Grade 5
Unit: Web of Life
Mystery 1: "Why would a hawk move to New York City?"

1. Follow the links below to watch the two videos. Read along with the transcripts.
2. Answer the end of mystery questions

VIDEO TRANSCRIPT

EXPLORATION VIDEO 1 - click to view video

Hi, it's Doug. A few weekends ago, I was at a park in the city with some friends of mine, and we had some food with us. And like you might expect in a city park, there were a lot of these, pigeons. When we got there, my friend was like I hate pigeons. I don't know how you feel about pigeons, but we all know pigeons are the most common bird you find in a city. My friend was getting a little annoyed that day because every time he'd turn away from his food to talk to me, these pigeons would come up and try to grab at it. My friend had to keep shooing them off over and over, but it didn't matter. The pigeons kept coming back. So finally, at one point, he yelled, get away. And every single pigeon took off. My friend was like, ha, finally. But I realized something. I said, I don't think it was actually you who scared those pigeons off. Look up, I said. And sure enough, we both looked up, and there was this. A red tailed hawk circling overhead. Is that a hawk, my friend said. I didn't know those lived in cities. How did you know to look for that? There were a couple of clues. First of all, if you've ever spent time in a city, then you know it's actually pretty hard to scare away pigeons. They're not afraid to come right up to people probably because they've learned we have delicious, tasty treats. The second clue is that even though pigeons live in cities and seem not to be scared of anything, they do have one thing

they're really scared of, and that's their predators, animals which hunt and eat them. Everyone knows about city pigeons, but people are surprised to find out that hawks and falcons are starting to live in cities now too. And they're doing really well. Some city hawks are even famous, like this red tailed hawk who lives in New York City's Central Park. The people of New York City love this guy. They've named him Pale Male because he's a boy, and he has some pale colored feathers on his head. In order to live in a city, there are really only couple of things that a predator, like Pale Male, needs access to. In the wild, hawks prefer high places to build their nests, places like the side of a cliff. But Pale Male has figured out that in the city, skyscrapers work just as well for that, so no problem. And then, of course, any predator needs prey, the animals that it eats in order to stay alive. In the wild, hawks prey on small birds. You know cities are full of those. So it's surprising to find wildlife other than pigeons living in cities, but you can find wildlife like hawks and falcons. And that's because every animal has some other living things that it's linked to. Pigeons are preyed upon by hawks and falcons. So where there are pigeons, there are hawks and falcons around too. Or as another example, consider this squirrel. Think about what kind of living things it's linked to. Whenever you see an animal, you could always discover the links to other wildlife by asking two simple questions. What does it eat? And what is it eaten by? I call these the food chain questions. So think about the squirrel. If you saw this squirrel in your neighborhood, which living things should you also be able to find near you just by asking the two food chain questions?

EXPLORATION VIDEO 2 - click to view video

With any animal, by asking the two questions-- what does it eat and what's it eaten by-- you can always spot a link that the animal is part of. You might have heard that scientists call this a food chain, and here the squirrel is in the middle of the food chain. What does it eat? Acorns, which

grow on oak trees. What's it eaten by? There are a few different predators that eat squirrels. A cat is one example. So there's a food chain linking cats to squirrels to oak trees. Now even if you're in a place where you don't think there's any interesting wildlife, I think you'll be surprised by what kinds of animals and plants you can find if you think about the food chains. You might even find plants and animals you didn't even know existed. One of my favorite tricks for finding creatures is to look for rotting logs on the ground. If you carefully roll one over, like this guy's doing here, there's almost always some kind of interesting little bugs, like this little millipede here, or sometimes toads and tree frogs, too. For example, I live in a city. Next to my apartment is this little yard that I share with our neighbors. Now I really never would have thought anything interesting could live in this little yard. But a few weekends ago, I noticed there was an old board lying on the ground, probably leftover from construction. I thought, well, let's see if my log rolling trick really works. Sure enough, when I rolled it over, I found this. It's a beetle. They have these little pinchers. And I wondered, well, what do they eat? When I went online and looked up what they ate, I read that they like to find and eat the caterpillars of moths. When I saw that, I was like, wait a second, there's a link I didn't even realize. Living near my apartment are moths that fly into our stairwell every night outside our front door. When I get up in the morning and I walk down the stairs, I always wind up seeing those interesting moths on the walls. So I suddenly realized all those moths I'd seen living in our stairwell had hatched from caterpillars that didn't get eaten by the beetles in the side yard. I thought, hmm, OK, so that's what the beetles eat. But then I asked myself the other food chain question-- what are the beetles eaten by? As I kept looking under that wooden board, I saw something else, too. It tried to hide for me. It scurried and buried itself in the mud. I was like, wait, what is that, a snake? But it had legs. I couldn't tell what it was at first, but as I carefully picked it up, I realized it was this. Do you know what this is? It looks a bit like a lizard, but it's not a lizard. It's called a salamander. Salamanders are

