

Lesson Plan Title

Spiders Tune

Grade Level

2nd grade

Subject Area

Science

MSCCRS

L.2.3B.1 Evaluate and communicate findings from informational text or other media to describe and to compare how animals interact with other animals and plants in the environment (i.e., predator-prey relationships, herbivore, carnivore, omnivore).

Art Form

Music

MSCCR Creative Arts Standards

MU: Cr2.1.2 Organize and develop artistic ideas and work.

- a. Improvise rhythmic and melodic patterns and musical ideas for a specific purpose.
- b. Generate musical patterns and ideas within the context of a given tonality (such as major and minor) and meter (such as duple and triple).

Duration

1 Hour

Materials

Guitar or other stringed instrument
Rubber Bands

Objectives

Students will understand predator-prey relationships.

Students will understand that animals interact with other animals in their environment in specific ways.

Students will understand that the strings on a guitar vibrate when lengthened or shortened.

Vocabulary

Vibrations

Predator

Prey

Pitch

Pluck

Lesson Description

Introduce the guitar as a musical instrument.

Strum the strings of the guitar so that students are able to both see and feel the vibrations made by the strings.

Introduce predator-prey relationships using the attached video of the spider.

Have students explore how spiders use their webs to interact with other animals in the environment.

Explain that just like spiders, guitarists (people who play the guitar) tune the strings of their guitar by lengthening and shortening them. This causes each string to make a different pitch and vibration.

Use the tuning knobs of the guitar to explore the different sounds and vibrations each string can make when lengthened and shortened.

Have students work in groups and experiment with rubber bands. Students should hold rubber bands with their fingertips and pluck the rubberband to hear different pitches according to how tight the rubber band is being pulled. Students should experiment with how they can make similar vibrations to those that spiders make with their web.

Recommended Resources

<https://www.youtube.com/watch?v=0EkEsTafD38>

Extended Learning Activities

Students can be placed in small groups with various rubber bands. Students should hold rubber bands with their fingertips and make concentric circles and have their partners “pluck” their web to hear different pitches.

This could also be done with geoboards and or wooden pegboards.

Sources

N/A

Tips

May work best following up a lesson on the predator-prey relationship, as a supplemental lesson to reinforce the learning of how animals interact in their environments with other animals.

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