must be able to:**Demonstrate knowledge of the design process by completing the different  |

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| **LESSON PLAN: Technology Grade 8** |
| Name of School: |  | Term: 2 | Week: 2 |
| Name of Teacher(s): |  | Date |  |
| **Focus**  | **PROCESSING -**  COMMUNICATION SKILLS  |
| **SPECIFIC AIMS**  | * Develop and apply specific design skills to solve technological problems
* Understand the concepts and knowledge used in technology education and use them responsibly and purposefully

Appreciate the interaction between people values and attitudes, technology, society and the environment |
| **CLASSROOM ACTIVITIES**  |
| **Periods** | **1**  | **2** | **3** | **4** |
| Content, concepts and skills | • Case study : technology with a positive impact on society.-- Investigate how waste paper and cardboard are recycled to produce new products for thePackaging industry.. | • Continuation of case study  | • Case study : Negative impact of technology or technological solutions | • Investigate the negative impact on society as highlighted in the case study. |
| Teacher’s Activities | * Teacher explains all the processes in the recycling diagram
* Explains the concept of processing
* Different materials that can be processed.
* Different ways of processing materials.
* Each group will get a different material, different product that is available in the classroom and discusses the product in relation to the questions above and completes responses in exercise book
* Explain the terms of Reuse, Recycle, Reduce.
* Impact of different materials on the environment.
 | * Give learners a worksheet from DBE textbook pertaining to recycling
 | * Give learners case study as Informal work.
* Emphasize on instructions
 | * Support leaners to investigate Case study
* Supervise formal completion
 |
| Learners’ Activities | * Write notes
* Responds to questions orally
* Responds to group discussion by writing answers down in exercise book
* Complete the worksheets given on how paper and cardboard can be recycled.
 | * Complete worksheet
 | * Learners respond to formal activity.
* Learners give feedback to the class.
 | * Learners finish up
 |
| Type of Assessment | Informal activity | Informal activity | Informal activityPAT | Informal Pat |
| Resources  | Sasol Inzalo textbook, variety of text books, collage of patterns, Exercise book  |
| **Teaching and Learning Outcomes** | **Learners must be able to:**1. Explain the design features of different products,
2. Understand the processing of different materials.
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| **LESSON PLAN: Technology Grade 8** |
| Name of School: |  | Term: 2 | Week: 3 |
| Name of Teacher(s): |  | Date |  |
| **Focus**  |  Knowledge |
| **SPECIFIC AIMS** | * Develop and apply specific design skills to solve technological problems
* Understand the concepts and knowledge used in technology education and use them responsibly and purposefully

Appreciate the interaction between people values and attitudes, technology, society and the environment |
| **CLASSROOM ACTIVITIES (generic planning):** |
| **Periods** | **1**  | **2** | **3** | **4** |
| Content, concepts and skills | * Revision the types of forces, from term 1
 | • Adapting materials to withstand forces – reinforcing concrete, plywood | • Choosing metal sections ( I-beam, angle iron, T-bar etc) to withstand forces and to save material | • Packaging containers are designed from pre-made patterns |
| Teacher’s Activities | * Teacher poses questions.
* Explain terms and concepts to learners, (properties of materials, tension, compression, bending, torsion, shear, by giving appropriate examples.
* Instruct all learners to create a glossary of technology terms at the back of their exercise book.
 | * Give information sheets to all learners on properties of materials, forces acting on materials and preservation of materials.
* Give the worksheets pertaining to the above content and case studies for learners to work on.
 | * Use the above given metal sections to illustrate how they withstand forces.
* Indicate how each saves material
 | * Provide learners with a template that contains various patterns where most containers are made from
 |
| Learners’ Activities | * Learners respond to questions from the teacher and peers.
 | * Do a revision on forces acting on materials. Write notes
* Study pictures provided to them on how to improve the materials to adapt them to suit particular purposes:

