Unit: All About Spiders

Grade: Second Grade/ Science

Mainstream class with integrated ELL students

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Southern Connecticut State University
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Introduction
Pieces of the original lesson plans appear in the new lessons with a star at the side of the page in the margin. The original lesson plan is placed behind the modified lesson and the materials needed for within each section. For the visuals mentioned in each lesson, they will be contained in a plastic bag and filed within the lessons themselves.
Title: All about Spiders

Grade Level: Second Grade

Target Group: Mainstream class with integrated ELL students

Source of Written Materials

Source of Lessons Designed:
Six lesson plans attached for Spider Unit

Lesson 1: Introduction to Spiders
Lesson 2: Spider Anatomy
Lesson 3: Web Building Spiders
Lesson 4: Non-Web Building Spiders
Lesson 5: Spider Diet and Spider Function
Lesson 6: Spider Reproduction

Learning goals for the unit
1. Students will know the differences between insects and spiders
2. Students will be able to identify the different parts of a spider
3. Students will know the different types of webs spiders can make
4. Students will know the different places non-web building spiders can live
5. Students will be able to identify food that spiders eat
6. Students will be able to define spiderling
7. Students will be able to demonstrate their understanding of the concept ‘ballooning’

This is what I want the children to know at the end of the unit.
## UNIT ON SPIDERS
### GOALS AND OBJECTIVES
#### LESSONS 1, 2, 3, 4, 5 & 6

<table>
<thead>
<tr>
<th>LANGUAGE</th>
<th>CONTENT</th>
<th>STRATEGIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>* Students will understand concept of what a spider is</td>
<td></td>
</tr>
<tr>
<td>Spider Vocabulary</td>
<td>* Students will know the differences between insects and spiders</td>
<td></td>
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<tr>
<td>-reproduction</td>
<td>* Students will be able to identify the different parts of a spider</td>
<td></td>
</tr>
<tr>
<td>-ballooning</td>
<td>* Students will know different types of webs spiders make</td>
<td></td>
</tr>
<tr>
<td>-spiderling</td>
<td>* Students will know different places non-web building spiders live</td>
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<tr>
<td>-webs</td>
<td>* Students will be able to identify food that spiders eat</td>
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<tr>
<td>-anatomy</td>
<td>* Students will be able to define spiderling</td>
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</tr>
<tr>
<td>(legs, fangs, cephalothorax, abdomen, eyes, pedipalps)</td>
<td>* Students will be able to demonstrate their understanding of the concept of ballooning</td>
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<tr>
<td>Number Recognition</td>
<td>* Students will brainstorm</td>
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</tr>
<tr>
<td></td>
<td>* Students will chart information on Venn Diagram</td>
<td></td>
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<td></td>
<td>* Students will record data in their spider books</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Students will</td>
<td></td>
</tr>
</tbody>
</table>

### Skills |

<p>| Class Discussions | * Students will discuss what they know about spiders and insects in small groups and whole class |
| Graphing Data | * Students will describe what they know about spiders in small groups |
| Asking Questions | * Students will create different types of spider webs in cooperative groups using pictures and books as tools |
| Taking/Giving Surveys | * Students will map out their playground as class and go on a spider hunt in pairs, locating different types of webs or where they saw spiders or egg sacs |
| | *Students will create a spiderling ballooning by working in pairs and will have the opportunity to make it balloon outside. |
| | *Students will identify parts of the spiders and insects |
| | * Students will graph data using Venn Diagram |
| | * Students will record data in their spider books |
| | *Students will create class graphs and maps |
| | * Students will create their own spider |
| | *Students will record spider information in their spider books |</p>
<table>
<thead>
<tr>
<th>LANGUAGE</th>
<th>CONTENT</th>
<th>STRATEGIES</th>
</tr>
</thead>
</table>
| Skills (continued) | he knows and the missing information will be filled with new spider vocabulary and opportunity to use it to construct his own spider  
*Students will create (assemble) a menu for a Spider Café that will be hung next to the different webs in the hallway and children’s spiders.  
*Students will survey classmates about their feelings about spiders prior to unit beginning and post the unit ending | *Students will express their feelings about spiders |
| Disposition | Appreciation and Respect  
* Students will appreciate spiders  
* Students will understand how spiders affect their daily lives  
* Students will describe how spiders make them feel |                                              |
ESL Standards

Goal 1
Students will use English to communicate in social settings

Standard 1
✓ Students will use English to participate in social settings
  * Lessons 1, 2, 3, 4, 5 & 6

Standard 2
✓ Students will interact in, through, and with spoken and written English for personal expression and enjoyment
  * Lessons 1, 2, 3, 4, 5 & 6

Standard 3
✓ Students will use learning strategies to extend their communicative competence
  * Lessons 1 & 5

Goal 2
Students will use English to achieve academically in all content areas

Standard 1
✓ Students will use English to interact in the classroom
  * Lessons 1, 2, 3, 4, 5 & 6

Standard 2
✓ Students will use English to obtain, process, construct, and provide subject matter information in spoken and written form
  * Lessons 1, 3, 4 & 6

Standard 3
✓ Students will use appropriate learning strategies to construct and apply academic knowledge
  * Lessons 2, 3, 5 & 6

Goal 3

Standard 1
✓ Students will use appropriate language variety, register, and genre according to audience, purpose and setting
  * Lessons 1, 2, 5 & 6
Standard 2
✓ Students will use nonverbal communication appropriate to audience, purpose and setting
* Lessons 4, 5 & 6

Standard 3
✓ Students will use appropriate learning strategies to extend their sociolinguistic and socio-cultural competence
* Lessons 3 & 5
Schematic Map

- Spiders
  - Comparing spiders and insects
  - Spider Reproduction
  - Spider Diet
  - Non Web-Building Spiders
  - Web-Building Spiders
  - Spider Anatomy
Lesson 1
<table>
<thead>
<tr>
<th>Unit</th>
<th>Notions</th>
<th>Functions</th>
<th>Formulas</th>
<th>Structures</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiders Lesson 1</td>
<td>*Spiders</td>
<td>Describing</td>
<td>*Spiders</td>
<td></td>
<td>*Discussing w/ group</td>
</tr>
<tr>
<td>*Identifying spiders</td>
<td>*Insects</td>
<td></td>
<td>have . . .</td>
<td></td>
<td>*Verbally labeling spiders</td>
</tr>
<tr>
<td>*comparing spiders to insects</td>
<td>*Body sections</td>
<td></td>
<td>They have</td>
<td></td>
<td>*Charting on a Venn Diagram</td>
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<tr>
<td></td>
<td>*legs</td>
<td></td>
<td>up to . . .</td>
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<td></td>
<td>*eyes</td>
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<td>Spiders . .</td>
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<td></td>
<td>*wings</td>
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<td>have wings</td>
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<td>*Spiders are.</td>
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<td>Describing</td>
<td>Insects</td>
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<td>*Verbally labeling insects</td>
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<td>Insects . .</td>
<td></td>
<td>*Charting on a Venn Diagram</td>
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<td>body</td>
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<td>sections</td>
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<td></td>
<td>*Insects are .</td>
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<td>Comparing</td>
<td>*Spiders</td>
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<td></td>
<td>have . . . but</td>
<td></td>
<td>*Pair Work</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>insects have. . .</td>
<td></td>
<td>*label by color</td>
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<td></td>
<td></td>
<td>Insects . . but</td>
<td></td>
<td>*Sharing with friends</td>
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<td>spiders have . .</td>
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Lesson 1: Introduction to Spiders

Duration: 45 minutes

Objectives:

For this class: 1. Students will be able to describe a spider and describe an insect.

2. Students will be able to compare an insect and a spider

Language Objective: 1. Students will be able to use language the following language in oral speech: Spiders have . . . legs (eyes, wings, body sections). Insects have . . . legs (eyes, wings, body sections). Spiders have . . . but insects have . . . ; Spiders have and insects have . . . ; more than, less than, the same as, are similar because, and are not the same because.

Materials:

- 5 x insect beanie babies
- 5 x spider beanie babies
- transparency of insect
- transparency of spider
- chart paper w/ chart made (2 columns, 5 rows)
- Marker
- Word print outs of: wings, legs, eyes, body sections

Warm-up Activities (10-15 minutes):

Begin the class by reading the book “Spiders” by Gail Gibbons to the class. Be sure to answer questions that the students have and write questions down on the board to answer later on in the unit.

Put the students into groups of 4 (5 if needed). Give each group one beanie baby of a insect and one of a spider. Tell the class that each group must come up with two things they notice about an insect and two things they notice about a spider. If students ask for clarification, have students think about how they would describe the insects and spider.

Review/ Mini-Lesson (10-15 minutes):

Go around the room and ask one child from each group to share with the class their groups two things they noticed about a spider and an insect. Record student observations on chart paper as they tell the class.

Have the students reconvene into their seats and ask a volunteer to hand-out “My Spider Book” to each child in the class. Have the student open up to page 1. (Page one is a picture of an insect and it has 4 sentences in which the children need to fill in the blanks. i.e. An insect has _____ legs; Insects have _____ body sections; Insects have _____ eyes; Insects do or do not have wings? (circle one)).

Have the children refer to the list of observations you made as they were sharing earlier. Ask students to tell you something about insects and wings. When a student says
that insects have wings, have the children circle the word that says 'do.' Continue asking children questions that guide them to use the list they have already made, the insect and animals they are holding in order to help them draw conclusions about what insects look like and how you would describe them.

When children have finished with the insect page, have the class turn to page 2. (Page 2 is a picture of a spider with the same questions as the insect page.) Use the same techniques to get children to describe a spider and complete page 2.

Use pre-labeled pictures when referring to a specific part of an insect or spider. This will enable ELL students to understand what you are speaking about and see the language in front of them.

Application/Practice (20 minutes):

Have students turn to page 3 in their spider book. They will see 2 pictures: one of a spider and one of an insect. The students job will be to color different parts of the insect and spiders bodies different colors that are written on the sheet. (i.e. Color the [picture of the insect][picture of eyes] red.) Have children complete their work book page. When children have finished have them share their pictures with their classmates. The Spider Book pages have been designed so that there are three different color versions of the page.

Homework/Review of Today’s Work:

Give children hand-out 1. (hand-out 1 is a two column page that has Insect [picture of an insect] on one column and Spider [picture of spider] on the other column. In each column there is one example of a type of insect and a type of spider. Have student ask their family members to help them come up with at least one other insect and one other spider.

