**COMPETENCE BASED CURRICULUM**

**JUNIOR SCHOOL**

**GRADE 8**

**FORMATIVE ASSESSMENT**

**AGRICULTURE AND NUTRITION**

**MARKING SCHEME**

1. What is soil conservation?

[**soil conservation**](https://krishijagran.com/featured/soil-and-water-conservation-engineering-measures-for-treatment-of-arable-land-in-watershed/) refers to the protection and management of soil resources to prevent their degradation and promote sustainable land use practices.

1. Identify the primary threats to soil conservation
2. *Chemical contamination*
3. *Slash and burn*
4. *Land overuse,*
5. *Overgrazing, etc.*
6. Why is soil conservation a important?
7. Preserving Agricultural Productivity:
8. Protecting Ecosystems and Biodiversity:
9. Water Quality and Quantity:
10. Climate Change Mitigation
11. Mitigating Soil Erosion:
12. State effective methods and techniques for soil conservation.
13. Grass water ways
14. Stone lines
15. Trash lines
16. Bunds
17. Crop rotation
18. Contour Plowing:
19. Terracing:
20. Windbreaks:
21. Strip Cropping:
22. Conservation Tillage:
23. **Cover Crops:**
24. **Mulching:**
25. **Conservation Buffer Strips**
26. Identify the following soil conservation npractices

Contour Ploughing

Terracing

1. Name the following agricultural practice for conserving water.



Mulching

1. **Name five Benefits of Soil Conservation**
2. Sustaining Agricultural Productivity:  Preventing Soil Erosion:
3. Enhancing Water Quality:  Mitigating Climate Change:
4. Conserving Biodiversity and Ecosystems:
5. Improves soil quality and productivity
6. Optimizes water infiltration.
7. Provides food and shelter
8. State four techniques to apply in water harvesting for farming.
9. Shallow Water Pans

# Water Ponds

# Water Tanks

1. **Sand Dams**
2. **Grey Water Recycling**
3. **Contour Trenching**
4. **Fog Harvesting**
5. **Gutter Installation**
6. **Identify the following water harvesting techniques**



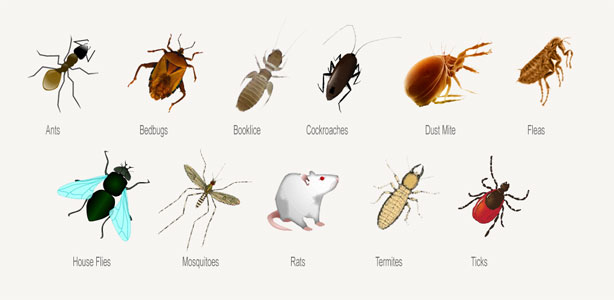
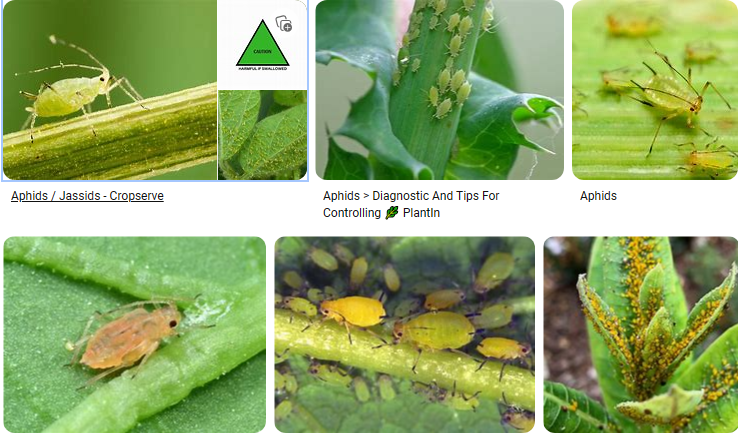


Contour Trenching Water Ponds Fog Harvesting

1. **Define**

**Square foot gardening** is the practice of dividing the growing area into small square sections, typically 1 foot (30 cm) on a side, hence the name.

1. Name the following pest



**Rat aphid cut worm**

1. **Name two Vegetables attacked by pests**
2. Kale
3. Spinach...
4. Tomatoes
5. Onions ...
6. Carrots ...
7. etc
8. Identify the farming tools below





Pair of gloves

Watering can

Wheelbarrow

Rake

Spade

1. State the guidelines to be followed when grilling different types of foods to ensure the food is well cooked.
2. Foods to be grilled for example, meat, should not be too thick to allow them to cook properly.
3. The grill should be preheated to the correct temperature before.
4. The food must be attended to constantly to prevent burning or over-cooking.
5. The food should be turned frequently to ensure even cooking.
6. Name the following cooking tools

