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| **Week** | **Lesson** | **Strand** | **Sub strand** | **Specific learning outcomes** | **Key inquiry questions** | **Learning experiences** | **Learning resources** | **Assessment** | **Remarks** |
| **1** | **1** | Conserving our Environmen t | Soil  Soil particles | By the end of the sub strand the learner should be able to: Distinguish  types of soil based on particle sizes | How can we determine the ability of different soils to hold water? | Learners to collect soil samples from their local  environment. | Soil samples  Sand Clay Loam  A sieve  Containers with small  holes at the base  Water  Video clips- relevant to the learning concept in the learning activities  MTP Grade 4  Agriculture page  1 |  |  |
|  | **2** | Conserving  our Environmen t | Soil | By the end of the  sub strand the learner should be able to: Investigate the ability of different types of  soil to hold water | How can we  determine the ability of different soils to hold water? | In groups,  learners to conduct experiment to observe particle sizes of different soils *(sand, clay and loam)* using a sieve. Learners to share  experiences on  observations made in the experiment on particle sizes of different soils | *Sand*  *clay loam* sieve  containers with  small holes at the base  MTP Grade 4  Agriculture page  2 |  |  |

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|  | **3** | **Conservin g our Environm ent** | **Soil** | By the end of the sub strand the learner should be able to:  Relate particle  sizes to ability of soil to hold water | How can we determine the ability of  different soils to hold water? | Learners to  share experiences on observations made in the experiment on ability of soil to hold water. Learners to  relate particle  sizes to ability of soil to hold  water. | *Sand clay loam*  sieve  containers with  small holes at the base  MTP Grade 4  Agriculture page  2-3 |  |  |
| **2** | **1** | Conserving  our  Environme nt | Soil | By the end of the  sub strand the learner should be able to:  Develop curiosity in investigating physical properties of different types  of soil. | How can we  determine the  ability of different soils to hold water? | Learners to  share experiences on observations made in the experiment on ability of soil to hold water. Learners to  relate particle  sizes to ability of soil to hold water. | *Sand*  *clay*  *loam*  sieve containers with small holes at the base  MTP Grade 4  Agriculture page  3-54 |  |  |
|  | **2** | Conserving  our  Environme nt | Uses of soil  in Farming | By the end of the  sub strand the learner should be able to: | How can we  use sand, clay  and loam soils in farming? | Learners  visit nearby farms and | *Sand*  *clay*  *loam*  sieve |  |  |

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|  |  |  |  | Determine the ability of different soils to hold water |  | explore the  uses of different types of soil. | containers with small holes at the base |  |  |
|  | **3** | Conserving our Environme  nt | Uses of soil in Farming | By the end of the sub strand the learner should be able to:  Explain the uses of sand, loam and clay in farming | How can we use sand, clay and loam soils  in farming? | In groups,  learners discuss ability of sand, clay and loam to hold water. Learners to watch a video clip on crops growing on different types of  soil *(sand,*  *clay and loam).* | *Sand clay loam*  sieve  containers with small holes at the  base  MTP Grade 4  Agriculture page  4-6 |  |  |
| **3** | **1** | **Conservin**  **g our Environm ent** | **Uses of soil**  **in Farming** | By the end of the  sub strand the learner should be able to: Appreciate the relationship between water holding capacity of clay, sand and  loam soils to their  uses | How can we  use sand, clay and loam soils in farming? | In groups,  learners to discuss the uses of soils *(loam, sand and clay)* in farming | *Sand*  *clay loam* sieve  containers with  small holes at the base  MTP Grade 4  Agriculture page  6 |  |  |

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|  | **2** | **Conservin g our Environm ent** | **Compost manure** | By the end of the  sub strand the learner should be able to:  Identify suitable  materials for making compost manure | What is  compost manure? | Learners observe stimulus materials such as video, photos, and pictures on preparation and use of compost  manure using compost heap method | MTP Grade 4  Agriculture page  7  Video  Photos  Sample of manure |  |  |
|  | **3** | **Conservin g our Environm ent** | **Compost manure** | By the end of the sub strand the learner should be able to:  Prepare compost manure for farming | What can we use to prepare compos t manure  ? | Learners to collect suitable materials for making compost manure.  In groups, learners to prepare compost manure using heap method | MTP Grade 4  Agriculture page  8-9  Video  Photos  Sample of manure |  |  |
| **4** | **1** | **Conservin g our Environm ent** | **Compost manure** | By the end of the sub strand the learner should be able to:  Explain the  meaning of compost manure for farming | What can we use to prepare compos t manure  ? | Learners to collect suitable materials for making compost manure.  In groups, | MTP Grade 4  Agriculture page  8-9  Video  Photos  Sample of manure |  |  |