Tell children that they will begin tomorrow’s morning meeting by sharing their findings with the class.
Part IV

I have addressed sheltered strategies and discourse in my lessons by selecting appropriate vocabulary and easy content concepts. I also used many visuals like pictures, props and Venn Diagrams. Manipulatives were used for child self-discovery of critical content. Important vocabulary was written on the board and transparencies. I referred back to the vocabulary through the lessons. I used gestures through the explanation of the content in order for children to better visualize the content that was being presented. I have allowed opportunities for group discussions both large and small, which included sharing ideas and brainstorming. Repetition allowed me to put emphasis on key words and phrases throughout the lesson. All of the above strategies helped me make content more understandable for ELL’s.
Label with Colors

Color the eyes purple.
Color the wings red.
Color the legs green.
Color the body sections yellow.

Color the eyes orange.
Color the wings green.
Color the legs blue.
Color the body sections red.
Label with Colors

Color the eyes blue.
Color the wings orange.
Color the legs green.
Color the body sections red.

Color the eyes purple.
Color the wings yellow.
Color the legs black.
Color the body sections brown.
Label with Colors

Color the eyes red.
Color the wings blue.
Color the legs green.
Color the body sections orange.

Color the eyes green.
Color the wings purple.
Color the legs yellow.
Color the body sections blue.
Insects and Spiders I know about

<table>
<thead>
<tr>
<th>Insects</th>
<th>Spiders</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Insect Image" /></td>
<td><img src="image2.png" alt="Spider Image" /></td>
</tr>
</tbody>
</table>

<p>| | |</p>
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<p>| | |</p>
<table>
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</thead>
</table>
Title: Introduction to Spiders- Lesson 1

Subject: Science, Language Arts, Math

Duration: 30 minutes

Learning Objectives:
1. The students will be able to differentiate between spiders and insects.
2. The students will be able to tell the main characteristics of spiders.

Vocabulary:
- Body sections
- Eyes
- Legs
- Wings

Materials:
- Spiders by Gail Gibbons
- Comparative worksheet for spiders and insects
- Copies of pages 6 and 7 (enough for entire class if needed) in Spiders
- Spiders Are Not Insects by Allan Fowler
- Venn Diagram
- Markers
- Sentence strips
- Venn Diagram spider/insect worksheet

Initiation:
At morning meeting, or the beginning of the day read Spiders by Gail Gibbons. Leave the book in a place where students can look at it freely. Make Spiders Are Not Insects by Allan Fowler available as well.

Have a Venn diagram either drawn with easily accessible markers nearby or hanging in the front of the room with sentence strips pre-cut and markers on hand. Spiders by Gail Gibbons should be nearby before the start of the lesson.

Have a copy of pages 6 and 7 in Gail Gibbons Spiders along with the comparative worksheet created for students. Pass out the copy of the book so students can refer to their own worksheet when completing the whole class activity.

Instructional Input:
Begin the lesson by asking the children if they remember the book about spiders that they read in class that morning. When the class responds affirmatively, ask them if they remember hearing about how spiders and insects were not exactly the same. Read the book Spiders Are Not Insects by Allan Fowler.

In completing the book ask the children if they can tell you how spiders and insects are different. Tell them we are going to record our answers using a Venn Diagram. Ask them if they remember how a Venn Diagram helps us learn information.
What types of information can a Venn Diagram help us learn? As the class answers your question be sure to record their answers.

Closure:
Tell the class that they are each going to get their very own Venn Diagram now. Are also going to get a paper that has the pages in Gail Gibbons book about how spiders and insects are different. The children are going to use 3 aids to help them: 1.) a worksheet b.) the Venn Diagram the whole class created 3.) the knowledge they learned from reading the books.

Inform the class that when they have finished that, they will then get a worksheet that compares spiders and insects. They will complete the page.

Assessment: Students must use complete sentences with correct spelling to fill in their Venn Diagram. Check comparison worksheets to be sure they have full understanding.

Enrichment: If students finish early give them a blank sheet of paper. Ask them to draw a picture of a spider and an insect. Tell them that they should be sure that the spider and insect have all the parts they are supposed to and no more. Have them label their pictures for easier assessment.

Modification:
Non-auditory learners may be given a copy of page 6 and 7 of Gail Gibbons book Spiders. Then can then refer to the worksheet to help them participate in the whole group discussion of how spiders are alike and different.

Have copied extra versions of the comparison sheet between spiders and insects. Children who are more visual, may look at the pictures and fill in the answers rather than write in words on the Venn Diagram how spiders and insects are alike and different.

Reflections:
* Were the students able to complete the Venn Diagram and comparative worksheet with relatively little problems?
* Were the students actively involved in the story?

Teacher Evaluation:
1. Were the learning objectives met?
2. Could the students work independently or did they need assistance and further direction/ explanation frequently?
Spiders and Insects

How many legs does the spider have? ____

How many eyes does the spider have? ____

How many body sections does the spider have? ____

Does a spider have wings? ____

How many legs does the insect have? ____

How many eyes does the insect have? ____

How many body sections does the insect have? ____

Does the insect have wings? ____

Crab Spider

Carpenter Ant
Spiders and Insects

How many legs does the **spider** have? ____

How many eyes does the **spider** have? ____

How many **body sections** does the **spider** have? ____

Does a **spider** have wings? ____

How many legs does the **insect** have? ____

How many eyes does the **insect** have? ____

How many **body sections** does the **insect** have? ____

Does the **insect** have **wings**? ____

**Tarantula**

**Bumble Bee**
Spiders and Insects

How many legs does the spider have? ____

How many eyes does the spider have? ____

How many body sections does the spider have? ____

Does a spider have wings? ____

How many legs does the insect have? ____

How many eyes does the insect have? ____

How many body sections does the insect have? ____

Does the insect have wings? ____

Black Widow

Cockroach
Facts about Spiders

Spiders have __________ legs.

Spiders have __________ body sections.

Spiders can have up to ________ eyes.

Spiders do or do not have wings.

(Circle one)
Facts about Insects

Insects have _______ legs.

Insects have _______ body sections.

Insects have _______ eyes.

Insects can or can not have wings?
(Circle one)
Use the Venn diagram below to compare Spiders (Arachnids) to Insects. Put the facts that are only about Spiders in the Spider circle. Put the facts that are only about Insects in the Insect circle. Put facts that are the same in the center.
Lesson 2
<table>
<thead>
<tr>
<th>Unit</th>
<th>Notions</th>
<th>Functions</th>
<th>Formulas</th>
<th>Structures</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiders Lesson 2</td>
<td>*cephalothorax</td>
<td>Describing</td>
<td>*spiders have</td>
<td>*place label on body part</td>
<td>*create own anatomically correct spider</td>
</tr>
<tr>
<td>*Spider Anatomy</td>
<td>*pedipalpi</td>
<td>Spiders</td>
<td>...</td>
<td>*partner work</td>
<td>*work labeling spider</td>
</tr>
<tr>
<td></td>
<td>*anatomy</td>
<td></td>
<td>*spiders have</td>
<td>*discussion with group</td>
<td>*labeling spider</td>
</tr>
<tr>
<td></td>
<td>*humans</td>
<td></td>
<td>up to ...</td>
<td>about what each body part does</td>
<td>*discussion</td>
</tr>
<tr>
<td></td>
<td>*fangs</td>
<td></td>
<td>*spiders are</td>
<td>(same 4 *’s as above)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*jaw</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>*abdomen</td>
<td></td>
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<tr>
<td></td>
<td>*legs</td>
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<td></td>
<td>*eyes</td>
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<tr>
<td></td>
<td>*spinnerets</td>
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</table>

Label spiders anatomy

* A __ is a spiders ___
* ___ are important because they help the spider do ___

Comparing Insects and Spiders

*spiders have ___ but insects have ___ but spiders have ___ but spiders and insects both have ___

*are similar because ___
*are different because ___
*are the same because ___
*are not the same because ___

*whole group Venn Diagram
*Individual Venn Diagram
*discussion
Lesson 2: Spider Anatomy

Duration: 2 x 45 minutes

Objectives:
  Content Objectives: The students will be able to create an anatomically correct spider using knowledge from the previous lesson and earlier this lesson.
  Language Objectives: The student will be able to identify the following parts of a spider: legs, eyes, fangs, spinnerets, abdomen, cephalothorax, jaw & pedipalpi

Materials:
- Are You a Spider? By Judy Allen and Tudor Humphries
- labeled body of the spider worksheet
- unlabeled body of a spider worksheet – with a word bank
- unlabeled body of a spider worksheet – with NO word bank
- worksheet with the parts of the spider written out (children will cut & paste it)
- spider sheet with parts on it (draw lines from body parts to correct labels)
- Venn diagram
- Sentence strips
- Markers
- Large paper spider
- Labels of parts of the spider to stick to the board
- Construction paper
- Glue
- Spider cards

Vocabulary:
- legs
- eyes
- fangs
- spinnerets
- abdomen
- cephalothorax
- jaw
- pedipalpi
- humans
- anatomy

Warm-up Activity (10-15 minutes):
  Read the story Are you a Spider? to the class. Ask the class the following questions: What do humans and spiders have in common? How are they different? What do insects and spiders have in common, how are they different?
  Create a Venn diagram comparing humans to spiders. Have the class brainstorm and fill in the different sides of the circle. Have the following sentence strips completed.
Have the ELL’s in the classroom place these strips where they feel the strips belong. Have the children justify their answers.

**Review/ Mini-Lesson (10-15 minutes):**

Bring the children’s attention to the board where the large paper spider cut out is hanging. Afterward, show the students where the labels to the different parts of the spider are on the board. Ask the children “where are the eyes on our spider? Can anyone put the label that says ‘eyes’ where the eyes are on our spider?”

Once the children appear to understand the purpose of the activity, have the children use the labels to label the parts of the spider. Be sure to correct students when they label incorrectly. When the children successfully finished labeling the different parts of the spider’s anatomy, remove the labels and have the children verbally tell you the different parts of the spider. Be sure to return the labels to their correct locations before moving on in the lesson any further.

