**Grade: 3**

**Subject: Science**

# Unit
Plants

| | |
|---|---|
| **Essential Question #1** | **Why are plants important as living things and as producers?** |
| **Essential Question #2** | **How can we use the physical properties of seeds to classify them?** |
| **Essential Question #3** | **How does a new plant grow from a seed?** |
| **Essential Question #4** | **What are some ways to grow new plants?** |
| **Essential Question #5** | **What are the different stages in the life cycle of a green plant?** |
| **Essential Question #6** | **How is each plant part important to the plant as a whole?** |

**Grade: 3**

**Subject: Science**

**Unit: Plants**

**Essential Question #1**

**Why are plants important as living things and as producers?**

| | | CT LEVEL |
|---|---|---|
| **Objective/Skill #1** | **Compare traits or plants and animals** | **K** |
| **Objective/Skill #2** | **Explain the role of plants as producers in a food chain.** | **AN** |
| **Objective/Skill #3** | | |
| **Objective/Skill #4** | | |
| **Objective/Skill #5** | | |

**Compare traits of plants and animals.**

**Complete Venn diagram comparing plant and animals traits.**

**Grade: 3**

**Subject: Science**

**Unit: Plants**

**Essential Question #2**

**How can we use the physical properties of seeds to classify them?**

| | | CT LEVEL |
|---|---|---|
| **Objective/Skill #1** | **Describe a seeds physical properties.** | **K** |
| **Objective/Skill #2** | **Sort and classify seeds according to physical traits / properties.** | **AN** |
| **Objective/Skill #3** | | |
| **Objective/Skill #4** | | |
| **Objective/Skill #5** | | |

**Scientific drawings and writing of seeds.**

**Use a sort mat to sort seeds.**

**Grade: 3**

**Subject: Science**

**Unit: Plants**

**Essential Question #3**

**How does a new plant grow from a seed?**

| | | CT LEVEL |
|---|---|---|
| **Objective/Skill #1** | **Identify the parts and functions of a seed.** | **K** |
| **Objective/Skill #2** | **Construct a model of a seed.** | **AP** |
| **Objective/Skill #3** | | |
| **Objective/Skill #4** | | |
| **Objective/Skill #5** | | |

**Estec Kit (Positively Plants)**

**Draw / construct a seed.**

**Grade: 3**

**Subject: Science**

**Unit: Plants**

**Essential Question #4**

**What are some ways to grow new plants?**

| | | CT LEVEL |
|---|---|---|
| **Objective/Skill #1** | **Identify ways in which seeds are dispersed.** | **K** |
| **Objective/Skill #2** | **Discuss and chart various ways of seed dispersal.** | **U** |
| **Objective/Skill #3** | **Record observations of a propagation demonstration** | **K** |
| **Objective/Skill #4** | | |
| **Objective/Skill #5** | | |

**Estec Kit (Positively Plants)**

**Propagation demonstration activity**

**Grade: 3**

**Subject: Science**

**Unit: Plants**

**Essential Question #5**

**What are the different stages in the life cycle of a green plant?**

| | | CT LEVEL |
|---|---|---|
| **Objective/Skill #1** | **Explain the stages of a plant's life span.** | **U** |
| **Objective/Skill #2** | **Predict the needs of a plant in order to grow, live, and thrive.** | **AN** |
| **Objective/Skill #3** | | |
| **Objective/Skill #4** | | |
| **Objective/Skill #5** | | |

**Estec Kit (Positively Plants)**

**Grow observe, and record the life span of plants.**

**Grade: 3**

**Subject: Science**

**Unit: Plants**

**Essential Question #6**

**How is each plant part important to the plant as a whole?**

| | | CT LEVEL |
|---|---|---|
| **Objective/Skill #1** | **Identify and label the parts of a plant.** | **AP** |
| **Objective/Skill #2** | **Explain function and importance of each plant part.** | **S** |
| **Objective/Skill #3** | | |
| **Objective/Skill #4** | | |
| **Objective/Skill #5** | | |

