Citrus Orchard Foreman Occupational Learning

Progressive Activities Assessment Guide

B3:

Land Preparation

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1st edition (06/2026)

Content originator:
Citrus Academy

Occupational alignment:
Ukudla Namanzi (Pty) Ltd

Contents

Chapter 1
Activity P1

Complete this activity to test your knowledge of the entire chapter:

1. Why is good quality soil important?
We need good quality soil to grow healthy, productive trees.
2. What is soil made of?
A combination of living and non-living components.
3. Is soil a renewable or non-renewable resource?
The living components of soil are considered renewable resources, and the non-living components are considered non-renewable resources.
4. What is soil potential?
Soil potential refers to the ability of the soil to support plant growth and produce a good quality crop.
5. How many elements do plants need for normal growth?
Seventeen.
6. What determines soil potential?
Soil fertility, plant available water, and soil permeability.
7. What is soil fertility?
Soil fertility refers to the nutrient content of the soil and the ability of the soil to sustain plant growth.
8. What is plant available water?
Plant available water refers to how much water there is in the soil that your trees can access.
9. What is soil permeability?
Soil permeability refers to the ease with which air, water and roots can penetrate the soil.
10. What determines soil texture?
The ratio between the different sized particles, being sand, silt and clay, in the soil.
11. When does soil erosion occur?
When soil is removed through the action of wind and water at a greater rate than it is formed.
12. What are the most common forms of soil erosion?
Water erosion and wind erosion.

Chapter 2
Activity P2

Complete this activity to test your knowledge of the entire chapter:
1. What are soil surveys?
Soil surveys are the process of sampling and judging the quality and suitability of a certain area for citrus production.
2. What determines what soil preparation methods are needed?
The profile properties, being stratification, texture, pH and salinity.
3. What are the three basic soil preparation methods?
Loosening, mixing, and ridging.
4. What is loosening?
Loosening involves using a tool to loosen the soil without changing the layering.
5. What is ridging?
Ridging is the process of taking soil from the inter-row spaces and moving it to the area where the trees will be planted.
6. What does soil maintenance involve?
Protecting the surface against erosion, minimising compaction, guarding against salinisation and limiting acidification.
7. What is the best way to protect the orchard floor against erosion?
Using a natural grass cover.