Heads Down, Owl Sounds

Meets 1st Grade California Science Content Standards- 2a, 2b, 2c, and 4a (see Standards Key)
California Visual Art Standard 2.4 - Plan and use variations in line, shape/form, color, and texture to communicate ideas or feelings in works of art.
Taking It Further - California Visual Art Standard 2.1 - Use texture in two-dimensional and three-dimensional works of art.

Animal to Draw for Art Contest – An owl

Writing prompt for the sentence of the back of the student's drawing - What is your owl doing in your drawing?

Objective – To understand how an owl's uneven ear position helps them locate small prey at night and that their prey is often small rodents such as mice or moles.
Time – 15 -20 minutes during the first session. Once the students know the rules, it could be used for as little as 5 minutes at a time.
Background - Being nocturnal hunters, owls rely heavily on their ears to find their small prey. In this exercise, the students will close their eyes and rely on their ears to tell the difference between sounds the teacher makes in the room. By changing both location and type of sound, the teacher challenges the students to use the same sense the owl does.

Materials –

- Different objects to move, crinkle, scrape, and make noise with.
- Tape to mark several spots on the floor where you will stand (or you can use landmarks in the classroom i.e. teacher's desk, by the door or a particular student's desk)
- Photo of owl with location of ears marked

Vocabulary –
Nocturnal – an animal that is awake at night
Predator – an animal that hunts and eats other animals
Prey – an animal that is hunted

Directions –
1. Explain to the students that owls have many physical features that make it possible for them to hunt at night including: excellent eyesight, silent flight, sharp talons on their feet and terrific hearing.
2. Show the students the photos of the owl that illustrate where the ears are placed on the side of the head and other physical features of the owl. Explain that this helps the owl locate their prey in the dark.
3. Explain to the students that this game is similar to "Heads-Up, Seven-Up" except instead of having their thumbs tapped, they will just be using their ears to try and locate and name different sounds. After you make the noise, the students will try to guess what the sound was and where the person making the noise is standing.

Game Procedure-
1. Show the students the different objects that you will be using to make the noises, but don't demonstrate the noise, let them try to anticipate the actual sounds.
2. Show them the different marks spots on the floor or talk about using landmarks such as other student's desk to estimate where the person making the noise is standing.
3. Explain to the students that they are all owls in the dark and you will be moving around the room and making a small amount of noise, like a mouse. When the sound stops, ask them to raise their hand if they think they know what you were using to make the sound and whose desk you stopped next to. Make sure to remind them not to peek, they are an owl in the dark.
4. Have all the students put their heads down on their desks and close their eyes. Ask them to use their imagination to picture themselves as an owl sitting in a tree listening in the dark.
5. As you move lightly around the room, make a noise using one of the objects; continue to make the noise until you stop moving.
6. Ask them what object were you using to make the noise and whose desk did you stop next to? Make sure they keep their heads down until one student answers correctly. When they do, have them look up to check where you are and what you used.
7. Whoever answers correctly gets to stand up with the teacher and pick the next sound to make. Everyone else puts their head down to play again. Help the standing student to move around the room quietly making the sound and stop next to a different student's desk. Continue.

Questions for Discussion - Do you think owls can make a lot of noise while they are hunting? How would their prey react if owls made a lot of noise?

Resources-
"Owl Moon" by Jane Yolen
"The Barn Owls" by Tony Johnston
"Owl Babies" by Martin Waddell
In San Marcos, CA, a resident set up a web-cam in an owl box. Two clutches of eggs were laid in 2010, you can find our more information here: http://mollysbox.wordpress.com/. The camera may not be running live, but you'll be able to see past videos of barn owls in their nest box.
Hear barn owl calls and find more info http://www.owlpages.com/owls.php?genus=Tyto&species=alba

Taking it Further – As a class, have the students sit silently for two minutes listening to all the different sounds they can hear. Have them write down a list of the sounds and share with the group. This is a great way to explore their sense of hearing. (This activity can be done lots of different places—in the classroom, outside at school, at a nearby park, etc.)

Silent Flight Demonstration -
To demonstrate how owl feathers produce silent flight, you can create this simple project. You'll need: two wooden rulers, twine, 2 pieces of fabric cut into 12 in. by ½ in. strips, and glue.

Take the fabric and glue on to one of the rulers. Trim so the edge of the fabric has lots of small pieces of fringe. This represents the fringe found on the edge of owl feathers. On each ruler tie approx. 3 feet of twine. When you twirl the non-fabric ruler, you should hear a buzzing sound. When you twirl the ruler with the fabric, you should hear no sound. Owl feathers have a small amount of fringe on the edge that helps them fly silently.