

## **ANSWER KEY FOR THE SEARCHING FOR SIGNS ACTIVITY**

**1. *What kind of animal has eaten these walnuts?***

The fact that holes were chewed into the nuts tells you that squirrels and not larger animals, such as deer, ate the nuts. Because there are only two holes in each walnut, you also know that either a Fox Squirrel or a Grey Squirrel ate the nuts. Fox and Grey Squirrels are larger than Red Squirrels and Chipmunks, so they have bigger teeth, which means that they can reach all the nutmeat through two holes. Smaller rodents, with smaller teeth, must chew four holes into the nuts in order to reach the nutmeat on all four sides.

**2. *Who left these tracks in the mud?***

These tracks were left by a White-tailed Deer.

**3. *What kind of bird dropped this feather, and why is there a fringe on one side?***

From the size of the feather, you know it is from a large bird. Its coloration matches that of a Great Horned Owl. Nocturnal predators, such as owls, need to be as silent as possible when pursuing their prey. The leading edge of their wing feathers are fringed so as to break the sounds of wind rushing over the wings. As a result, owls make virtually no noise when they fly.

**4. *According to the deer skull's teeth, is this animal a carnivore, omnivore, or herbivore?***

Because all of the teeth found in the deer's skull are designed to snip and grind, instead of tear food, they are the teeth of an herbivore. Carnivores, such as dogs and cats, have teeth designed for tearing and ripping meat. Omnivores, which eat both plants and meat, have a combination of grinding and tearing teeth... like humans.

**5. *Who could have made such a neat and tidy passageway?***

Voles line their passageways with ¼ inch grass clippings. If you are walking through a grassy area, try uncovering the top layer of grasses in a few places. You might uncover an entire network of tunnels that have been constructed by small creatures! If you do this, however, make sure to replace the top layer before you leave.

**6. *Who left these tracks next to the hickory nut?***

These tracks were left by some type of squirrel.

**7. Any guesses as to what this animal is and whether it was a carnivore, omnivore, or herbivore?**

Look at those sharp, pointy canine teeth. The name *canine* gives you an idea of what kind of animal this is. A cousin to wolves, foxes, and dogs, this coyote is a carnivore. (Although it will eat berries and plants when it is hungry.)

**8. What sort of animal leaves THIS sign?**

Believe it or not, this sign was left by worms. As worms move through the soil, munching on plant and animal materials, they leave small tunnels behind. Sometimes, we can see the openings of those tunnels when the worms come to the surface. When worms go to the bathroom, they leave what look like little balls of soil, called worm “castings.” These castings are incredibly valuable for keeping the soil healthy by changing organic waste into natural, odorless fertilizer!

**9. What are these things and who made them?**

Both are nests. The first one spotted is a squirrel nest. While squirrels spend the winter in dens inside of trees, they often build another type of home in the summer. These summer homes are made out of leaves and may be the size of basketballs. The extra ventilation provided by the leaves keeps the inside temperatures cooler for baby squirrels.

The second nest spotted is a hawk nest. The fact that it is built out of branches and twigs, and is located so high in the tree, lets you know that a pretty large bird lives there. (Squirrels would never live in such a nest, because it is too open to attack from the air - from hawks and owls!)

**10. Why would you smell cucumbers in the woods?**

Although there is some disagreement about this concept, many people believe that the venomous Copperhead snake emits an odor that resembles cucumbers. Copperheads are most active at night, when higher humidity levels enable odors to carry farther than in the daytime. However, since most people do not hike at night, they have probably never noticed this. Count yourself fortunate to have had this unique experience!