**Estec Kit (Positively Plants)**

**Create a mobile about the part of a plant.**

**Mailbox activity**

**Grade: 3**

**Subject: Science**

# Unit

Animal Adaptations

| | |
|---|---|
| **Essential Question #1** | **How do you classify animals?** |
| **Essential Question #2** | **Why do different animals have different body coverings?** |
| **Essential Question #3** | |
| **Essential Question #4** | |
| **Essential Question #5** | |

**Grade: 3**
**Subject: Science**
**Unit: Animal Adaptations**

**Essential Question #1**

**How do you classify animals?**

| | | CT LEVEL |
|---|---|---|
| **Objective/Skill #1** | **Students will characterize the traits of vertebrates.** | **U** |
| **Objective/Skill #2** | **Sort animals into correct classifications** | **AP** |
| **Objective/Skill #3** | | |
| **Objective/Skill #4** | | |
| **Objective/Skill #5** | | |

**ESTEC kit Animal Adaptations**

**Sort animal pictures into appropriate classifications**

**Grade: 3**

**Subject: Science**
**Unit: Animal Adaptations**

**Essential Question #2**

**Why do different animals have different body coverings?**

| | | CT LEVEL |
|---|---|---|
| **Objective/Skill #1** | **Understand the purpose of different animal coverings.** | **U** |
| **Objective/Skill #2** | **Explain the effect of pollution on animals.** | **S** |
| **Objective/Skill #3** | | |
| **Objective/Skill #4** | | |
| **Objective/Skill #5** | | |

**ESTEC kit Animal Adaptions (Animals and their coverings)**

**Grade: 3**

**Subject: Science**

# Unit
Energy

| | |
|---|---|
| **Essential Question #1** | **What is NRG?** |
| **Essential Question #2** | **How is energy transformed from one type to another?** |
| **Essential Question #3** | **How can we get more energy?** |
| **Essential Question #4** | |
| **Essential Question #5** | |

**Grade: 3**
**Subject: Science**
**Unit: Energy**

**Essential Question #1**

**What is NRG?**

| | | CT LEVEL |
|---|---|---|
| **Objective/Skill #1** | **Explain what energy is** | **E** |
| **Objective/Skill #2** | **Identify types of energy** | **K** |
| **Objective/Skill #3** | **Determine source of energy** | **A** |
| **Objective/Skill #4** | | |
| **Objective/Skill #5** | | |

**Activities that you may opt to use with objectives/skills being taught above**

**ESTIC kit "Energy Antics"**

**Grade: 3**

**Subject: Science**

**Unit: Energy**

**Essential Question #2**

**How is energy transformed from one type to another?**

| | | CT LEVEL |
|---|---|---|
| **Objective/Skill #1** | **Define energy transformation** | **K** |
| **Objective/Skill #2** | **Demonstrate transfer of energy through a closed circuit** | **U** |
| **Objective/Skill #3** | | |
| **Objective/Skill #4** | | |
| **Objective/Skill #5** | | |

**Activities that you may opt to use with objectives/skills being taught above**

**ESTIC kit "Energy Antics"**

**Grade: 3**

**Subject: Science**

**Unit: Energy**

**Essential Question #3**

**How can we get more energy?**

| | | CT LEVEL |
|---|---|---|
| **Objective/Skill #1** | **Identify renewable energy sources.** | **U** |
| **Objective/Skill #2** | **Create poster encouraging people to conserve energy.** | **U** |
| **Objective/Skill #3** | | |
| **Objective/Skill #4** | | |
| **Objective/Skill #5** | | |

**Activities that you may opt to use with objectives/skills being taught above**

Poster designing

Solar car (ESTEC Kit)

**Grade: 3**

**Subject: Science**

# Unit
Matter

| | |
|---|---|
| **Essential Question #1** | **What is matter?** |
| **Essential Question #2** | **What are physical properties?** |
| **Essential Question #3** | **What is a phase change?** |
| **Essential Question #4** | |
| **Essential Question #5** | |

