K-2 MULTI-GRADE BRIDGE Reference Material Theme Three: Deep in the Forest

Book 3 – Good-Night, Owl!

Background Information and additional activities on Owls from Home Science Tools (https://learning-center.homesciencetools.com/article/owls-young-science-explorers/):

"Owls need to be able to see well, since they are hunters. They have specially designed eyes that see in daylight as well as the dark. An owl's eyes are large and bright, so they are able to gather light to see by even when it is nighttime. Our eyes work by reflecting (like what happens in a mirror) light, and then an image of what is reflected, or being seen, is created in our brains. Since owls' eyes are so large, they are able to gather and reflect more light than we can. Owls do not have perfect vision at night, but they can see clearly. Not only are the owl's eyes very large, but they are also close together in its flat face. That means that this bird can't see to the side, unless it turns its head, while we are able to look up or to the side just by moving our eyes.

Owls can turn their heads nearly all the way around because of their flexible necks. Their heads aren't able to spin around in a full circle, though. This is a unique feature that humans don't have. The owl's vertebrae are what allow it to see to the sides and behind. The bones in the neck and back are part of the vertebra. Humans (as well as most mammals) have seven bones (or vertebrae) in the neck. An owl has twice that! An owl's 14 vertebrae in the neck allow it to rotate its head, seeing in nearly every direction, even though its body stays in the same spot."