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|  |  |  |  |  |  | learners to prepare compost  manure using heap method |  |  |  |
|  | **2** | **Conservin g our**  **Environm ent** | **Water** | By the end of the  sub strand the learner should be able to:  Water plants and domestic animals in the immediate environment | What are the  uses of water  in farming? | In groups,  learners to make various Agricultural uses of water in school (*watering flower beds, plants, seed bed and watering animals*). | Seed bed  Buckets  Pangs  MTP Grade 4  Agriculture page  10-11 |  |  |
|  | **3** | **Conservin g our Environm ent** | **Water** | By the end of the sub strand the learner should be able to:  Identify  different uses of water in farming | What are the uses of water in farming? | Learners to  visit the neighbouring farms to observe how water is used for farming purposes. Learners to observe a video clip on uses of water in the farm | Seed bed Buckets Pangs  MTP Grade 4  Agriculture page  11-13 |  |  |
| **5** | **1** | Conserving  our  Environme | Water conservation  in farming | By the end of the  sub strand the | What are the  different | Learners  watch a | Seed bed  Buckets  Pangs |  |  |

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|  |  | nt |  | learner should be  able to:  Carry out drip irrigation to water plants | ways drip  irrigation is used to conserve water in farming? | video clip  on irrigation of crops through drip irrigation. In groups, learners to  carry out drip  irrigation in school using  bottles | Jembe Slashers Spade  Projectors  MTP Grade 4  Agriculture page  11-13 |  |  |
|  | **2** | **Conservin**  **g our Environm ent** | **Water conservatio n in farming** | By the end of the  sub strand the learner should be able to:  Describe drip  irrigation as a way of conserving water  Appreciate use of drip irrigation in conserving water in farming | What is drip  irrigation? | In groups,  learners to carry out drip irrigation in the school using a 5 to  10-metre-  long perforated plastic Pipe Learners  visit nearby farms and explore the use of drip irrigation method. | Seed bed  Buckets Pangs Jembe Slashers Spade Projectors  MTP Grade 4  Agriculture page  11-13 |  |  |
|  | **3** | **Conservin g our Environm** | **Living better with wild** | By the end of the sub strand the learner should be | What are the small wild animals that | In pairs, learners to  brainstorm and | Birds  Squirrels  Money |  |  |

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|  |  | **ent** | **animals** | able to:  Identify small wild animals that destroy crops  and domestic  animals  Explain  damages caused by small wild animals in the farm | destroy crops  and domestic animals? | share experiences on small wild  animals such as *birds,*  *squirrels, monkeys, mongoose and moles* that destroy crops and domestic animals | Domestic animals  MTP Grade 4  Agriculture page  14-15 |  |  |
| **6** | **1** | **Conservin g our**  **Environm ent** | **Living better with**  **wild animals** | By the end of the  sub strand the learner should be able to:  Construct a scarecrow using locally available materials  Use a scarecrow to keep off small wild animals from the farm | How can you prevent reduce damage from small wild animals in  the farm? | Learners to  watch video clip or charts on varieties of scarecrow.  In groups,  learners to construct a scarecrow using locally available materials | Birds  Squirrels  Money  Domestic animals  MTP Grade 4  Agriculture page  15-16 |  |  |
|  | **2** | **Conservin g our Environm ent** | **Living better with wild animals** | By the end of the sub strand the learner should be able to:  Use digital  resources to acquire | How can you prevent reduce damage from small wild animals in | In groups,  learners to discuss how they could make a scarecrow using | Birds Squirrels Money  Domestic animals  scarecrows  MTP Grade 4  Agriculture page |  |  |