**Grade: 3**

**Subject: Science**

**Unit: Matter**

**Essential Question #1**

**What is Matter?**

| | | CT LEVEL |
|---|---|---|
| **Objective/Skill #1** | **Define what matter is** | **K** |
| **Objective/Skill #2** | **Identify states of matter** | **K** |
| **Objective/Skill #3** | **Characterize the traits of each state of matter** | **U** |
| **Objective/Skill #4** | | |
| **Objective/Skill #5** | | |

**Activities that you may opt to use with objectives/skills being taught above**

**List examples of each state of matter.**

**Make "The Alphabet of Matter"**

**Sort pictures into the three states of matter.**

**Grade: ___3___**

**Subject: Science_**

**Unit: _Matter_**

**Essential Question #2**

**What are physical properties?**

| | | CT LEVEL |
|---|---|---|
| **Objective/Skill #1** | **Name the seven physical properties** | **K** |
| **Objective/Skill #2** | **Describe an object using the seven properties** | **AP** |
| **Objective/Skill #3** | | |
| **Objective/Skill #4** | | |
| **Objective/Skill #5** | | |

**Activities that you may opt to use with objectives/skills being taught above**

**Children secretly select an object, describe it by its physical properties.**

**Observing and record properties of crystals in Science Lab.**

**Grade: ___3___**

**Subject: Science_**

**Unit: _Matter__**

**Essential Question #3**

**What is a phase change?**

| | | CT LEVEL |
|---|---|---|
| **Objective/Skill #1** | **Explain what causes matter to change** | **U** |
| **Objective/Skill #2** | **Identify the differences between physical and chemical change** | **K** |
| **Objective/Skill #3** | | |
| **Objective/Skill #4** | | |
| **Objective/Skill #5** | | |

**Activities that you may opt to use with objectives/skills being taught above**

**Experiment with vinegar and baking soda.**

**Ice cubes races.**

**Make jello and goo-yuk experiments.**

**Grade: 3**

**Subject: Science**

# Unit

Butterflies

| | |
|---|---|
| **Essential Question #1** | **What is the life cycle of a butterfly?** |
| **Essential Question #2** | **What differences are there between a butterfly and a moth?** |
| **Essential Question #3** | |
| **Essential Question #4** | |
| **Essential Question #5** | |

**Grade: 3**

**Subject: Science**

**Unit: Butterflies**

**Essential Question #1**

**What is the life cycle of a butterfly?**

| | | CT LEVEL |
|---|---|---|
| **Objective/Skill #1** | **Articulate the stages of butterfly life cycle** | **U** |
| **Objective/Skill #2** | **Define the traits of each stage of the lifecycle** | **U** |
| **Objective/Skill #3** | **Sketch the stage of the life cycle** | **A** |
| **Objective/Skill #4** | **Observe and record the lifecycle changes of living specimens** | **A** |
| **Objective/Skill #5** | | |

**Activities that you may opt to use with objectives/skills being taught above**

**Hand motions to dramatize life cycle**

**Illustrate the life cycle of a butterfly**

**ESTEC kit (Butterflies and Moths)**

**Order manipulative of each stage**

**Grade: 3**

**Subject: Science**

**Unit: Butterflies**

**Essential Question #2**

**What differences are there between a butterfly and a moth?**

| | | CT LEVEL |
|---|---|---|
| **Objective/Skill #1** | **Identify traits of butterfly** | **K** |
| **Objective/Skill #2** | **Identify traits of a moth** | **K** |
| **Objective/Skill #3** | **Compare and contrast butterfly and moth using a Venn diagram** | **A** |
| **Objective/Skill #4** | | |
| **Objective/Skill #5** | | |

**Activities that you may opt to use with objectives/skills being taught above**

**T Chart moth and butterfly traits**

**Scrutinize pictures of butterflies and moths**

**Grade: 3**

**Subject: Science**

# Unit

Weather

| | |
|---|---|
| **Essential Question #1** | **How do we record weather information?** |
| **Essential Question #2** | **What is the water cycle?** |
| **Essential Question #3** | **What are the different types of clouds?** |
| **Essential Question #4** | |
| **Essential Question #5** | |