amphibians. They're like frogs with long tails. They even start out in life as little tadpoles. I was so excited to find this. I couldn't believe I could find a salamander living in the city right outside my window all this time. When I looked them up on the internet, guess what? I found out they eat beetles. So there was an entire food chain happening right there in my little yard in the city--salamanders, which eat beetles, which eat tiny moth caterpillars, all of this happening under a wooden board in my yard. What could you find where you live? Well, try my trick of looking for a log to roll over. Don't be scared. There's usually very little that can hurt you. If you do have any wildlife in your area that could be harmful, talk about that with a teacher or a parent. You might need to shake the log with your foot first. And always be sure to be gentle when you roll a log over. Place it back carefully. You wouldn't want to crush any little salamanders or beetles that live under it. Whether you find something under a log or in a tree or in the grass, when you do find a creature you're interested in, remember to ask yourself the food chain questions. What does it eat? And what's it eaten by? When you ask these questions, I guarantee you it will lead you to some other interesting links. So take a moment now. What are some animals you think you might be able to find in your neighborhood? And what if you asked the food chain questions? Does it lead you to think of any new animals to look for?

Web of Life

Mystery 1: Why would a hawk move to New York City?

Name: _____
Date: _____

End of Mystery Questions

1. How would you describe a food chain to someone who hasn't thought about that idea before?

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2. When you go "down" the food chain by continuing to ask "What does it eat?" at what category of living things do you always end up?

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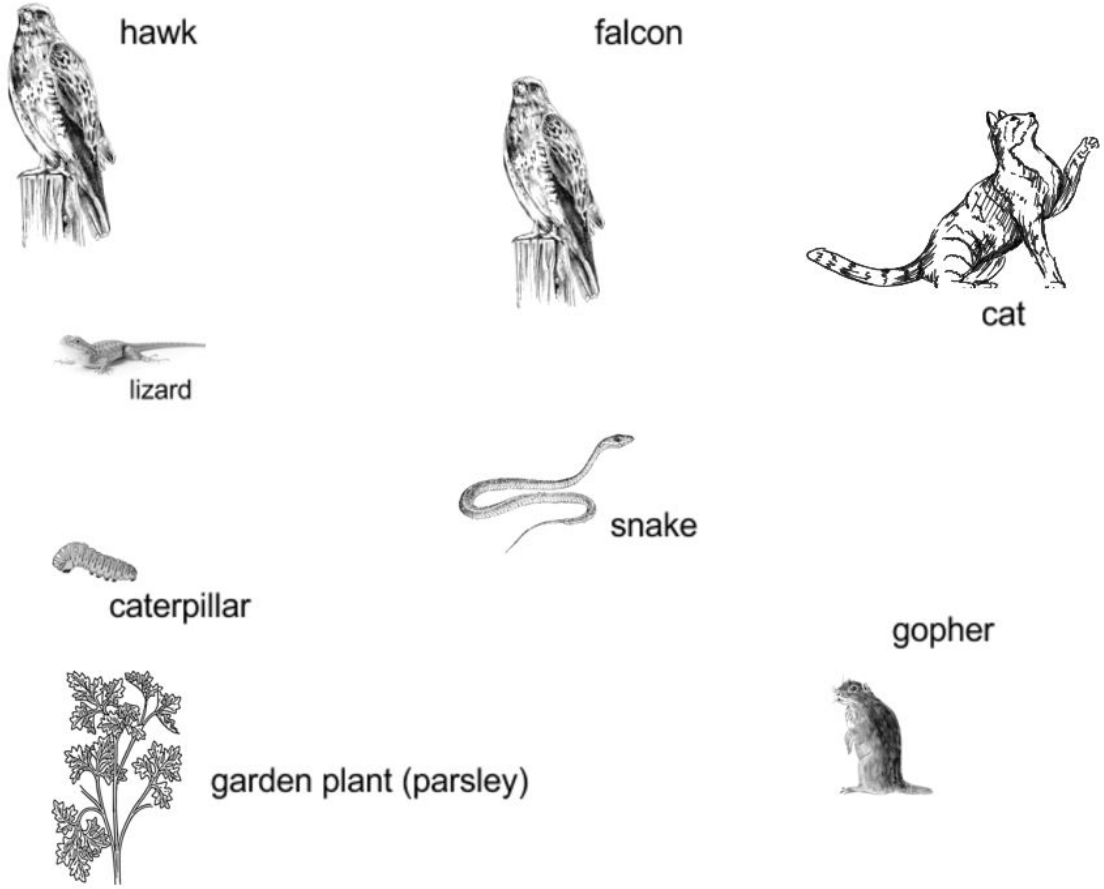
3. Rather than showing just one food chain, the images below show a habitat, where several food chains are linked to each other. Draw arrows connecting each of these living things by what they eat, then answer question #4.



4. When you connect all the different food chains within one habitat, like you did above, what words or phrase do you think best describe how this diagram looks? Why?

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5. **Research**: Choose any animal, such as your favorite animal, then use a trustworthy source of information to find out the answers to the two “food chain” questions, which you should write below. (If your animal isn’t eaten by anything else, that’s okay, just be sure to say so.)

Animal: _____

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