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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 the  Packaging 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 activity  PAT | | | 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:\Users\School%20EC\Documents\DBE\Technology%20Gauteng%20Subject%20com%20meeting\Term%202%20Lesson%20Plans\Grade%208%20Term%202%20Lesson%20Plans\Resources\Marking%20RUBRIC%20for%20model.docx) | |  | | Isometric grid on page 173 | | | [Resources\Isometric grid.docx](file:///C:\Users\School%20EC\Documents\DBE\Technology%20Gauteng%20Subject%20com%20meeting\Term%202%20Lesson%20Plans\Grade%208%20Term%202%20Lesson%20Plans\Resources\Isometric%20grid.docx) |
|  | |  | | [Resources\Isometric grid.docx](file:///C:\Users\School%20EC\Documents\DBE\Technology%20Gauteng%20Subject%20com%20meeting\Term%202%20Lesson%20Plans\Grade%208%20Term%202%20Lesson%20Plans\Resources\Isometric%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 |  | |  | |  | | |  |