

**Project FOCUS
Best Lessons
FIRST GRADE**

Title of Lesson: Spiders

Theme: Life Science

Unit Number: 6 **Unit Title:** Animal Planet

Performance Standard(s) Covered (enter code):

S1L1

S1CS4

Enduring Standards (objectives of activity):

Habits of Mind

- Asks questions
- Uses numbers to quantify
- Works in a group
- Uses tools to measure and view
- Looks at how parts of things are needed
- Describes and compares using physical attributes
- Observes using senses
- Draws and describes observations

Content (key terms and topics covered):

Spiders, animals

Learning Activity (Description in Steps)

Abstract(limit 100 characters): This lesson introduces students to the different characteristics of spiders with a hands-on activity

Details: First I had the students fill in the notes I had made for them and asked them questions about the characteristics, habitat, and behavior of spiders. Then I showed the students the preserved tarantula and orb weaving spiders along with the tarantula skin and explained the various body parts that are contained on the two body segments of spiders (abdomen and cephalothorax). Then using the information the students just learned about the construction of a spider, I had them make their own edible spider. I gave each student a bag, told them not to take anything out unless I instructed them to do so, and reinforced the fact that they could not eat anything till they had made a spider. With my own personal spider building materials, I had the students take out both marshmallows and the half of a toothpick. I showed them how the toothpick was to be inserted half way in one marshmallow and that the other marshmallow was then placed over the other exposed end of the toothpick. I asked the students what the two marshmallows represented, and they represent the cephalothorax and abdomen. Then I instructed the students to take out the 8 pretzel sticks and asked them what they thought the pretzel sticks represented and where they go on the body of the spider. The students should respond that the pretzel sticks represent the spider's legs and four pretzel sticks go on each side of the cephalothorax (simply on just one of the marshmallows). Finally, I asked the students to remove the 2 M&Ms from the bag and once again inquired as to what they represented. The M&Ms serve as the spider's eyes, but it

should be explained that spiders contain 6 to 8 eyes. (Two eyes were used for clarity and made the spider treats look cuter). The eyes should be placed on the front of the cephalothorax. The students can then eat their spiders! The students really enjoyed this part of the lesson!

Materials Needed (Type and Quantity):

- Animal Encyclopedia book for students to write facts (optional)
- large Jet-Puffed marshmallows (enough so each student has two)
- toothpicks
- miniature M&Ms
- pretzel sticks
- small, plastic sandwich bags
- ball of white yarn
- giant stuffed animal spider (not necessary but goes great with the big spider web)
- either photographs of spiders or spiders that have been preserved in ethanol (these can be found at the Georgia Natural History Museum)
- skin of a tarantula (also at the G.N.H.M.)

Notes and Tips (suggested changes, alternative methods, cautions):

Prior to teaching the spider lesson, the materials needed to build the edible spiders must be assembled into individual plastic bags for the students so everything is kept together. A bag should be prepared for each student in the class. Each bag should contain 2 large Jet-Puffed marshmallows, half of a toothpick, 8 pretzel sticks, and 2 mini M&Ms. You should also prepare a bag for yourself since it will help in the demonstration of the assembly of the spider. I also recommend bringing extra marshmallows, etc. in case a student accidentally eats their science project. If the students are receiving notes on spiders, fill-in-the-blank notes save lots of writing time during class. I got spider notes online and talked with Dr. Smith at the G.N.H.M. The notes should be printed out beforehand. Also the ball of white yarn (Michaels craft stores have lots), stuffed animal spider, and any other visual aids (preserved spiders and tarantula skin for example) should be obtained beforehand. If preserved spiders cannot be found, plastic spiders (like those used for decoration at Halloween) might make a good substitute.

The students can eat every component of the spider except for the toothpick. The students should be told to remove it and throw it away before they ingest their hand-made spider. If preserved spiders are being used, the students should be told to handle the glass jars carefully and use both hands when observing them. The students should be told not to open the jars or shake them. If a tarantula's shedded skin is being used, the students should be told to handle it gently since it is very fragile.

Sources/References:

- 1) Georgia Natural History Museum
- 2)
- 3)