



5555 Zoo Boulevard
Wichita, KS 67212
316.660.WILD

scz.org

S.T.E.A.M. with Invertebrates

Choose a square • Complete the activity • Check it off

Use this chart however works best for your family. If you need to have daily tasks, follow the calendar. If you want to do a Wednesday activity on Monday, that is perfect too. Activities are perfect for preschool through high school and will help get all students out of the house. Have them take photos of their creations and share the photos with others.

The photos can also be a good evaluation tool for parents who are not working from home.

Monday	Tuesday	Wednesday	Thursday	Friday
Count how many different types of bugs you see in your yard. Think about why they might look different.	Wake up early and go on a spider web hunt. The webs are the most beautiful if there is dew on the ground. Remember not to disturb the web. A spider worked extra hard on it overnight.	Find a roly polly. Observe where it lives. Make a habitat in a box that is similar and allow one to live in the box overnight. Make sure to put it back in the same spot the next day.	Save the worms. After an overnight rain go outside and look for worms that have come up from underground. Gently pick them up with clean hands and place them in the grass.	Make of count of each bug you find in your yard. What type of bug did you find the most? Its ok if you do not know what it is. This can be an adventure for another day.
Grasshoppers versus beetles – which can you find more of in your yard with your eyes.	Do you find more bugs where it is bright and sunny or where it is dark and wet? Why do you think most bugs live this way?	Roll a dice. Once it lands on a number go find that many insects with your eyes and describe them to your family.	Go out at night and count the number of bugs you hear. Now count them for the same amount of time during the day. When did you hear more?	Made lady bug pictures with the children's little red finger prints for the lady bug's body. Look at a photo of a lady bug if you cannot find a live one to watch and add in the details.
Find a bug with your eyes that has two different body parts.	Find a bug that is fuzzy. How do you think the fuzz could help it?	Count how many red insects you can find with your eyes.	Find a bug with your eyes that has three or more body parts.	Find a bug with your eyes that has one body part.
Keep a record of all the different bugs you see in a given time, at a given place. Don't worry if you don't know what they are, enjoy counting them!	How many brown bugs do you see in your yard? Explore reasons why you may see so many brown bugs.	Take your book outside, near a tree or shrub. Relax and see if an ant or another invertebrate travels across you.	Drawings of bugs were found in ancient Egypt. Use sidewalk chalk and draw your own bugs.	If you have an old banana or orange, put it outside and watch what insects eat it.
Make an edible ant hill in a cup. Grab a clear cu and put a layer of chocolate pudding into the cup for the "dirt". Then, crush graham crackers and pour the crumbs into the cup for the "sand". Add chocolate chips or raisins for the "ants." Now go outside and eat your anthill.	Do the honey bee dance. Honeybees go out in search of flowers with nectar and pollen. Once they find a good flower patch they go back to the hive and do a dance to tell the other bees where to go. Create your own dance moves that mean left, right, forward, backward and see if you can lead your home bees to the flowers.	You can tell the temperature by a crickets chirps. The higher the temperature, the faster a cricket chirps. $50 + (\text{number of chirps in a minute} - 40) / 4 =$ approximate temperature in degrees Fahrenheit. What an exciting blend of music, science, and mathematics.	Are flies bothering your picnic? Get a shallow dish and put rocks in it (so the flies don't drown). Add about $\frac{1}{2}$ inch of apple cider vinegar and a tablespoon of sugar. This should attract the flies and keep them away from your food.	Listen for the bug choir. The late afternoon insect chorus is the music of spring and summer. The locusts perform first, followed by the cicadas during the late afternoon with the crickets and katydids finishing up during the evening.



5555 Zoo Boulevard
Wichita, KS 67212
316.660.WILD

scz.org

Kansas College and Career Readiness Science Standards

Grade	KCCRSS	Description
Kindergarten	K-LS1-1	Use observations to describe patterns of what plants and animals (including humans) need to survive.
	*K-ESS2-2	Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.
First	K-ESS3-3	Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live.
	1-LS1-1	Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.
Second	1-LS3-1	Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.
	2-LS2-2	Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.
	2-LS4-1	Make observation of plants and animals to compare the diversity of life in different habitats.
Third	3-LS2-1	Construct an argument that some animals form groups that help members survive.
	*3-LS1-1	Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction and death.
Fourth	4-LS1-1	Construct and argument that plants and animals have internal and external structures that function to support survival, growth, behavior and reproduction.
	4-LS1-2	Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways.
Fifth	*5-LS2-1	Develop a model to describe the movement of matter amount plants, animals and decomposer, and the environment.
Middle School	*MS-LS1-3	Use an argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells.

* Additional activity/discussion required.