|  |  |
| --- | --- |
| * Two prong fork |  |
| Skewer |  |
| Tongs |  |

1. **State the desirable properties of linen**
   * + 1. Linen is a strong fibre.
       2. Linen creases badly since it has no resilience.
       3. Linen can withstand high temperatures.
       4. Linen is not easily damaged by mild alkalis.
       5. Linen is a good conductor of heat hence ideal for hot weather.
       6. Linen is more resistant to high temperatures than cotton.
       7. Linen is moth proof.
       8. Linen is shiny.
       9. Linen does not pick dirt particles easily.
       10. Linen is more resistant to sunlight than cotton.
2. **State the undesirable properties of linen**
   * + 1. Linen frays easily.
       2. Linen is attracted by mildew if stored damp.
       3. Linen catches fire easily.
3. **State the challenges experienced or faced when buying household goods and services.**
4. Increase in prices.
5. Scarcity of goods and services.
6. Transport challenges.
7. Expired goods.
8. Cheating on weights of goods and other measurements.
9. Poor Quality of goods.
10. Network problems for on-line shops and services.
11. Incompetent service provides.
12. Availability of fake online outlets that are fraudsters.
13. Lack of market information to consumers.
14. **What are the ways of Saving Income when buying household goods and services?** 
    * 1. Bargaining.
      2. Shopping in bulk.
      3. Buying household goods and services during promotions.
      4. Comparing prices before buying goods and services.
      5. Using a shopping list.
      6. Buying goods and services from exhibitions and trade fairs.
      7. Improvising some items, you intended to buy using locally available materials.
15. There are several ways of buying various household goods and services from the sale outlets. Name a few.
    1. Use of Cash.
    2. Through credit.
    3. Use of Mobile money.
    4. Through barter trade.
    5. Use of cheque.
    6. Use of credit card.
    7. Use of Debit card.
16. **State three reasons for having a kitchen garden**
17. Clean air
18. Herbs detox
19. Aesthetics matter
20. Stay grounded
21. Organic vegetables
22. Compost your waste
23. Cheap and easy
24. Recycle and use
25. Health friendly
26. **State three types of kitchen gardens.**

## Hanging kitchen gardens in Kenya

## Container kitchen gardens in Kenya

## Raised bed kitchen gardens in Kenya

## In-ground kitchen gardens in Kenya

## Indoor kitchen gardens:

## Potager kitchen garden

## Permaculture kitchen garden

## Vertical kitchen garden in Kenya

## Hydroponic kitchen garden in Kenya

## Staircase kitchen garden in Kenya

## Simple drip garden

## Tyre kitchen garden

## Multi storey kitchen garden

## Food robe kitchen garden

## Sack kitchen garden

## Wick irrigation kitchen garden

## Moist bed kitchen garden

## Aquaponics kitchen garden

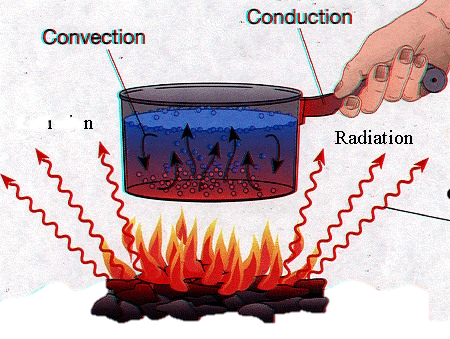
## Yard small kitchen garden

## Cone kitchen garden

## Micro-kitchen garden

## State three methods of cooking food:

1. Baking
2. Boiling
3. Steaming
4. Grilling
5. Frying
6. **Identify the methods of heat transfer when cooking below**



1. **What is meant by the following terms?**

**Dextrinisation:** The reaction of dry heat on the surface of food which changes starch to dextrin, e.g. toast.

**Gelatinisation:** The process of thickening which takes place when a mixture of starch and liquid is heated.

### Mention five ways used to retain nutrients while cooking

1. Choose fresh foods that are not over-ripe, bruised, cut or scraped.
2. Peel thinly or cook inn their skins, jacket
3. Aim at golden brown when cooking in dry heat.
4. Use enough water to cover
5. Cook them for the appropriate time
6. Blend starchy flavours with cold water before cooking
7. Stir thoroughly and continuously over low heat
8. Wash vegetables before cutting. Soaking or washing time should be reduced to minimize nutrient loss.
9. Cut vegetables into big pieces so that exposure of vitamins to water is less while cooking and washing.
10. Use a vegetable peeler to remove skin as it helps remove only a very thin layer of skin.
11. Use minimum water for cooking. Bring the water to boil and add the vegetables to cook.
12. Cook vegetables by steaming and pressure cooking to conserve nutrients.
13. Cover the vessel with a lid while cooking as it hastens cooking.
14. Vegetables salads should be prepared just before serving to conserve nutrients.
15. Use acids such as lime juice or vinegar to salads as it prevents loss of Vitamin C since Vitamin C is stable in acid.
16. Store foods in a cool, dark place.
17. When boiling, add the raw food to the boiling water rather than to cold water.
18. Steaming is a way of cooking with a minimum amount of water.
19. If possible use the cooking water for gravies, sauces or soups as it is a source of water-soluble vitamins and elements (minerals).
20. Cook for the minimum time necessary to make the food palatable and safe.
21. Do not use baking soda to help keep the green colour of vegetables, as this increases loss of vitamin C.
22. Do not use copper utensils. (Copper helps to destroy vitamin C.)
23. Soak whole pulses overnight
24. **State the factors to consider when setting a table.**
25. The number of people taking the meal as this determine the number of covers to be laid.
26. The meal to be served as this ensures that all the tableware is available.
27. Number of courses/dishes as this enables one to set the cover for the courses.
28. Tableware as this determines their placement.
29. Type of meal service as each type has its own way of laying the table.
30. The type of dinners determines the way of table setting e.g. ages, special needs.
31. A centre piece should be available for beauty/enhance appetite.
32. Provide adequate space to avoid overcrowding for comfort.
33. Ensure the room is clean for hygiene.
34. The table cloth should be well laundered for neatness.
35. Table appointments should be clean for hygiene/enhance appetite