

# Jay Curriculum: Unit Cover Page

**Unit title:** Spiders

**Grade Level:** 1

**Content Area(s):** Science

**Date Created:**

**Designed By:** Jay First Grade Teachers

## **Year 1 Map & Template Development**

- Map/Matrix Completed
- Material & Resources Listed
- Draft Design Template Completed
- Initial Draft Template Document

## **Year 2 Piloting**

- Develop:
- Performance Tasks
- Other Assessments
- Scoring Rubrics
- Piloted

## **Year 3 Review & Complete Assessment**

- Performance Tasks Development
- Other Assessments Completed
- Scoring Rubrics Completed
- Reviewed/Revised Templates

## **Year 4**

- Full Implementation
- Benchmarks Established

### **Standard(s)/Performance Indicators:**

- A2 Classifying Life Forms
  - Describe characteristics of different living things
  - Ecology
- B1 Identify ways that organisms depend upon their environment
  - Cells
- C1 Demonstrate that living things are made up of different parts
  - Continuity and Change
- D2 Identify characteristics that help organisms live in their environment
- D3 Describe ways in which individuals of the same species are alike and different
  - Structure of Matter
- E1 Show that large things are made up of smaller parts
- E3 Group objects based on observable characteristics (e.g. color, size, texture)
  - Scientific Reasoning
- K3 Make observations
- K4 Participate in brainstorming activities
  - Communication
- L1 Describe and compare things in terms of number, shape, texture, size, weight, color, and behavior

**Unit:** Spiders

### **Brief Summary of Unit/Topic**

#### **Summary:**

In this unit, students will observe and compare living insects and spiders (arachnid) specimens. Students should know there are many different kinds of insects and spiders. As we concentrate on spiders they will become aware of their similarities and differences. Spiders need, as all living things do, a place to live, food to eat, a way to stay safe, and a way to reproduce. Students will have the opportunity to observe actual spiders which will give them first hand information to draw conclusions about similarities and differences and how nature allows each creature to best provide for its self. Their usefulness to nature will be discussed. Using their own observations and information from readings, poems, A.V. materials and songs, students will support their ideas about spiders as well as their physical characteristics, life cycle, food sources, habitats, and defenses.

### **Stage #1: Identify Desired Results**

#### **Essential Question/s:**

#### **General understanding/s (What is worth being familiar with?)**

Students will observe the characteristics between an arachnid and an insect. They will investigate habitats, food sources, ways of being useful, and ways they reproduce.

#### **Students will know:**

1. There are many kinds of spiders
2. There are specific differences between insects and arachnids
3. Insects have 3 body sections, 6 jointed legs, 2 antennae, and an exoskeleton
4. Spiders are arachnids and have 2 body sections, 8 legs, and are covered by a strong skeleton which it sheds periodically.
5. Spiders are found almost anywhere on Earth
6. Spiders are beneficial to man
7. Spiders use methods to obtain their food (hunters, web weavers, trap makers)

#### **Students will be able to:**

1. Observe and describe physical characteristics of insects and spiders
2. Record observations with words and drawings
3. Create paper presentations, murals and paintings of spiders and their habitats
4. Make comparisons of spiders and insects
5. Maintain spiders in classroom environment
6. Create stories relating to spider facts

#### **Enduring Understanding/s:**

- Spiders are arachnids, not insects
- Spiders have characteristics which are different from insects
- Spiders are beneficial to man
- Spiders are found almost anywhere on Earth

## Stage #2: Evidence

What evidence will students have to provide in order to demonstrate that they have developed the skills, knowledge and understanding to successfully complete this unit?

Performance Tasks/Products/other assessments Performance tasks should have a <u>scoring guide</u> .	<i>Performance Indicators</i> for this task.* Example: <b>ELA: C- 1,2,3</b> <b>Science: B- 3,5,7</b> <b>SS His: H- 2</b>	<u>Modalities</u> <b>K</b> =Kinesthetic <b>O</b> =oral <b>V</b> =visual <b>W</b> =written	Are <u>examples</u> available to students? ? <b>Y, N, or N/A</b>	Component of Local Assessment System?  <b>Y or N</b> (See <a href="#">aligned scoring guide</a> .)
Students will list the differences between an arachnid and an insect	A2, C1, D4, E1, E3, K3			
Students will recognize the usefulness of spiders	B1, K3, K4			
Students will identify methods spiders use to obtain their food (Hunters, web weavers, trap makers)	B1, D2, E3, K3, K4, L1			
QUIZZES, TESTS, PROMPTS				
Students will compare and label the body parts of a spider and an insect on a worksheet with 85% accuracy				
Students will illustrate 1 way in which spiders are useful				
Students will compare methods spiders use to obtain food, through a whole group pictorial lesson				
OTHER				
Information observations and discussions during work on the performance tasks				
Usage of materials in our spider activity kits				
Illustration				
Dialogues				
Charts				
STUDENT SELF ASSESSMENT				
Student Journal Writing				

\*Abbreviate: English Language Arts= ELA, Career Preparation=CP, Modern and Classical Languages=MCL, Social Studies=SS, Visual and Performing Arts=VPA

### **Stage #3: Plan learning experiences & instruction**

**What teaching & learning experiences may equip students to develop & demonstrate the targeted understanding(s)? (activities/plans):**

1. Brainstorm known information about spiders. Make a web.
2. Introduce key vocabulary terms.
3. Students will bring in spiders. Daily observations on what they are doing. Keep a journal entry about the spiders.
4. Discuss differences between insects and arachnids. Chart likenesses and differences. Work on worksheets explaining these facts.
5. Read appropriate literature and discuss.
6. List common kinds of spiders.
7. Use a magnifying glass to identify the body parts on a spider. Label these according to an activity sheet.
8. Discuss webs – how they are made and why? (hunter webs, weavers, trapdoor spiders)
9. Compare spider homes and their formations
10. Read, "Be Nice to Spiders". Make posters showing usefulness of spider. Example: Spiders are good for gardens.
11. Videos on spiders. See first grade video library list.
12. Discuss how spiders travel – ballooning
13. Make a Big Book on spider facts. Use as a class project.
14. Discuss that mother spiders lay eggs, that baby spiders are called spiderlings.
15. Graphing: "How do you feel about spiders?" See activity from Spider Theme booklet.
16. Nature walk. Looking for spiders and webs.
17. Spider web art. Read Eric Carle's book "The Very Busy Spider". Make a web, use glue and glitter for a raised surface.
18. Learn spider songs, poems and chants
19. Use computers to research information on spiders.
20. Make edible spiders.

### **REFERENCES:**