Withstand forces-tension / compression / bending / torsion / shear and write answers on the worksheet given to them. | * Read a case study on positive and negative impacts of technological products on the environment and/ or society.
* Start a technology glossary at the back of the exercise books
 | * Learners study the patterns and attempt to predict the shapes represented by the various patterns
 |
| Type of Assessment | Informal activity | Informal activity | Informal activity | Informal  |
| **Teaching and Learning Outcomes** | **Learners must be able to:*** Apply investigation skills.
* Apply making skills.
* Complete investigations, Case Studies, Worksheets and Practical Activities.
* Apply knowledge of Properties of Materials.
 |
| Resources |  | Sasol Inzalo textbook page 154-156 | Sasol Inzalo tetbook 157-158 | Collage of patterns |
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| **LESSON PLAN: Technology Grade 8** |
| Name of School: |  | Term: 2 | Week: 4 |
| Name of Teacher(s): |  | Date |   |
| **Focus**  | Making skills |
| **CLASSROOM ACTIVITIES (generic planning):** |
| **Periods** | **1**  | **2** | **3** | **4** |
| Content, concepts and skills | * Development of 2D plans for an opened container
 | • Practical activity: a product requires packaging. Design and make packaging for a purpose. The nature of the product determines the design and properties of the packaging material. | Practical activity: Jewellery box | • Class discussion on technological products that have negative effect to the environment |
| Teacher’s Activities | * Illustrates by drawing a pattern for a simple packaging. Example an open box.
 | * Give learners a template of the jewellery container
* Provide a verbal scenario
 | * Facilitate safe use of tools and cutting skills
 | * Allocate different products to groups. Eg . cans, plastics, glass bottles, cardboard boxes etc
 |
| Learners’ Activities | * Draw their own designs.
* Practice cutting shapes
 | * Learners trace the plan of the template
 | * Learners work safely to make and assemble the above packaging product
 | Participation* Groups discuss the negative effects of each product and come up with a solution to solve the negative effect
 |
| Type of Assessment | Informal activity | Informal activity | Informal activity | -Informal |
| Resources |  | -Template |  |  |
|  | Sasol Inzalo textbook |  |  |
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| **LESSON PLAN: Technology Grade 8** |
| Name of School: |  | Term: 2 | Week: 5 |
| Name of Teacher(s): |  | Date |   |
| **Focus**  | Making Skills |
| **CLASSROOM ACTIVITIES (generic planning):** |
| **Periods** | **1**  | **2** | **3** | **4** |
| Content, concepts and skills | * Model building
 | • Model building | •Design- Learners improve the model house on its exterior so that it reduces energy demand by occupants (reducing negative effect of technology)  | • Design -- Learners improve the model house on its exterior so that it reduces energy demand by occupants (reducing negative effect of technology) |
| Teacher’s Activities | * Provide template and cardboard to individual groups
 | * Supervise learners performing a practical
 | * Illustrate that exterior deals with outside design
* Demonstrate the concept of Overhanging Awning
 | * Emphasize on labels of parts and materials used for the external improvements
 |
| Learners’ Activities | * Learners cut and shape the cardboard
 | * Join the various pieces of the model to complete the model house
 | * Sketch in 3D the external features to improve energy saving ( two possible solutions)
 | * Complete their sketches…
 |
| Type of Assessment | Informal activity | Informal activity | Informal activity | Informal |
| Resources | Sasol Inzalo textbook page 165-167 | Sasol Inzalo textbook page 165-167 | Sasol Inzalo textbook |  |
| [Resources\Marking RUBRIC for model.docx](file:///C%3A%5CUsers%5CSchool%20EC%5CDocuments%5CDBE%5CTechnology%20Gauteng%20Subject%20com%20meeting%5CTerm%202%20Lesson%20Plans%5CGrade%208%20Term%202%20Lesson%20Plans%5CResources%5CMarking%20RUBRIC%20for%20model.docx) |  | Isometric grid on page 173 | [Resources\Isometric grid.docx](file:///C%3A%5CUsers%5CSchool%20EC%5CDocuments%5CDBE%5CTechnology%20Gauteng%20Subject%20com%20meeting%5CTerm%202%20Lesson%20Plans%5CGrade%208%20Term%202%20Lesson%20Plans%5CResources%5CIsometric%20grid.docx) |
|  |  | [Resources\Isometric grid.docx](file:///C%3A%5CUsers%5CSchool%20EC%5CDocuments%5CDBE%5CTechnology%20Gauteng%20Subject%20com%20meeting%5CTerm%202%20Lesson%20Plans%5CGrade%208%20Term%202%20Lesson%20Plans%5CResources%5CIsometric%20grid.docx) |  |