Hand out spider worksheets. There are different worksheets for the different levels of English that some children may speak. Distribute worksheets as to how you see fit. Have students use the worksheets and label the parts of the spider. They may use the spider in the front of the room as a model to label, they may use any of the spider books that have been read thus far, or they can use the sheet that is already labeled to help them appropriately place the labels to their spiders. Students may use shoulder buddies to check each others work.

**Application/ Practices (45 minutes):**

Tell the children that they are going to create their own spiders. They are each going to pick a spider card out of a bag. The spider they pick out is the spider that they are going to create. Using popsicle sticks, construction paper, crayons and markers, they will each create a spider that has the following parts: 8 legs, 8 eyes, 2 body sections, fangs, spinnerets and a jaw.

Have the parts of the spider that are required to finish the activity listed on the board. Draw a picture of the spider and do the following: number the legs to show that the spider has 8 legs, number the eyes (in a different color) to show that the spider has 8 eyes, number the body sections (in yet another color) to show the spider has 2 body sections, and put stars on the spiders jaws, fangs and spinnerets.

Have the students follow up their creation activity by using the spiders to play a game with each other “identify the spiders body parts.” Explain to the children that they will want to do two things during this activity: 1. identify the body part of a spider and 2. explain in at least 1 sentence what each body part does or how it helps the spider.

**Homework/ Review of Today’s Work:**

Give children a half completed Venn Diagram comparing spiders to dogs. Tell children that they are to complete the diagram for homework. They can either fill in the rest of the diagram by writing or they can cut out the pieces at the bottom and paste the in the correct places in the diagram.
Part IV

I have addressed sheltered strategies and discourse in my lesson by selecting age appropriate content concepts and easy vocabulary that the children will be able to grasp. I used visuals of large spiders with appropriate labels that can be manipulated for children use and exploration. Charts with symbols were also used to complete a Venn Diagram comparing spiders to dogs. Important vocabulary was displayed on the black board and children were urged to use the vocabulary in their discussions with each other. I also used gestures through the lessons during many explanations of the content. I have allowed for opportunities for whole group and paired discussions, which included sharing ideas and brainstorming. I used repetition and put emphasis on key words and phrases throughout the lesson. All of these strategies have helped me make more content more understandable for English Language Learners.
Spider Anatomy

**Anatomy:** the body parts of any living creature

- **fangs**
- **pedipalps**
- **eyes**
- **jaws**
- **legs**
- **cephalothorax**
- **abdomen**
- **spinnerets**

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Spider Anatomy

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Spider’s Body Parts
Choose a part of the spider and write it on the correct line.

spinnerets  legs  eyes  fangs  pedipalps
Jaws  abdomen  cephalothorax
Spider Anatomy

Spider’s Body Parts
Cut out the labels and paste them on the correct line.

<table>
<thead>
<tr>
<th>legs</th>
<th>eyes</th>
<th>fangs</th>
</tr>
</thead>
<tbody>
<tr>
<td>jaw</td>
<td>pedipalps</td>
<td>abdomen</td>
</tr>
<tr>
<td>spinnerets</td>
<td>cephalothorax</td>
<td></td>
</tr>
</tbody>
</table>
Spider Anatomy

Spider’s Body Parts
Draw a line from the body part to the correct line.

- legs
- eyes
- fangs
- spinnerets
- jaw
- abdomen
- cephalothorax
- pedipalps
Comparing Spiders to Dogs

Venn Diagram

Spiders  Both  Dogs

- they both have eyes
- has 2 eyes
- has more than 2 eyes
- both have legs
- has only 4 legs
- has 8 legs
- both have 2 body sections
- can bite people, animals or insects
- can be tiny or very large

- has ears
- has a tail
- has spinnerets
- has pedipalps
- is covered in fur
- spins silk
- breaths oxygen
- are very tiny
- bark very loudly

Pieces of the Venn Diagram

Cut out the vocabulary and glue or tape it onto the correct side of the Venn Diagram
Title: Spider Anatomy
Subject: Science
Duration: 30 minutes

Learning Objectives:
1. The students will be able to identify parts of a spider.
2. The students will be able to label parts of a spider with no word bank.

Materials:
- Are You a Spider? By Judy Allen and Tudor Humphries
- Spider facts worksheet
- Labeled body of the spider sheet
- Unlabeled body of a spider sheet- with NO word bank
- Unlabeled body of a spider sheet- with word bank
- Transparency of labeled spider body (same picture as above)
- Over head projector
- Vis-à-vis markers
- Copies of spider survey (enough for class)

Vocabulary:
- Pedipalpi
- Cephalothorax
- Abdomen
- Spinnerets
- Eyes
- Legs
- Fang
- Jaw

Initiation:
Have transparencies made of a.) the labeled parts of a spiders body and b.) the unlabeled part of a spiders body. Also have the spider facts worksheet with questions and the unlabeled parts of the spider copied, stapled and ready to go.

Have the book Are You a Spider? by Judy Allen and Tudor Humphries in the room. Introduce several books on spiders to the class at morning meeting. Leave them at the front of the room for perusal.

Instructional Input:
Begin the class by reading the book Are You a Spider? By Judy Allen and Tudor Humphries. Take out the Over head projector and slide the transparency of the labeled spider body. Ask the students to tell you the different parts of the spider. Ask them if they can tell you a sentence that uses the word for a part of the spiders body in comparison to a insect. (For example “A spider has 8 legs and an insect only has 6.”)

Have the children turn to the page with the unlabeled diagram of a spider’s body in their spider book. Complete the diagram with the class.
Next, ask the class to give you some facts about spiders. Make a list on the board while the class responds.

Closure:
Tell the class to turn to the spider fact sheet in their spider book. They are to complete the fact sheet questions by using the information on the board. Put their spider book in their safe place folder when completed.

Assessment:
Check each child’s spider fact sheet to see that it is completed. Have them verify that their answers are correct with a nearby friend. When all work checked have them put their spider work back in their safe place folder.

Enrichment:
If children finish their work early, have them complete a spider survey. Have them survey their friends that have also finished their work.

Modifications:
Children that have a difficult time labeling a spiders body with no word bank may use an alternate picture with a word bank. If that is too difficult, have them draw a line from the word to the place where the word goes with a crayon. Tell the children to use different colors for different words.

Reflections:
* Were the students able to complete the work with the knowledge and understanding that they had of spiders up to this point?
* Was there another way of presenting the material that may have been more appropriate or hands-on?

Teacher Evaluation:
1. Were the learning objectives met?
2. Could the students work independently or did they need to ask for help on a regular basis?
3. Could the lesson have been structured differently for easier comprehension and understanding?
Spider Body Parts

- abdomen
- cephalothorax
- spinnerets
- pedipalpi
- fang
- jaw
- eyes
- leg
Spiders

Name the body parts.

How many legs?

Word Box
- legs
- palps
- jaws
- abdomen
- eyes
- spinnerets
- cephalothorax
Title: Spiders, Spiders Everywhere!-Lesson 3

Subject: Art, Science, Math, Writing

Duration: 45 minutes to 1 hour

Learning Objectives:
1. The students will be able to create an anatomically correct spider using knowledge that they have learned in the past 3 days.
2. The students will be able to utilize their fine motor skills efficiently in making the spider.

Materials:
• Enough Spider Cards from page 42 in Great Science Resource Book Evan-Moor EMC 398 for one for each student.
• Construction paper
• Crayons
• Markers
• Pencils
• Scissors
• Glue
• Popsicle Sticks

Initiation:
Enough spider cards should be copied and cut prior to the start of the lesson. Precut 1/2 sheets of construction paper of black, brown, red, green, orange and yellow.
Create your own spider as an example.
Have a list of qualities every student's spider must have.

Instructional Input:
Begin the activity by asking students names of the parts of spiders. As they respond, label the spider on the board with the children's answers.
Tell the children they are going to create their own spiders. They are going to pick a type of spider out of a bag and the type they draw is the type of spider they are going to create. Using popsicle sticks, construction paper, crayons and markers they will each create a spider with 8 legs, 8 eyes, fangs, spinnerets and 2 body sections. The helper of the day may pass out spider cards as teacher distributes supplies.
Tell them to begin working when they receive a spider card, materials and have a pencil and glue stick on their desk.

Closure:
Leave the example spider at the front of the room for all to look at. On the board, write the parts of the spider that each child needs for their own spider. Those parts are: 8 legs, 8 eyes, 2 body sections, fangs/palps, spinnerets.

Assessment:
• A completed spider with 2 body parts, 8 legs, up to 8 eyes, fangs and spinnerets
• Each child’s name must be on the underside of the spider.
• Have children take a white sheet of paper and write the type of spider and the age of the spider.

**Enrichment:** There are 2 options that children may choose from if work is completed early.

1. An acrostic spider. Have them write the type of their spider they just created up top. On the lines across, have children describe their spider using adjectives in complete sentences.
2. Completing spider puzzles online at the following websites.

**Modification:**
Students that a more difficult time cutting may pick up the pre-cut legs, and body pieces so all that lefts to be done is gluing. Also, have pre-cut types of spiders already printed out so these students may choose the correct type of spider and just color the paper rather than write it over. Have circular objects for children to trace if circles are difficult to draw for children.

**Reflections:**
• Were the students able to complete the task with relative ease?
• Were the students involved in the activity?

**Teacher Evaluation:**
1. Were the learning objectives met?
2. Could the students work independently? Would they have been better in pairs?
3. Did the students know what they were doing or did they need more direction?
Lesson 3
<table>
<thead>
<tr>
<th>Unit</th>
<th>Notions</th>
<th>Functions</th>
<th>Formulas</th>
<th>Structures</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiders</td>
<td>*spinnerets</td>
<td>Explain function of spider webs</td>
<td>*webs are imp. because *spiders use their webs to</td>
<td>*trap</td>
<td>*discussion with group *physically labeling *verbally labeling *listening to stories</td>
</tr>
<tr>
<td>Lesson 3</td>
<td>*silk</td>
<td></td>
<td></td>
<td>*catch</td>
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<tr>
<td>*Web-</td>
<td>*web</td>
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<tr>
<td>Building</td>
<td>*trap</td>
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</tr>
<tr>
<td>Spiders</td>
<td>*tangled web</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>*funnel web</td>
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<tr>
<td></td>
<td>*orb web</td>
<td></td>
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<tr>
<td></td>
<td>*sheet web</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>*triangle web</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Describe how spiders build their webs</td>
<td>*spiders use ___ to build their webs *spiders build webs by ___</td>
<td>*construct</td>
<td>*cooperative learning *creating spider webs *discussion in pairs *listening to books</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*spin</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>*build</td>
<td></td>
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<td></td>
<td></td>
<td>Identify 5 types of webs spiders build</td>
<td>*A ___ web looks like ___ *A ___ web has ___ shape *___ web reminds me of</td>
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</table>
Lesson 3: Web-Building Spiders

Duration: 3 x 45 minute periods

Objectives:

**Content Objectives:**
1. Students will be able to describe the function of spider webs.
2. Students will be able to describe how spiders build their webs.

