

Horticulture/Garden

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Understanding Soils

Investigation

- Identify what soil is and where it comes from.
- Explain how soils form.
- Identify soil layers
- Summarize how they differ.
- Understand basic soil properties such as pH, organic matter and nutrients.
- Define pH.
- Explain why soils can have different pH levels.
- List different types of fertilizers.
- Define soil organic matter and what it can impact in soil.

Experimentation

- Take a soil sample and send it to a soil lab to measure pH, nutrients and organic matter and be able to explain the recommendations that were provided in the soil report from the lab

Understanding Plants

Investigation

- Describe how plants depend of soil for growth.
- Label the major roles of each of the main plant parts (roots, stems, leaves, flowers).
- Classify plants as monocots or dicots.

Experimentation

- Examine flowers, seeds and seedlings to find the different parts and classify them as monocots or dicots.

Common Vegetable Crops

Investigation

- Identify the most common warm and cool season vegetable crops.
- Classify common vegetable crops by whether they are monocots or dicots.



- Classify common vegetable crops by whether they are annual or perennial.
- Classify common vegetable crops by their botanical family.

The Plant Growing Environment

Investigation

- Identify the basic requirements for plant growth.
- List the basic requirements for germination of seeds.
- Define the growing conditions for common warm and cool season crops.

Experimentation

- Compare germination of some common vegetables (lettuce, pea, bean, corn) under different temperature conditions.

Vegetable Crop Management

Investigation

- List types of plant containers.
- Define growing media.
- Define transplanting and describe how it can be an advantage in the garden.
- Identify the main factors in selecting a vegetable garden site.
- Classify the most common challenges found in the home garden.

Experimentation

- Grow broccoli, cabbage, pepper and tomato transplants by providing the most appropriate environments and using proper media and containers.
- Start tomato transplants in both greenhouse media and garden soil and compare germination and early growth.
- Ask gardeners you know what some of their challenges are and how they avoid or overcome them.

Marketing and Selling Vegetable Crops

Investigation

- Find the most common crops in the grocery store and observe how they differ in appearance and price through the year.
- Classify crops that could be grown in your garden according to their price and availability in the store.

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