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|  |  |  |  | information on  small wild animals | the farm? | locally  available materials. | 17 |  |  |
|  | **3** | **Conservin**  **g our Environm ent** | **Living**  **better with wild animals** | By the end of the  sub strand the learner should be able to:  Store photos of small wild animals that destroy crops and domestic animals  Appreciate the importance of  living better with small wild animals. | How is a  scarecrow constructed? | In groups,  learners to install the scarecrows in the immediate environment  to keep off small wild animals.  In pairs,  learners to use digital resources that have appropriate software to search for information on small wild animals that destroy crops and domestic animals. | Birds  Squirrels  Money  Domestic animals scarecrows  MTP Grade 4  Agriculture page  18 |  |  |
| **7** | **1** | **Conservin**  **g our Environm ent** | Growing  Fruit  Trees | By the end of the  sub strand the learner should be able to:  Identify places where fruit tree | Where could  we collect fruit seeds? | In groups,  learners to suggest various places where seeds of fruit trees such as | Trees  Videos  MTP Grade 4  Agriculture page  19 |  |  |

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|  |  |  |  | seeds could be  obtained |  | *guava and tree tomato* could be obtained |  |  |  |
|  | **2** | **Conservin g our**  **Environm ent** | **Fruit Seed**  **Collection** | By the end of the  sub strand the learner should be able to:  Collect fruit tree seeds from the local environment. | Where could  we collect  fruit seeds? | With help of  the parents or guardians’ learners to collect seeds of fruits such as *guava and tree*  *tomato* | Trees  Videos  MTP Grade 4  Agriculture page  20-21 |  |  |
|  | **3** | **Conservin g our Environm ent** | **Fruit Seed**  **Preparation** | By the end of the sub strand the learner should be able to:  Prepare fruit seeds for planting Appreciate the importance of preparing  seeds for  planting. | How are fruit seeds prepared for planting? | Learners to extract seeds from the fruits such as *guava and tree tomato* using appropriate means  Learners clean  the extracted seeds in water | Trees  Videos  MTP Grade 4  Agriculture page  22-23 |  |  |
| **8** | **1** | Conserving  our  Environme nt | Fruit Tree  Nursery Bed | By the end of the  sub strand the learner should be able to:  Prepare a nursery bed for establishing fruit seedlings | How are fruit  seeds established in  a nursery? | In groups,  learners to select a suitable site for establishing the fruit tree nursery bed *(container nursery or ground* | Nursery bed  Containers  Seedlings  MTP Grade 4  Agriculture page  22-23 |  |  |

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|  |  |  |  |  |  | *nursery*  *bed).* |  |  |  |
|  | **2** | Conserving  our  Environme nt | Fruit Tree  Nursery Bed | By the end of the  sub strand the learner should be able to:  Sow seeds into a nursery bed | How are fruit  seeds  established in a nursery? | In groups,  learners to prepare and set up the nursery bed | Nursery bed  Containers  Seedlings  MTP Grade 4  Agriculture page  23-24 |  |  |
|  | **3** | Conserving  our Environme nt | Fruit Tree  Nursery Bed | By the end of the  sub strand the learner should be able to:  Manage a fruit tree nursery bed up to transplanting Select fruit tree seedlings for sale and transplanting purposes | How are fruit  seeds established in a nursery? | In groups,  learners to sow the seeds such as *guava and tree tomato* in to the nursery bed | Nursery bed  Containers  Seedlings  MTP Grade 4  Agriculture page  25-26 |  |  |
| **9** | **1** | **Conservin g our**  **Environm ent** | **Fruit Tree**  **Nursery**  **Bed** | By the end of the  sub strand the learner should be able to: | How are fruit  seeds  established in a nursery? | In groups,  learners to sow the seeds such as *guava and tree tomato* in to the nursery bed | Nursery bed  Containers  Seedlings  MTP Grade 4  Agriculture page  26 |  |  |

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|  | **2** | **Conservin g our Environm ent** | **Fruit Tree Nursery Bed** | By the end of the  sub strand the learner should be able to:  Sell fruit tree seedlings to earn  income. | How are fruit seeds established in  a nursery? | In groups,  learners to care by carrying out practices such as *mulching, watering, thinning and*  *weeding* in the nursery bed. | Nursery bed Containers Seedlings  MTP Grade 4  Agriculture page  26 |  |  |
|  | **3** | **Conservin g our**  **Environm ent** | **Transplanti ng** | By the end of the  sub strand the learner should be able to:  Prepare seedlings for transplanting | How can  we prepare fruit seedlings for transplan ting? | In groups,  learners to prepare planting holes. Learners to transplant the  seedlings from  the nursery bed to the seedbed | Nursery bed  Containers  Seedlings  MTP Grade 4  Agriculture page  30-35 |  |  |
| **10** | **CONTINOUS ASSESSMENT TEST** | | | | | | | | |