**Language Objectives:**
1. Students will be able to identify 5 types of webs that spiders build.

Materials:
- Picture of each type of web hanging on board
- Labels of names of webs written on sentence strips that will stick to board
- *How Spiders Make their Webs* by Jill Bailey
- Yarn (white, off white, gray)
- 5 different 4 x 4 sheets of bulletin board paper
- glue
- scissors
- 5 picture packets of various pictures of one type of webs
- color & label the webs sheet
- Cloze activity sentences about webs sheet

Vocabulary:
- Spinnerets  *tangled web*
- Silk  *funnel web*
- Web  *orb web*
- Trap  *sheet web*
- triangle web

Warm-up Activities (10-15 minutes):
Have the different pictures of the webs hanging on the board. Bring the children’s attention to the various types of webs. Ask the class to brainstorm names for these different types of webs. Tell them that as we read *How Spiders Make their Webs*, we will use the labels that are on the board to find the names for each type of web.

When the story has been completed, have the students mix up the labels and place them correctly.

Review/Mini-Lesson (10-15 minutes):
Tell the class that they have an activity to complete. During this activity they will have to label webs with the correct names. Afterwards, they will have the assemble sentences that are true about spider webs and spiders in general. When they have finished the activity, children may choose a friend that is also finished and check the work to be sure it is correct. Have student explain why their sentences are true and valid statements about spiders.
Application/ Practice (60-75 minutes):
Assign the children to groups of 5-6 students. (Depending upon the number of students in the classroom, the groups may be smaller. There must be 5 groups, no more!). Give every group a packet of pictures. Each group will be assigned to create a specific type of spider web. They will have their own piece of bulletin board paper, yarn and glue to make their web. Instruct the children in how to work well in a group:
   a. pick the picture of the web that you want to create
   b. use pencils to draw the web on your paper first
   c. glue yarn over the pencil on the paper
   d. color the final product

Homework/ Review of Today’s Work:
Children will pick one type of web. Their job is to draw a picture of the type of web in a place that a person might find that web. Under their picture they will make 2 sentences about that type of web. A hand-out will be given for ELL’s so they can choose which statements are true and copy those sentences to their drawing.
Part IV

Lesson 3 encompasses the following strategies: gesturing, watching others label, listening, discussion (large and small groups), visuals and realia, framing the main idea and modeling. The variety of strategies gives the students greater opportunities to understand the content of the lesson. Through gesturing, such as pointing or the motion of crawling, students are better able to understand the action or task that I have asked of them even if they do not know the language. Watching others label the spider also helps English Language Learners because they can see what other children are doing in order to succeed and the students are modeling what I want the rest of the class to do.

Listening to read-aloud stories helps expose ELL’s to content vocabulary that they may otherwise not hear except for in school. It also aids in that it introduces the topic at hand for the day, activates prior knowledge and it coincides with the discussion groups because children will use what they know in order to complete a short warm-up activity I have provided for them. Visuals and realia are used by the pictures of various webs on the board with the labels that the children can manipulate allow for student exploration and trial and error. When time is available, students can move the labels and play games with each other attempting to identify the various webs correctly. Among the pictures of webs are pictures of real web dwelling spiders that the children enjoy looking and observing.
Web-Building Spiders

Directions
Draw a line from the web name to the correct spider web

1. tangled web
2. funnel web
3. sheet web
4. Triangle web
5. orb web

Spider Web Sentences

Directions
Complete the sentences using spider vocabulary

1. A spider web is made out of ____________.
2. A spider spins silk from it's _________________.
3. A triangle web is a web that has a shape of a _________________.
5. The web that is shaped like a tornado is a _____________ web.
Web-Building Spiders

Directions
*Draw a line from the web name to the correct spider web*

- Tangled web
- Funnel web
- Orb web
- Sheet web
- Triangle web

Spider Web Sentences

Directions
*Complete the sentences using spider vocabulary*

1. A spider web is made out of __________.
2. A spider spins silk from it's __________.
3. A triangle web is a web that has a shape of a __________.
5. The web that is shaped like a tornado is a ________ web.

| Funnel | spinnerets | orb | triangle | silk |
My favorite type of web is a ________________ web.
Spider Web Facts

1. In the book *Charlotte’s Web*, the gray spider spun herself an orb web our of silk.
2. An orb web is a circle shape and the also the most common type of spider web.
3. Most spiders that live in funnel webs have poisoness bites.
4. A funnel web has the same shape as a tornado.
5. Tangled webs have no shape at all. They look like big messes of silk.
6. On Halloween, many people hang cobwebs on their doors and porches. These cobwebs look just like tangles webs.
7. Triangle webs are harder to find than orb webs.
8. A triangle web has the shape of a triangle.
9. Sheet webs are opaque, which means that we can’t see through sheet webs like other spider webs.
10. Sheet webs can be found in trees where gypsy moths usually live.
Triangle Webs

Hyphionotes paradoxus  © 2002 Samuel Zschokke
Some spiders spin triangle webs. A triangle web is fastened at three points. The web's bands of dry and sticky silk trap insects.
Funnel Webs
Spiders create funnel webs, too. The top is big and the bottom is small. The web is held in place by lines of silk. The spider sits at the bottom and waits for an insect to fly or walk in.
The most beautiful spider web of all is the orb web.
Tangled Web
Some spiders are web weavers. They spin webs to catch their food. There are spiders that weave tangled webs. The spider spins a tangled mass of silk. When an insect is trapped, the spider runs out to get it.
Sheet Webs

Nephila senegalensis © 2004 Samuel Zschokke
Other spiders weave sheet webs. The spider hangs upside down beneath the web. When an insect hits the sheet web, the spider quickly pulls it through the webbing.
Web Hunt

Directions: Hunt for spiderwebs at school or around your home. Record your observations on the chart below. (Remember: Look at, but don’t touch, the spiders.)

<table>
<thead>
<tr>
<th>Orb Web</th>
<th>Funnel Web</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Orb Web" /></td>
<td><img src="image2" alt="Funnel Web" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Triangular Web</th>
<th>Sheet Web</th>
<th>Cobweb</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image3" alt="Triangular Web" /></td>
<td><img src="image4" alt="Sheet Web" /></td>
<td><img src="image5" alt="Cobweb" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Type of Web</th>
<th>Size of Web</th>
<th>Spider Observations</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

Spiders © 1998 Creative Teaching Press
Cut me out. Color me in. Name me too! Then hang me in your web.
Title: Web-Building Spiders-Lesson 4

Subject: Science, Language Arts, Cooperative Learning, Reading

Duration: 2/3 x 45 minutes

Learning Objectives:
1. The students will know how spiders build their webs.
2. The students will be able to identify 5 types of webs that are built.
3. The students will understand the purpose of spider webs.

Materials:
- How Spiders Make Their Webs by Jill Bailey
- Spiders by Seymour Simon
- White Yarn (4-5 pieces per child)
- Bulletin board paper
- Glue
- Scissors
- Spider cut outs specific to funnel webs, orb webs, sheet webs, tangled webs and triangular webs.
- 5/6 picture packets of different web types and the spiders that inhabit them.
- Gray yarn
- White yarn
- Off white yarn

Vocabulary:
- Spinnerets
- Silk
- Web
- Trap

Initiation:
At the beginning of the day, read select pages from Seymour Simon’s Spiders and How Spiders Make Their Webs by Jill Bailey. Tell the class that later today we will be learning about one type of spiders called Web-Building spiders.

Group children in groups of 4 to 5. If students already sit at tables of 4 or 5 have each table be its own group. Have picture packets of different types of spider webs and the spiders that live in them. Depending upon the number of groups you may need more than 5 types of webs.

Draw one persons name from each group. That person will draw a web type out of a bag. That group will create that web type.

Instructional Input:
Assign each group (either randomly or not) a web type. Give every group member a picture packet that they will look at in order to create the web type their group has been assigned.
Explain directions in the following manner:
1. Each table is going to work together as a group.
2. Each group is going to get a web type that spiders make.
3. Every group member will receive a picture packet of the web type their group was assigned.
4. Using yarn, glue and bulletin board paper, each group will create the type of web their group was assigned.
5. When the web type has been completed, each group member will cut out a spider, color it and put their name on it.
6. Each child’s spider will be placed in their web.

After explaining directions to the class, it may prove useful to write on the white board or even give a mini-lesson on how to work in groups. Make a list of the things that the group must do before working. For example, on the board a teacher may want to write:
1. Every one should look at the picture packet.
2. Group should discuss the webs they see in the picture packet.
3. Group should choose 1 or 2 webs they like best.
4. Group should ‘vote’ on which packet they like best.
5. Group should use a pencil to draw out web first.
6. Glue yarn on top of drawn out web.

Closure: After the group has built their web, each child will use construction paper to create their own spider for their group’s web.

Assessment:
- Every child’s x amount of yarn will be a part of the web.
- Each child’s spider will be
  o anatomically correct
  o in the web somewhere
  o have the child’s name on it.

Enrichment: Each group member will write one sentence describing the type of spider that lives in their spider web.

Modifications:
1. Children with low reading skills may use pictures to better understand the type of web the group will be building.
2. Children with fine motor skill difficulty may use spider cut-outs.