**Grade: 3**

**Subject: Science**

**Unit: Weather**

**Essential Question #1**

**How do we record weather information?**

| | | CT LEVEL |
|---|---|---|
| **Objective/Skill #1** | **Read a thermometer** | **AP** |
| **Objective/Skill #2** | **Use weather symbols to observe and record weather data** | **AP/U** |
| **Objective/Skill #3** | | |
| **Objective/Skill #4** | | |
| **Objective/Skill #5** | | |

**Activities that you may opt to use with objectives/skills being taught above**

**Reading thermometers**

**Daily observance of weather and report to class**

**Grade: 3**

**Subject: Science**

**Unit: Weather**

**Essential Question #2**

**What is the water cycle?**

| | | CT LEVEL |
|---|---|---|
| **Objective/Skill #1** | **Learn the process of the water cycle** | **K** |
| **Objective/Skill #2** | **Explain each phase of the water cycle** | **C** |
| **Objective/Skill #3** | | |
| **Objective/Skill #4** | | |
| **Objective/Skill #5** | | |

**Activities that you may opt to use with objectives/skills being taught above**

**Water cycle song**

**Water cycle demonstrations**

**Illustrate the water cycle**

**H2O bracelets**

**Grade: 3**

**Subject: Science**

**Unit: Weather**

**Essential Question #3**

**What are the different types of clouds?**

| | | CT LEVEL |
|---|---|---|
| **Objective/Skill #1** | **Identify the types of clouds** | **C** |
| **Objective/Skill #2** | **Match clouds with the weather they may produce** | **K** |
| **Objective/Skill #3** | | |
| **Objective/Skill #4** | | |
| **Objective/Skill #5** | | |

**Activities that you may opt to use with objectives/skills being taught above**

**Cotton clouds at their proper altitude**

**Cloud Book by Tomie De Paola**

**Grade: 3**

**Subject: Science**

# Unit

Simple Machines

| | |
|---|---|
| **Essential Question #1** | **How do machines work?** |
| **Essential Question #2** | |
| **Essential Question #3** | |
| **Essential Question #4** | |
| **Essential Question #5** | |

**Grade: 3**

**Subject: Science**

**Unit: Simple Machines**

**Essential Question #1**

**How do machines work?**

| | | CT LEVEL |
|---|---|---|
| **Objective/Skill #1** | **Explain the purpose of machines** | **C** |
| **Objective/Skill #2** | **Define force energy and work** | **C** |
| **Objective/Skill #3** | | |
| **Objective/Skill #4** | | |
| **Objective/Skill #5** | | |

**Activities that you may opt to use with objectives/skills being taught above**

**Make butter 1 group shake in jar 2nd group use an electric mixer**

**I'm thinking of a machine…. (I'm thinking of a machine that opens cans)**

**Forceful Charades- Simple Machines book pgs 7-16-21**

**Grade: 3**

**Subject: Science**

**Unit: Simple Machines**

**Essential Question #2**

**What are Simple Machines?**

| | | CT LEVEL |
|---|---|---|
| **Objective/Skill #1** | **Define different types of Simple Machines** | **K** |
| **Objective/Skill #2** | **Sort machines into their different categories** | **AN** |
| **Objective/Skill #3** | | |
| **Objective/Skill #4** | | |
| **Objective/Skill #5** | | |

**Activities that you may opt to use with objectives/skills being taught above**

Science Lab hands on models to work identification

**Walking school tour to locate use of simple machines**

**Class sets of simple machines and machines we use**

**Grade: 3**

**Subject: Science**

**Unit: Simple Machines**

**Essential Question #3**

**What are Compound Machines?**

| | | CT LEVEL |
|---|---|---|
| **Objective/Skill #1** | **Explain what a compound machine is** | **K** |
| **Objective/Skill #2** | **Categorize a machine as simple or compound** | **AN** |
| **Objective/Skill #3** | | |
| **Objective/Skill #4** | | |
| **Objective/Skill #5** | | |

**Activities that you may opt to use with objectives/skills being taught above**

Mailbox activity Tilted Compound Machines pg 37

Identify objects as a simple or compound machine.