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| **LESSON PLAN: Technology Grade 8** |
| Name of School: |  | Term: 2 | Week: 6 |
| Name of Teacher(s): |  | Date |  |
| **Focus**  | DESIGN SKILLS |
| **CLASSROOM ACTIVITIES (generic planning):** |
| **Periods** | **1**  | **2** | **3** | **4** |
| Content, concepts and skills | •Design- improve the model house in its interior so that it reduces energy demand by occupants (reducing negative effect of technology) | •Design- improve the model house in its interior so that it reduces energy demand by occupants (reducing negative effect of technology) | •Make- make practical improvements on models according to previous sketches.  | • Make- make practical improvements on models according to previous sketches. |
| Teacher’s Activities | * Illustrate the concept of internal insulation in a house.
* Explain insulation in detail
 | * Supervise and facilitate formal
 | * Supervise and facilitate formal (practical)
* Emphasizes on safety in the workshop
 | * Supervise and facilitate
 |
| Learners’ Activities | * Discuss materials that are good insulators of heat
 | * Sketch the interior of the house with the modification of insulation ( eg. Ceiling)
 | * Make improvements on their models to meet the design requirements
 | * Continue to make modifications on the models.
 |
| Type of Assessment | Informal activity | Informal activity | Informal activity | Informal |
| Resources | Sasol Inzalo textbook page 165-167 | Sasol Inzalo textbook | Sasol Inzalo textbook | Sasol Inzalo textbook |
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| **LESSON PLAN: Technology Grade 8** |
| Name of School: |  | Term: 2 | Week: 7 |
| Name of Teacher(s): |  | Date |  |
| **Focus**  | DESIGN SKILLS |
| **CLASSROOM ACTIVITIES (generic planning):** |
| **Periods** | **1**  | **2** | **3** | **4** |
| Content, concepts and skills | •Design- improve the model house in its interior so that it reduces energy demand by occupants (reducing negative effect of technology) | •Design- improve the model house in its interior so that it reduces energy demand by occupants (reducing negative effect of technology) | •Make- make practical improvements on models according to previous sketches.  | • Make- make practical improvements on models according to previous sketches. |
| Teacher’s Activities | * Illustrate the concept of internal insulation in a house.
* Explain insulation in detail
 | * Supervise and facilitate formal
 | * Supervise and facilitate formal (practical)
* Emphasizes on safety in the workshop
 | * Supervise and facilitate
 |
| Learners’ Activities | * Discuss materials that are good insulators of heat
 | * Sketch the interior of the house with the modification of insulation ( eg. Ceiling)
 | * Make improvements on their models to meet the design requirements
 | * Continue to make modifications on the models.
 |
| Type of Assessment | Informal activity | Informal activity | Informal activity | Informal |
| Resources | Sasol Inzalo textbook page 165-167 | Sasol Inzalo textbook | Sasol Inzalo textbook | Sasol Inzalo textbook |
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| **LESSON PLAN: Technology Grade 8** |
| Name of School: |  | Term: 2 | Week: 8 |
| Name of Teacher(s): |  | Date |  |
| **Focus**  | COMMUNICATION SKILLS |
| **CLASSROOM ACTIVITIES**  |
| **Periods** | **1**  | **2** | **3** | **4** |
| Content, concepts and skills | •Communicate | •Communicate | •Communicate | • Communicate |
| Teacher’s Activities | * Facilitate
* Provide rubric for presentation
 | * Supervise and facilitate
 | * Supervise and facilitate
 | * Supervise and facilitate
 |
| Learners’ Activities | * Teams present their plans, model improvements and evaluation
 | * Teams present
 | * Continue presentation of their solutions
 | * Wrap up team presentations
 |
| Type of Assessment | Informal activity | Informal activity | Informal activity | Informal |
| Resources | Sasol Inzalo textbook | Sasol Inzalo textbook | Sasol Inzalo textbook | Sasol Inzalo textbook |

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| **LESSON PLAN: Technology Grade 8** |
| Name of School: |  | Term: 2 | Week: 9 |
| Name of Teacher(s): |  | Date |  |
| **Focus**  | REVISION SKILLS |
| **CLASSROOM ACTIVITIES**  |
| **Periods** | **1**  | **2** | **3** | **4** |
| Content, concepts and skills | •Revision | •Revision | •Revision | • Revision |
| Teacher’s Activities | * Support learners
 | * Support Learners
 | * Support learners
 | * Support learners
 |
| Learners’ Activities | * Revise
 | * Revise
 | * Revise
 | * Revise
 |
| Type of Assessment | Informal activity | Informal activity | Informal activity | Informal |
| Resources | Sasol Inzalo textbook | Sasol Inzalo textbook | Sasol Inzalo textbook | Sasol Inzalo textbook |
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| **LESSON PLAN: Technology Grade 8** |
| Name of School: |  | Term: 2 | Week: 10 |
| Name of Teacher(s): |  | Date |  |
| **Focus**  | REVISION SKILLS |
| **CLASSROOM ACTIVITIES** |
| **Periods** | **1**  | **2** | **3** | **4** |
| Content, concepts and skills | •Revision | •Revision | •Revision | • Revision |
| Teacher’s Activities | * Support learners
 | * Support Learners
 | * Support learners
 | * Support learners
 |
| Learners’ Activities | * Revise
 | * Revise
 | * Revise
 | * Revise
 |
| Type of Assessment | Informal activity | Informal activity | Informal activity | Informal |
| Resources | Sasol Inzalo textbook | Sasol Inzalo textbook | Sasol Inzalo textbook | Sasol Inzalo textbook |
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| **LESSON PLAN: Technology Grade 8** |
| Name of School: |  | Term: 2 | Week: 11 |
| Name of Teacher(s): |  | Date |  |
| **Focus**  | REVISION SKILLS / JUNE EXAM |
| **CLASSROOM ACTIVITIES** |
| **Periods** | **1**  | **2** | **3** | **4** |
| Content, concepts and skills | •Revision | JUNE EXAM | JUNE EXAM | • JUNE EXAM |
| Teacher’s Activities | * Support learners
 | Monitoring exams  |  | Term 3 prep |
| Learners’ Activities | * Revise
 | * Write Exam
 | * Write exam
 | Closure |
| Type of Assessment | Formal activity | Formal activity | * Formal
 |  |
| Resources |  |   |  |  |