Reflections:
- Were the students actively involved in the activity?
- Were the students able to work cooperatively?
- Could the students create a way to work together to build the web with the help of a teacher or aid?
Teacher Evaluations:
1. Were the learning objectives met?
2. Could the students learn about their group’s spider?
3. Did the students grasp the task at hand or did they need more guidance and direction?
4. Was there another informational book solely on web building spiders?
Cephalothorax

Legs
jaws

eyes
abdomen
spinnerets
pedipalpi
Arachnid
Lesson 4
<table>
<thead>
<tr>
<th><strong>Unit</strong></th>
<th><strong>Notions</strong></th>
<th><strong>Functions</strong></th>
<th><strong>Formulas</strong></th>
<th><strong>Structures</strong></th>
<th><strong>Activities</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiders Lesson 4 *Non-Web Building Spiders</td>
<td>*hunting spider *jumping spider *wandering spider *tarantula *shade *cool *warm *dry *protected *safe</td>
<td>Identify spider habitat</td>
<td>*NWB spiders live where ___ * ___ type of place is where a NWB spider might live</td>
<td>*shade *cool *warm *protected *safe</td>
<td>*listening to books *reading books *pair work *scavenger hunt *whole group predictions *charting *mapping</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identify 4 types of NWB spiders</td>
<td>* ___ is 1 type of NWB spider * ___ is another type of NWB spider *There are ___ types of NWB spiders</td>
<td></td>
<td>*individual book hunt *listening to books *whole group discussion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Comparing NWB spiders to WN spiders</td>
<td>*both WB and NWB spiders</td>
<td>*where as *rather than *on the other hand *unlike *different than *only</td>
<td>*group work *family talk *visuals *sharing *paired correction *group work</td>
</tr>
</tbody>
</table>
Lesson 4: Non-Web Building Spiders

Duration: 45 minutes

Objectives:

Content Objectives:
1. Students will be able to identify places where non-web building spiders live
2. Students will be able to identify 4 types of non-web building spiders
3. Students will be able to complete Venn diagram comparing web-building spiders to non-web building spiders

Language Objectives:
1. Students will use spider vocabulary to build sentences about non-web building spiders and web-building spiders.

Materials:
- The Lady and the Spider by Faith McNulty
- chart paper
- markers
- map of playground (11 x 17)
- maps of playground (hand-outs)

Vocabulary:
- hunting spider
- jumping spider
- wandering spider
- Tarantula
- shade
- *cool
- *warm
- *protected
- *safe

Warm-up Activities (10-15 minutes):
Begin the class by reading The Lady and the Spider. Ask the class where the spider in the story lived. Show the class the map of the playground and have them show you where they think the spider in the story might stay if he were to live in our school playground.

Follow up the introduction to the lesson with a book hunt. Have the children use the books that are displayed in the front of the room and look at the spiders in the books for specific spider names and locations of where they live. Have students share their findings with their friends for another 2 minutes after the book hunt.

Use chart paper to create a class list of the characteristics of where non-web building spiders might live. (Look for answers like shady, cool, no sun, trees, under rocks, in bushes, in gardens, tree branches, under the play set, under the dirt/grass.)

Review/Mini-Lesson (10-15 minutes):
Tell children that we have a fun activity to do that will bring us outside but we will not be able to go there until the following activity is completed. Inform children that they are going to be working in pairs of boy/girl to create sentences about non-web
building spiders. Tell children that they want to create as many sentences as possible, but the sentences have to make sense.

When the children have completed that activity, have them read their sentences to each other and explain why the sentences they have created are true.

Application/ Practice (20-25 minutes):

Distribute the maps of the playgrounds. Tell the children that they will pair up in groups of 2 or 3. (Have the children do that immediately). Each pair of students will get one clip board and take a pencil. When we go outside, the pairs of students will walk around the playground looking for spider webs, egg sacs, non-web building spiders, spider silk and web building spiders. They will mark where they find everything on their map. When we come in from outside, we will use the ‘data’ to label our large playground map.

Homework/ Assessment:

Have children draw a map of their yard at home. Have them mark where they predict a spider may in fact live. Tonight, have children use their maps to mark where they find any spiders or spider webs at their homes and have them talk to a family member about where spiders may live in their houses.
Lesson 4 addresses sheltered strategies and discourse in the lesson by first selecting age appropriate content concepts and easy vocabulary. Next, I framed the main idea by activating the students prior knowledge and reading aloud a book on the lesson topic of the day, non web-building spiders. I used books and pictures to brainstorm where these creatures might live. As a whole class, we brainstormed what other places these spiders may in fact live. Afterward, we mapped out our playground and marked on our maps where we think we might find non web-building spiders, being sure to emphasize the key vocabulary for the day and re-iterating the structures for the day as well. I have allowed opportunities for group discussion, large and small in the beginning, during and after the main lesson. Repetition put emphasis on the key vocabulary for the day and the phrases through the lesson. All of these strategies helped me make content more accessible for ELL’s.
Title: Non Web-Building Spiders-Lesson 5

Subject: Science, Social Studies

Duration: 30-45 minutes

Learning Objectives:
1. Students will be able to list places non-web building spiders live.
2. Students will be able to identify what these spiders eat.
3. Students will be able to identify 4 different types of non web-building spiders.

Materials:
- The Lady and the Spider by Faith McNulty
- Spiders by Seymour Simon
- Outside and Inside Spiders by Sandra Markle
- Chart Paper
- Markers
- Expert Weaver Web Math (enough copies for all)

Vocabulary:
- Hunting spider
- Wandering spider
- Jumping spiders
- Tarantula

Initiation:
Make a diagram of the outside playground area. Make enough copies for every student to have one and have one copy on a 11 x 17 scale. This will be used for whole class data.

The morning of the lesson have the students read The Lady and the Spider by Faith McNulty during morning meeting. Briefly talk about why this spider didn’t live in a web like a lot of other spiders the children have seen before. Ask the students if they have ever seen a spider when it wasn’t in a web.

Instructional Input:
Tell the students that today we are going learn about another type of spider, a non-web building spider. These spiders can live just about anywhere that’s not in a web. There are several different names for these spiders. Hunting spiders, wandering spiders, jumping spiders and Tarantula’s are just a few names of the many spiders that do not live in webs.

Give each child a map of the playground. Ask the children if they can tell you what the map is. When the children respond with “it’s our playground” tell them that they are correct. Next, tell the children that today we are going to take a walk around our playground together as a class. (If there is additional help in the room, split the children up into groups so there is one adult per group.) Explain that they are going to take their maps and a pencil and walk around outside looking for places a spider that
doesn't live in a web might in fact hide and create a home. Tell them that when they see a place where they think a non web-building spider might live, or they see one, to make an X on that spot on the map, or draw a picture of spider.

Closure:
Have children put a pencil on their desk but bring their maps to the floor. Ask students for volunteers to give guesses as to where spiders may live on the playground. Make a chart of the children's answers while marking their guesses on the large of the playground.
Take a second sheet of chart paper and pose the following questions to the students. “What do the places we think spiders may live have in common? What would make a spider choose a certain place to live? What does that spider need to stay safe?” List characteristics that non web-building spiders need in order to survive. Finish the hour with a Venn Diagram by using the information the class gathered.

Assessment:
• Children should have marked at least 3 places on their maps of the playground for where they think non web-building spiders may live.
• Check the second worksheet entitled “If I don’t live in a Web” for spelling, capitalization and spelling of words.

Enrichment: If children finish writing their sentences about where they might live if they were a non web-building spider, have them work on Expert Weaver Web Math.

Modifications: If children have difficulty writing sentences, have them work in pairs, telling each other in full sentences where they would live if they were a non web-building spider and why they would live there.

Reflections:
• Was there another activity that would have been more effective and a smoother transition for material?
• Could the students complete the task at hand?

Teacher Evaluations:
1. Were the learning objectives met?
2. Did the children understand the purpose of the assignment?
3. Did the students enjoy the experiment? Did it work?
<table>
<thead>
<tr>
<th>Places I might live if I were a spider on Guilford Lakes playground.</th>
<th>Characteristics of the places I would live.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Place 1:</td>
<td>Noise:</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Sentence:</td>
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<td></td>
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<tr>
<td>Place 2:</td>
<td>Temperature:</td>
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<td></td>
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<tr>
<td>Sentence:</td>
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<td></td>
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</tr>
<tr>
<td>Place 3:</td>
<td>Weather:</td>
</tr>
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<td>Sentence:</td>
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<td>Location:</td>
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<tr>
<td>Food:</td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Let's compare the two types of spiders. There are Web-Builders and Wandering Spiders.

<table>
<thead>
<tr>
<th>Web-Builders</th>
<th>Wandering Spiders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make webs</td>
<td>Do not make web, crawl on ground.</td>
</tr>
<tr>
<td>tiny eyes, poor eyesight</td>
<td>good eyesight: two large front eyes.</td>
</tr>
<tr>
<td>Sensitive legs, good sense of touch.</td>
<td>larger, powerful jaws</td>
</tr>
<tr>
<td>Web-builders have three claws on each foot. The middle claw holds the silk.</td>
<td>larger sharp fangs</td>
</tr>
<tr>
<td>Long skinny legs to help them balance and glide over their webs.</td>
<td>Wandering spiders have only two claws on each foot with a pad of hair between to help their grip.</td>
</tr>
<tr>
<td></td>
<td>Hairy legs and body. The hair is sensitive and helps them find their prey.</td>
</tr>
</tbody>
</table>

Use the information in the chart above to make a poster. You need to compare a Web-Builder Spider to a Wandering Spider. Include charts and illustrations. You may design the poster anyway you want. You can draw or cut magazine pictures or get pictures from the Internet. Be neat and spell correctly.

Ideas:

1. Make a Venn Diagram.
2. Make a comparison chart with facts and pictures.
3. Draw a large environment and draw different spiders and label.
Use the Venn Diagram below to compare Web-builder spiders to Wandering Spiders. Put facts about each spider in the circle under their label. Put facts about what all spiders have in common in the center.

