A Dangerous Garden, Things that sting and poke
Grade 1

Come and learn about the adaptations that plants and animals have that allow them to survive.

Overview of Unit:
• Pre-assessment
• What animals eat
  o Introduce herbivore, carnivore, omnivore
  o How an animal can stay safe
• How humans stay safe in nature
• How plants stay safe
• Field Trip
  o Plant adaptations
  o Insect defenses
  o Build a mini defense from nature
• Make a plant using knowledge of adaptations
• Post-assessment
• Glossary

Students will know:
• Related vocabulary
• Purpose of features of plants and animals, adaptations
• How humans use and make similar external adaptations
• The adaptations of specific plants and insects
• How to apply adaptations to a specific environmental challenge

Students will be able to:
• Create a mini glossary
• Relate humans, plants, and animals
• Support ideas with evidence
• Learn directly from nature through making careful observations
• Apply knowledge to a new task

Links to Standards
• Common Core
  o ELA
    ▪ CCSS.ELA-Literacy.RI.1.1
    ▪ CCSS.ELA-Litaracy.RI.1.5
    ▪ CCSS.ELA-Litaracy.RI.1.7
    ▪ CCSS.ELA-Litaracy.RI.1.10
    ▪ CCSS.ELA-Litaracy.WI.1.8
Lesson Plans:

- Pre-assessment
  - **Purpose:**
    - Assess what students already know about the topic
    - Ask students to support their thinking with evidence
  - **Time:**
    - 15 minutes

- What animals eat
  - **Purpose:**
    - Introduce terms:
      - Herbivore
      - Carnivore
      - Omnivore
      - Predator
      - Prey
    - **Time:**
      - 20 minutes
    - **Intended Structure:**
      - Anticipatory set
        - First reading is intended for guided reading
        - Ask students what they think they will be learning about
        - Look at text structure
      - Activity
        - Read the paragraph together
        - Underline the vocabulary
        - Have students draw a picture above each that will help them remember what each term means. E.g. a leaf above “herbivore”
        - Independently have students answer the question
• How humans stay safe in nature
  o **Purpose**
    ▪ Connect adaptations of animals with human made objects
    ▪ Review concepts from introduction
  o **Time**
    ▪ 20 minutes
  o **Intended structure**
    ▪ Anticipatory set
      • Ask students what they think this section will be about and why
    ▪ Activity
      • Small group reading for paragraph 1 and the instructions
      • Brainstorm some potential answers
      • Have students work independently
    ▪ Closing
      • Come back together and share answers
      • If time, introduce idea that engineers design the tools we use

• How plants stay safe
  o **Purpose**
    ▪ Introduce idea of adaptations
    ▪ Plants, animals, and humans all have adaptations
    ▪ Represent ideas visually and be able to explain the drawing
  o **Time**
    ▪ 20 minutes
  o **Intended Structure**
    ▪ Anticipatory set
      • Introduce what an adaptation is
      • Guided reading of paragraph
      • Enter vocabulary into glossary and review previous terminology
    ▪ Activity
      • Brainstorm ways that the plant could stay safe and show the
      • Have students create their plant
    ▪ Closing
      • Share the drawing in small group
• Field Trip
  o Structure of Field Trip
    ▪ 20 minutes – Begin as a group
    ▪ 90 minutes – Rotate through 3 Activities
    ▪ 20 minutes – Closing activity as a group
  o Plant adaptations
    ▪ Purpose
      • Make close observations of nature
      • Apply academic knowledge to reality
      • Record observations visually
      • Find examples of plant adaptations
    ▪ Time
      • 30 minutes
    ▪ Structure
      • Introduce the lesson
      • Learn names
      • Review what was learned in class
      • Draw plants
      • Share favorite
  o Insect defenses
    ▪ Purpose
      • Make close observations of nature
      • Apply academic knowledge to reality
      • Record observations visually
      • Find examples of animal adaptations
    ▪ Time
      • 30 minutes
    ▪ Structure
      • Introduce the lesson
      • Learn names
      • Review what was learned in class
      • Find insects and study them
  o Build a mini defense from nature
    ▪ Purpose
      • Create a plan, implement it, and revise
      • Use what was learned in class to think about how to design a
        home made of natural materials
    ▪ Time
      • 30 minutes
    ▪ Structure
      • Introductions
      • Names
      • Make a tiny person and make a house for the person
• Make a plant using knowledge of adaptations
  o **Purpose**
    ▪ Reinforce knowledge learned from readings and hands-on experiences
    ▪ Assess understanding
    ▪ Allow creativity in a learning environment
  o **Time**
    ▪ 30-45 minutes
  o **Intended structure**
    ▪ Anticipatory Set
      • Reflect back on field trip
      • Share what was learned over the course of the unit
    ▪ Activity
      • Have students select a place card and a challenge card
      • Each student must create their own plant with adaptations suited for their challenge and habitat
    ▪ Closing
      • Share the invented plants, making sure each student discusses:
        o What the challenge was
        o Their response to the challenge
        o Defining the adaptations

• Post-assessment
  o **Purpose**
    ▪ Assess what was learned
  o **Time**
    ▪ 15 minutes
  o **Intended structure**
    ▪ Have students complete the final assessment independently