Name____________________  Date________________
Lesson 5
<table>
<thead>
<tr>
<th>Unit</th>
<th>Notions</th>
<th>Functions</th>
<th>Formulas</th>
<th>Structures</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiders</td>
<td>*entrée</td>
<td>Identify at least 3 types of food</td>
<td>*1 type of food spiders eat is __</td>
<td>*more than</td>
<td>*group discussion</td>
</tr>
<tr>
<td>Lesson 5</td>
<td>*menu</td>
<td>spiders also eat __</td>
<td>spiders also eat __</td>
<td>*less than</td>
<td>*brainstorming</td>
</tr>
<tr>
<td>*Spider Diet</td>
<td>*main course</td>
<td>spiders think ___ tastes good</td>
<td>spiders also eat __</td>
<td>*the same as</td>
<td>*mapping</td>
</tr>
<tr>
<td>*Spider Function</td>
<td>*dessert</td>
<td>Specify $ amounts; add/sub $</td>
<td>spiders also eat __</td>
<td>*is too expensive</td>
<td>*listening</td>
</tr>
<tr>
<td></td>
<td>*beverages</td>
<td></td>
<td>spiders also eat __</td>
<td>*very cheap</td>
<td>exercises</td>
</tr>
<tr>
<td></td>
<td>*prices</td>
<td></td>
<td>spiders also eat __</td>
<td>*inexpensive</td>
<td>*creating</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use social conversation</td>
<td>I would like to order ___ to start</td>
<td>*partner work</td>
<td>menu</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>___ would be nice for ___</td>
<td>*creation of menu</td>
<td>*partner work</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>I want ___</td>
<td>*decision making</td>
<td>writing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>thank you</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>hello</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>how are you today</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>thank you, I'm fine</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- *group: discussion
- *brainstorming: mapping, listening, exercises, creating, menu
- *partner work: creation of menu, decision making, charting, writing
- *role play: group work, pair work, decision making, speaking
Lesson 5: Spider Diet and Spider Function

Duration: 45 minutes to 1 hour

Objectives:

Content Objectives:
1. Students will be able to identify at least 3 types of food spiders eat.
2. Students will be able to specify money amounts and add/subtract money.

Language Objectives:
1. Students will use the vocabulary of a spider diet to create ‘spider’ dinner menus.
2. Students will use social conversation to buy dinner for their spiders.

Materials:
- oak tag or construction paper
- crayons, markers, colored pencils
- pencils
- chart paper
- marker
- rough draft menus for whole class
- cut out words of spiders dinner
- rulers
- The Roly-Poly Spider
- Large blank menu for whole class to create

Vocabulary:
- Entrée
- Main Course
- Dessert
- Beverages
- Prices
- menu

Warm-up Activities (10-15 minutes):
Tell the class that we are going to be reading a story. As we read the story, we are going to be looking for different things that the spider in the story eats. (Have the statement what spiders eat written on the top of the chart paper with one example underneath, perhaps insects. Read The Roly-Poly Spider to the class. Chart what children say the spider eats on chart paper.

Review/ Mini-Lesson (10-15 minutes):
Show the children the large menu hanging on the board. Ask the children what each of the headings mean. What is an Entrée? Who can tell me an example of a Main Course? Where would we see a menu? Do we have them in our houses? Does dessert come at the beginning of the meal or at the end?
Have the children give you an example of an Entrée. Write the example on the board. Have another student give you a price of that entrée while you write it down. Ask for one more example of an entrée and repeat what you had done above. Follow the same format for Main Course, Dessert and Beverages. When the menu has been created, ask students to pick one entrée, one main course, one dessert and one beverage. As they choose their choices, you write down the prices vertically. Then as a class, we will add the prices together and see how much our spider dinner will cost.

Application/Practice (20 minutes):

Provide students with a rough draft copy of a menu, a rubric of what is needed and a list of things that a spider may eat along with prices. Students can use the list to create their rough draft menus. ELL students can either copy directly from the list of food and prices OR they can cut the vocabulary and put it where they want on the menu.

When children have completed their rough draft and checked it by a teacher or para-professional, have them take a piece of construction paper and begin to create a menu for the class Spider Diner. The model menu will remain in the front of the room for children to look at and model. As children finish, have them check the rubric that was given to them to be sure they have everything they need for their menus.

Homework/Assessment:

Ask children to look at our class list of what spiders eat. Ask children if they have ever seen any of these creatures at their own homes. Tell them that they are to draw a picture of these creatures in the places they the children have seen the various insects. At the bottom of the page, they are to write one sentence for each insect that they have seen at their own home.
Part IV

Lesson 5 addresses sheltered strategies and discourse in the lesson by the following strategies: framing the main idea, writing the objective on the board, brainstorming, modeling, creating, explaining and discussing. The lesson begins with my drawing attention to the objective written on the board. A small discussion of the lesson draws me into the introduction of the vocabulary for the day which is displayed on sentence strips on the board. As a class, we read a story and discuss why the spider eats what he eats and break off into pairs to further discuss if you were a spider what might you eat. We reconvene as a whole group, share our ideas and the task is given after modeling what a menu looks like and how to create our own spider diner menus. The children will each make their own menu. ELL’s who need the language can use the chart list and cut our the different types of insects and glue them to the paper. ELL’s are also paired with a native English speaker who helps them understand what specific insects are. In completing the task, the students will play in groups and order food at the spider diner choosing from a variety of menus. The notions are still displayed at the front of the room and children are encouraged to use the formulas and structures of the lesson in their discussions.
Menu

Entrée
1. $ |
2. $ |
3. $ |

Main Course
1. $ |
2. $ |
3. $ |

Dessert
1. $ |
2. $ |
3. $ |

Beverages
1. $ |
2. $ |
3. $ |
## Spider Menu Choices

<table>
<thead>
<tr>
<th></th>
<th>mosquitos</th>
<th>crickets</th>
</tr>
</thead>
<tbody>
<tr>
<td>daddy long legs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>millipedes</td>
<td>centipedes</td>
<td>caterpillars</td>
</tr>
<tr>
<td>lady bugs</td>
<td>gypsy worms</td>
<td>frogs</td>
</tr>
<tr>
<td>small birds</td>
<td>grasshoppers</td>
<td>beetles</td>
</tr>
<tr>
<td>moths</td>
<td>butterflies</td>
<td>cockroaches</td>
</tr>
<tr>
<td>gnats</td>
<td>flies</td>
<td>bugs</td>
</tr>
<tr>
<td>midges</td>
<td>ants</td>
<td>june bugs</td>
</tr>
<tr>
<td>other spiders</td>
<td>slugs</td>
<td>lightening</td>
</tr>
<tr>
<td>dragon flies</td>
<td></td>
<td>bugs</td>
</tr>
</tbody>
</table>
List of Things Spiders Eat

* Flies
* Bugs
* Grasshoppers
* Choice beetles
* Moths
* Butterflies
* Tasty cockroaches
* Gnats
* Midges
* Daddy longlegs
* Centipedes
* Millipedes
* Mosquitoes
* Crickets
* Ants
* Flying ants
* Frogs
* Small birds
* Cockroaches
* June bugs
* Other spiders
* Slugs
* Lightning bugs
* Lady bugs
# Venn Diagram

**comparing**

**Web-Building & Non Web-Building Spiders**

<table>
<thead>
<tr>
<th>Web-Builders</th>
<th>Non Web-Builders</th>
</tr>
</thead>
<tbody>
<tr>
<td>• makes webs</td>
<td>• Do not make webs, crawl on the ground</td>
</tr>
<tr>
<td>• tiny eyes, poor eyesight</td>
<td>• good eyesight: 2 large front eyes</td>
</tr>
<tr>
<td>• sensitive legs, good sense of touch</td>
<td>• larger, powerful jaws</td>
</tr>
<tr>
<td>• web-builders have three claws on each foot. The middle claw holds the silk</td>
<td>• larger sharp fangs</td>
</tr>
<tr>
<td>• Long skinny legs to help them balance and glide over their webs</td>
<td>• Wandering spiders have only 2 claws on each foot with a pad of hair between to help their grip</td>
</tr>
<tr>
<td></td>
<td>• Hairy legs and body. The hair is sensitive and helps them find their prey.</td>
</tr>
</tbody>
</table>

![Venn Diagram Image]
Title: Spider Diet & Spider Function- Lesson 6

Subject: Reading, Writing

Duration: 45 minutes

Learning Objectives:
1. Students will be able to identify the types of food spiders eat.
2. Students will be able to write complete sentences with correct capitalization and punctuation.

Materials:
- Oak tag for sturdy menus
- Crayons, markers, colored pencils
- Sloppy copy journals
- Pencils
- Chart paper
- Marker
- Spider web maze (enough copies)
- The Roly-Poly Spider
- Cut out words of spiders dinner

Initiation: The morning of the lesson, read The Roly-Poly Spider by Jill Sardegna to the class.
Have spider resource books available for children to browse.
Have a piece of chart paper hanging for ready access.

Instructional Input:
Remind the children of the story of Roly-Poly. Ask children if they remember what Roly ate. Write down their answers as they give them to you. Ask them what he would have eaten had the book continued on. After a list is drawn, tell children they are now going to create a menu for their spider that they created last week.
Give the following directions:
1. You will create a menu in your sloppy copy journals.
   a. You will use full sentences for your menu
   b. You will need to create choices for entrée, main course and dessert.
2. Teacher will check spelling, punctuation and sentences.
3. Child will take piece of oak tag and make a final copy.
4. Children will decorate their menu's.

Closure: When menus are complete, hang them in hall.
Assessment:
- Menu’s will be checked for complete sentences, punctuation, capitalization and spelling.

Enrichment: Have students do spider web maze to pass time.

Modifications: Students that have difficulty writing may use printed words available. They can paste them on their final menu.

Reflections:
- Did the students enjoy the activity?
- Were the students involved in the activity or did their need to be more substance?
- Did the students understand what was going on or did they need more guidance?

Teacher Evaluations:
1. Were the learning objectives met?
2. Did the students understand the task at hand?
What's for Lunch?

Suppose you have a restaurant just for spiders. What do you serve? Fill in the menu with delicious spider treats. Remember—spiders can only slurp, not chew.
Lesson 6
### Functional Notational Chart --- Lesson 6

<table>
<thead>
<tr>
<th>Unit</th>
<th>Notions</th>
<th>Functions</th>
<th>Formulas</th>
<th>Structures</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiders</td>
<td>*spiderling</td>
<td>Explain the process of</td>
<td>*A spider balloons because ___</td>
<td>*ordinal numbers (first, second, third, fourth,)</td>
<td>*listening to books</td>
</tr>
<tr>
<td>Lesson 6</td>
<td>*egg sac</td>
<td>ballooning</td>
<td>*A spider's balloon is made of ___</td>
<td>*next</td>
<td>*listening to friends</td>
</tr>
<tr>
<td>*Spider</td>
<td>*ballooning</td>
<td></td>
<td>*Without ___ a spider can't balloon</td>
<td>*finally</td>
<td>*visuals</td>
</tr>
<tr>
<td>Reproduction</td>
<td>*reproduction</td>
<td></td>
<td></td>
<td>*in conclusion</td>
<td>*labeling</td>
</tr>
<tr>
<td></td>
<td>*wind</td>
<td></td>
<td></td>
<td>*lastly</td>
<td>*defining</td>
</tr>
<tr>
<td></td>
<td>*jump</td>
<td></td>
<td></td>
<td>*primarily</td>
<td>*connecting</td>
</tr>
<tr>
<td></td>
<td>*launch</td>
<td></td>
<td></td>
<td></td>
<td>*draw conclusions</td>
</tr>
<tr>
<td></td>
<td>*float</td>
<td></td>
<td></td>
<td></td>
<td>*extended thinking</td>
</tr>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Use</td>
<td></td>
<td>*___ is necessary for a spider to balloon</td>
<td>*experiment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>appropriate</td>
<td></td>
<td>*First a spider must ___</td>
<td>by experience</td>
<td></td>
</tr>
<tr>
<td></td>
<td>vocabulary</td>
<td></td>
<td></td>
<td>*group</td>
<td></td>
</tr>
<tr>
<td></td>
<td>to explain</td>
<td></td>
<td>*Next a spider will ___</td>
<td>discussion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>how a spider</td>
<td></td>
<td></td>
<td>*draw</td>
<td></td>
</tr>
<tr>
<td></td>
<td>balloons</td>
<td></td>
<td>*Finally, ___ happens</td>
<td>observations</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>*___ needs to jump off a branch</td>
<td>*pair</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>*When spiders get to big to live in the web, they</td>
<td>discussion</td>
<td></td>
</tr>
</tbody>
</table>

*experiment by experience *group discussion *draw observations *pair discussion *written reflection *draw observation
Lesson 6: Spider Reproduction

Duration: 2 x 45 minute periods

Objectives:

**Content Objectives:**
1. The student will be able to define spiderling
2. The student will be able to explain the process of ballooning

**Language Objectives:**
1. The student will be able to use appropriate vocabulary to explain how a spiderling balloons

Materials:
- Inside and Outside Spiders by Sandra Markle
- Spiders by Seymour Simon
- Ziploc bags
- Yarn
- Plastic spiders
- Scissors
- Pencil

Vocabulary:
- Spiderling
- Egg sac
- Ballooning
- Reproduction

* wind
* jump
* launch
* float

Warm-up Activities (10-15 minutes):
Inform the children that we are going to be learning about spider reproduction today. Ask the students if anyone knows the meaning of reproduction. If no one can give an answer that is remotely close to a correct definition, give the class examples of reproduction to lead them to the correct definition.

Read the class the pages on reproduction. Show the children what happens when the spiders get big enough to leave their mothers web, this is called ballooning.

Review/ Mini-Lesson (10-15 minutes):
Have children tell about their experiences with balloons. Relate their experiences to what a spider does when they leave their web. Ask the children, how are your experience and the spiders experience similar? How are they different?

Tell the children that they are going to build their own spider and balloon sac. By the students creating their own, they will be able to claim ownership of their balloons and learn simultaneously.

1. Cut each zip block bag in half so you have 2 squares, enough for the whole class to have one square.
2. Have kids use their pencil to make one hole in each corner of the square.
3. Distribute 4 pieces of yarn to each student.
4. Have children tie one piece of yarn to each corner.
5. *Teacher or Paraprofessional will tie the ends of the four pieces of yarn together in one knot WHILE tying in one other string that hangs below the bag.* (Now the balloon sac is completed)
6. Tie a plastic Halloween spider to the end of each piece of yarn.

**Application/ Practice (20 minutes):**

When the children have finished making their balloons, let them know that we are going outside to the playscape. We are going to toss (throw) our balloons off the top and watch the wind take them away. If the class would like, we are going to see whose ballooning spiderlings travel the farthest.

**Homework/ Assessment:**

Tell the children that their homework tonight is to bring their balloons home and show their family/guardians how the spiderling balloons work. In addition to demonstrating to the family how spiders balloon, students are to write sentences about what their family thought of the activity. ELL students can have their family each write at least 2 sentences, or for ELL they can have a discussion with their family in their native language (if parents don’t speak English) about why they liked the activity. The extent of their homework will depend on the level of English proficiency they are at.
Part IV

In lesson 6, I have encompassed sheltered strategies and discourse in my entire lesson. I first selected appropriate vocabulary that was not too difficult for second language learners to grasp. In explaining the task at hand to the children, I used gestures to help the students who had difficulty understanding English better understand the concept I was speaking about. I also had the children create their own spiderling balloons and afterwards, we went outside and children experimented with the balloons to see how they actually work. In completing the experiment, the class returned inside and the children had small group discussions about how a spiderling balloons. We concluded with a whole group brainstorm to clarify and summarize the lesson.
Title: Spider Reproduction - Lesson 8

Subject: Science, Social Studies

Duration: 2 x 45 minutes

Learning Objectives:
- The students will be able to explain how spiders are born.
- The students will be able to define spiderling
- The students will be able to explain the concept of ballooning

Materials:
- Inside and Outside Spiders by Sandra Markle
- Spiders by Seymour Simon
- Pencils
- Bad mitten birdies (or tennis balls with holes punched symmetrically)
- Paint
- Construction paper
- Yarn
- Ziploc bags
- Tape
- Glue
- 1- Hole puncher

Vocabulary:
- spiderling
- egg sac
- ballooning

Initiation:
Prior to the start of class the following steps need to have been completed. (It is possible to have your students do the prep work, but the prep work alone could take up to 2 class periods. By prepping the materials, the students will still be able to create the project of their own, claim ownership and learn.)

1. Cut zip lock bags in half so you have 2 squares, enough for the class to each have one square
2. Hole punch all 4 corners of the bags.
3. Tie equal size string to all 4 corners of the bags, enough for the class
4. Tie a string twice as long as the string affixed to the corners so it dangles, forming a parachute.

Instructional Input:
Reading sections of the following books about spider egg sacs, spiders caring for their young and ballooning: Outside and Inside Spiders and Spiders.
Give each student a bad mitten birdie. Give students construction paper. Tell
them to decorate their birdies into spiderlings. Make it look as real as possible. When
they have finished, they will tie the long piece of yarn onto the ‘spider.’

When the whole class has completed the project, take the class outside and have
the children thrown their spiderlings in the air. Tell students to watch how the wind
carries the spiderlings down in different directions. Have the students throw ‘spiders’ in
a variety of patterns and watch the different directions the spiderlings take. Allow the
students to explore the variety of patterns for at least 20 minutes.

Closure: When hands-on exploration is completed, have students reconvene in meeting
circle. Ask them about patterns they saw with the spiderlings ballooning. How would
they feel being only 3 or 4 days old and going off their own?

Assessment:
  • A completed spiderling for students to take home.
  • A completed spiderling crossword puzzle.

Enrichment: Shall students finish the discussion early, pass out a silk egg spider
reproduction puzzle.

Reflections:
  • Did students understand the task at hand?
  • Were students involved in the activity?

Teacher Evaluations:
  1. Were the learning objectives met?
  2. Did the students enjoy the activity?
  3. Did the students make the connection of ballooning?
Checklists
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<td>37</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>V. Engage at Appropriate Language Proficiency Levels</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>V.1. Use questions appropriate for language levels</td>
<td>37</td>
</tr>
<tr>
<td>V.2. Assign appropriate tasks for varying levels</td>
<td>39-40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VI. Literacy/Academic Development</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>VI.1. Allow use of L1 for planning and conceptualizing</td>
<td>38</td>
</tr>
<tr>
<td>VI.2. Lots of real oral and written language</td>
<td>41</td>
</tr>
</tbody>
</table>
## Sheltered ELL Strategies Checklist

### Lesson 4

<table>
<thead>
<tr>
<th>I. Contextualize Lesson</th>
<th>Lesson 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.1.a. Visuals (Realia, Manipulatives, Gestures)</td>
<td>50</td>
</tr>
<tr>
<td>I.1.b. Model (Instruction, Processes)</td>
<td>51</td>
</tr>
<tr>
<td>I.2. Activating Background Knowledge</td>
<td>50</td>
</tr>
</tbody>
</table>

### II. Make Text Comprehensible

<table>
<thead>
<tr>
<th>II.1. Graphic Organizers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>II.2. Develop Vocabulary</td>
<td>50-51</td>
</tr>
<tr>
<td>II.3. Simplify Written Text</td>
<td></td>
</tr>
</tbody>
</table>

### III. Make Talk Comprehensible

<table>
<thead>
<tr>
<th>III.1. Graphic Organizers; Listening Guides (Checklists, etc.)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>III.2. Frame Main Ideas</td>
<td></td>
</tr>
<tr>
<td>III.3. Pace Teacher’s Speech</td>
<td></td>
</tr>
</tbody>
</table>

### IV. Engage: Opportunities for Output

| IV.1. Teacher Questioning and Response Strategies; Instructional Conversations | 50-51 |
| IV.2. Small Group Work (including Information gap activities) | 50 |
| IV.3. Meaningful, real-life activities; Students as researchers | 51-52 |

### V. Engage at Appropriate Language Proficiency Levels

| V.1. Use questions appropriate for language levels | 50-51 |
| V.2. Assign appropriate tasks for varying levels | 50-51 |

### VI. Literacy/Academic Development

| VI.1. Allow use of L1 for planning and conceptualizing | 50 |
| VI.2. Lots of real oral and written language | 51-52 |
# Sheltered ELL Strategies Checklist

## Lesson 5

<table>
<thead>
<tr>
<th>I. Contextualize Lesson</th>
<th>Lesson 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.1.a. Visuals (Realia, Manipulatives, Gestures)</td>
<td>60, 62, 68</td>
</tr>
<tr>
<td>I.1.b. Model (Instruction, Processes)</td>
<td>60-61</td>
</tr>
</tbody>
</table>

| L2. Activating Background Knowledge | 60 |

## II. Make Text Comprehensible

| II.1. Graphic Organizers | 65 |
| II.2. Develop Vocabulary | 61-63 |
| II.3. Simplify Written Text | 63 |

## III. Make Talk Comprehensible

| III.1. Graphic Organizers; Listening Guides (Checklists, etc.) | 65 |
| III.2. Frame Main Ideas | 60 |
| III.3. Pace Teacher’s Speech | 60 |

## IV. Engage: Opportunities for Output

| IV.1. Teacher Questioning and Response Strategies; Instructional Conversations | 60-61 |
| IV.2. Small Group Work (including Information gap activities) | 61 |
| IV.3. Meaningful, real-life activities; Students as researchers | 61 |

## V. Engage at Appropriate Language Proficiency Levels

| V.1. Use questions appropriate for language levels | 60-61 |
| V.2. Assign appropriate tasks for varying levels | 60-61 |

## VI. Literacy/Academic Development

| VI.1. Allow use of L1 for planning and conceptualizing | 60 |
| VI.2. Lots of real oral and written language | 61, 63 |
# Sheltered ELL Strategies Checklist
## Lesson 6

<table>
<thead>
<tr>
<th>I. Contextualize Lesson</th>
<th>Lesson 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.1.a. Visuals (Realia, Manipulatives, Gestures)</td>
<td>71</td>
</tr>
<tr>
<td>I.1.b. Model (Instruction, Processes)</td>
<td>72</td>
</tr>
<tr>
<td>I.2. Activating Background Knowledge</td>
<td></td>
</tr>
</tbody>
</table>

| II. Make Text Comprehensible                                                             |          |
| II.1. Graphic Organizers                                                                 |          |
| II.2. Develop Vocabulary                                                                | 71-72    |
| II.3. Simplify Written Text                                                              |          |

| III. Make Talk Comprehensible                                                           |          |
| III.1. Graphic Organizers; Listening Guides (Checklists, etc.)                          |          |
| III.2. Frame Main Ideas                                                                  | 71       |
| III.3. Pace Teacher's Speech                                                            | 71       |

| IV. Engage: Opportunities for Output                                                    |          |
| IV.1. Teacher Questioning and Response Strategies; Instructional Conversations           | 71-72    |
| IV.2. Small Group Work (including Information gap activities)                           | 72       |
| IV.3. Meaningful, real-life activities; Students as researchers                         | 72       |

| V. Engage at Appropriate Language Proficiency Levels                                     |          |
| V.1. Use questions appropriate for language levels                                      | 71-72    |
| V.2. Assign appropriate tasks for varying levels                                        | 72       |

| VI. Literacy/Academic Development                                                       |          |
| VI.1. Allow use of L1 for planning and conceptualizing                                  | 71-72    |
| VI.2. Lots of real oral and written language                                            | 72       |
Extra Spider Activities
These spiders are getting ready to have a race. Help them line up. For each row, write the numerals in order from the lowest to the highest.

<table>
<thead>
<tr>
<th>A.</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>42</td>
<td>29</td>
<td>36</td>
<td>68</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B.</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>60</td>
<td>10</td>
<td>34</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C.</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>78</td>
<td>83</td>
<td>18</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D.</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>99</td>
<td>29</td>
<td>50</td>
<td>43</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E.</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>87</td>
<td>39</td>
<td>17</td>
<td>96</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>F.</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>56</td>
<td>33</td>
<td>64</td>
<td></td>
</tr>
</tbody>
</table>

**Bonus Box:** On the back of this sheet, write six different numerals between 1 and 100. Ask a classmate to write them in order from the lowest to the highest.
Spiders Sums

Color 4 of the spiders green.
Color 2 of the spiders yellow.

Color 3 of them brown.
Color 1 spider black.

1. How many spiders are there in all? _______

2. Count the legs on the black spider. Write the number here. _______

3. Count the legs on the yellow spiders. Write the number here. _______

4. Count the legs on the brown spiders. Write the number here. _______

5. Count the number of green, yellow, and black spiders. Subtract the number of brown spiders. How many spiders are left? _______

6. Subtract the number of brown and green spiders from all of the spiders. How many are left? _______
Expert Weavers

These spiders have woven a web of subtraction facts. Solve each problem. Write the correct answer in each □.

What a web!

<table>
<thead>
<tr>
<th>Problem</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 - □ = 5</td>
<td>6</td>
</tr>
<tr>
<td>□ - 6 = 4</td>
<td>10</td>
</tr>
<tr>
<td>□ - 9 = 3</td>
<td>12</td>
</tr>
<tr>
<td>18 - □ = 9</td>
<td>9</td>
</tr>
<tr>
<td>□ - 6 = 7</td>
<td>10</td>
</tr>
<tr>
<td>11 - □ = 9</td>
<td>2</td>
</tr>
<tr>
<td>9 - □ = 5</td>
<td>4</td>
</tr>
<tr>
<td>□ - 8 = 8</td>
<td>2</td>
</tr>
<tr>
<td>□ - 3 = 6</td>
<td>3</td>
</tr>
<tr>
<td>□ - 8 = 8</td>
<td>2</td>
</tr>
<tr>
<td>□ - 3 = 6</td>
<td>3</td>
</tr>
<tr>
<td>12 - □ = 5</td>
<td>7</td>
</tr>
<tr>
<td>□ - 3 = 8</td>
<td>5</td>
</tr>
</tbody>
</table>

**Bonus Box:** Look at your answer in each □. If the number is even, color it yellow. If the number is odd, color it orange.
Spider Similes

A simile compares things using the words like and as. Fill in the blanks for the similes below. These can be facts or opinions.

Spiders are as ______________ as ______________.

Spiders are like a ____________________________.

A spider web is like a ____________________________.

Baby spiders are as ______________ as ______________.

A tarantula is as ______________ as ______________.

Now write some similes of your own.

1. ____________________________.

2. ____________________________.

3. ____________________________.

4. ____________________________.

Draw a picture of your favorite simile.
Spiders

Across

3. ________ are helpful.
   Widow Spider

Down

1. A spider is not an ________.
2. A spider spins a ________.
4. A spider has _____legs.
5. A spider's eggs are in a ____.
Spiders

Eggs
Head
Spider
Spin
Thorax
Webs
Facts About Spiders

Spiders have 8 legs.

Spiders come in many sizes and colors.

Spiders have 2 body parts, a cephalothorax and an abdomen.

Spiders spin a silky web using an organ called a spinneret; it is in the spider's abdomen.

Spiders do not have an internal skeleton, they have an exoskeleton (it is like very hard skin).

Spiders see using many simple eyes.

Some spiders have a poisonous bite.

Spiders are arachnids; they are not insects.

Spiders hatch from eggs.
Spider Questions

How many legs do spiders have? _________

How many body parts do spiders have? _________

What is the name of the organ that spiders use to spin a silky web? ________________

Do spiders have an internal skeleton or an exoskeleton? ________________

Do spiders have eyes? ____________

Do some spiders have a poisonous bite? ____________

Are spiders arachnids or insects? ____________

Do spiders hatch from eggs? ____________
Opinions are what people think about a subject. Use this survey to find out what your classmates, friends, and parents think about spiders.

Use tally marks to record the answers.

<table>
<thead>
<tr>
<th>Questions</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do you like spiders?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Do you think spiders are scary?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Do you think spiders are harmful?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Would you like a spider to crawl on you?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Do you think spiders are ugly?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Do you think all spiders are poisonous?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Do you think spiders are helpful?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Record the results of your survey:
How many people took the survey? ____
Put the totals next to the matching numbers.

[Blank space for tally marks]
SPIDER BOOK
HANDOUT
All About Spiders!

Name ____________________
Spiders and Insects

How many legs does the spider have? ____
How many eyes does the spider have? ____
How many body sections does the spider have? ____
Does a spider have wings? ______

How many legs does the insect have? ____
How many eyes does the insect have? ____
How many body sections does the insect have? ____
Does the insect have wings? ____

Black Widow

Cockroach
Facts about Spiders

Spiders have _________ legs.

Spiders have _________ body sections.

Spiders can have up to _________ eyes.

Spiders  do  or  do not  have  wings.

(Circle one)
Facts about Insects

Insects have ______ legs.

Insects have ______ body sections.

Insects have ______ eyes.

Insects can or can not have wings?
(Circle one)
Spiders

Name the body parts.

How many legs?

Word Box

<table>
<thead>
<tr>
<th>legs</th>
<th>palps</th>
</tr>
</thead>
<tbody>
<tr>
<td>jaws</td>
<td>abdomen</td>
</tr>
<tr>
<td>eyes</td>
<td>spinnerets</td>
</tr>
<tr>
<td>cephalothorax</td>
<td></td>
</tr>
</tbody>
</table>
Facts About Spiders

Spiders have 8 legs.

Spiders come in many sizes and colors.

Spiders have 2 body parts, a cephalothorax and an abdomen.

Spiders spin a silky web using an organ called a spinneret; it is in the spider's abdomen.

Spiders do not have an internal skeleton, they have an exoskeleton (it is like very hard skin).

Spiders see using many simple eyes.

Some spiders have a poisonous bile.

Spiders are arachnids; they are not insects.

Spiders hatch from eggs.

@EnchantedLearning.com
Spider Questions

How many legs do spiders have? _________

How many body parts do spiders have? _________

What is the name of the organ that spiders use to spin a silky web? ________________

Do spiders have an internal skeleton or an exoskeleton? ________________

Do spiders have eyes? _________

Do some spiders have a poisonous bite? _________

Are spiders arachnids or insects? ______________

Do spiders hatch from eggs? _________
A fact is something that is true about a subject.

An opinion is what someone thinks about that subject.

Read the statements below and check whether they are facts or opinions about spiders.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Fact</th>
<th>Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Spiders have eight legs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Spiders are scary.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Spiders are mean.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Spiders spin a web.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Baby spiders are called spiderlings.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Spiders are ugly.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Spiders lay eggs.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Write two facts about spiders.

1. 

2. 

Write two opinions about spiders.

1. 

2. 
Spiders

Across

3. _______ are helpful.
6. _______ Widow Spider

Down

1. A spider is not an _______.
2. A spider spins a _______.
4. A spider has ___ legs.
5. A spider's eggs are in a _____.

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Places I might live if I were a spider on Guilford Lakes playground.

Place 1: ______________________
Sentence: ______________________

____________________________

____________________________

Place 2: ______________________
Sentence: ______________________

____________________________

____________________________

Place 3: ______________________
Sentence: ______________________

____________________________

____________________________

Characteristics of the places I would live.

Noise:

____________________________

____________________________

Temperature:

____________________________

____________________________

Weather:

____________________________

____________________________

Location:

____________________________

____________________________

Food:

____________________________

____________________________