

Sample Cricket Challenges: (You can find more challenges through the links below):

Resiliency Nature Challenge:

- ❖ Pick a plant or animal you see every day to observe. Create a nature or photo journal to record its progress. Draw or take a photo of it at the beginning of your observation. Each week, note challenges and threats that the plant or animal faces. What strategies do they adopt? How do they evolve their strategies to respond to conditions? How do they change? At the end of your observation period, draw or take a photo of it. Are there any lessons from the ways that the plant or animal coped with its challenges that you can use in your own life?

Week- Long Nature Challenge:

Can you commit to take a week-long nature challenge? Pick a fictional book that includes a natural setting (as an example, you might use *Smack Dab in the Middle of Maybe* or another book). For a week, spend at least 10 minutes a day outside looking for things mentioned in the book and keep a nature journal. Your challenges:

- ❖ Day one- find at least one insect and identify it, describe its life cycle, habitat, diet, and predators. Bonus points if you draw it and identify parts of its anatomy.
- ❖ Day two- find a leaf and identify the plant that it is from, its life cycle, habitat, and the animals who use it for food and shelter. Bonus points if you make a rubbing of the leaf and identify its parts.
- ❖ Day three- find and identify one bird and describe its life cycle, habitat, diet, and predators. Bonus points if you draw it and identify its anatomy.
- ❖ Day four- find and identify one mammal and describe its life cycle, habitat, diet, and predators. Bonus points if you draw it and identify parts of its anatomy.
- ❖ Day five- find a nut or seed and identify the plant that it is from, its life cycle, habitat, and the animals who use it for food. Bonus points if you draw it and label its parts.
- ❖ Day six- listen for bird calls. Identify at least one bird whose call you heard and answer the questions about it from day three. Bonus points if you research whether or not the bird migrates. Double bonus points if (for a migrating bird) you map out its migration route or (for a bird that does not migrate) you calculate the area in feet of the bird's typical territory.
- ❖ Day seven- sniff the air. See if you can identify a plant by the smell of its leaves or flowers. Write 7 facts about it in your nature journal. Bonus points if you draw the plant and identify its parts.

Create a Nature Discovery Center Challenge

- ❖ Use time in nature to destress by creating a Nature Discovery Center. Gather items from nature that interest you, are safe to touch and are not endangered. To take your Discovery Center to the next level, you can include only items that are mentioned in a fictional book that you are reading. Make sure that you have permission from the landowner. Display the items in your Discovery Center. Your Discovery Center does not have to be anything fancy. You can use whatever you have on hand. Some ideas include a shadow box, a bowl, a plate, a jar, or a shoebox. You may wish to record from where you gathered the item and the date on which you gathered it, and (if you are using a

fiction book as a reference, the page number on which the item is first mentioned). You can find a short video about creating a Discovery Center at <https://www.youtube.com/watch?v=Dc3Dz4YriQ8>. As you continue to explore your natural world, you can add more things to your Discovery Center.

Go on a Nature Wonder Hour Adventure and Become a Nature Detective

- ❖ Your Nature Wonder Hour can be as long or as short as you would like. The key is to let curiosity be your guide. As you go through your day, write down any questions you have about the natural world and items in your discovery center. For example, you may wonder what type of trees you see outside your window, why moss grows in certain spots but not others, what animals are making the sounds that you hear outside your window, why some plants have thorns, why a spider weaves its webs in a particular pattern, or why some birds migrate and some don't. Examining items from your Discovery Center also can help you to create your own Nature Wonder Hour Adventure. You can write down what you discover and add to it as you learn more. You can find a short video about the Nature Wonder Hour at <https://www.youtube.com/watch?v=lw7SrghUmfw>. Below are some sample questions you can ask about items from your Discovery Center. You can use them as a jumping off point to explore and learn about the things that interest you.

Items from Plants.

- ❖ Identify the plant from which the item came.
- ❖ How does it provide food or shelter for animals or humans?
- ❖ Does it have any companion plants that usually grow near it? Where does it grow in the wild? Is it native to your area? If not, where did it originate and how did it come to grow in your area?
- ❖ What type of ecosystem is the plant usually found in? Does it live on other plants? Do any other plants live on it?
- ❖ What is its life cycle? How does the plant change throughout the year? What strategies does it use to survive? How do those evolve over time?
- ❖ If your item is a leaf, is it a simple or compound leaf?
- ❖ What role has your plant played in human or animal history?
- ❖ Is your plant an annual or perennial?
- ❖ How are its seeds spread?
- ❖ How tall and wide does your plant usually grow?
- ❖ Does your plant prefer shade, sun, or a combination?
- ❖ In what type of soil does your plant grow best?
- ❖ How has the plant evolved over time? Has it been cultivated by humans?
- ❖ Does the plant have any protective physical or chemical defenses to protect it from predators?
- ❖ Are there any legends or traditions associated with the plant (for example, mistletoe)?

Items from Animals:

- ❖ Can you identify the animal from which the item came?
- ❖ Where does the animal usually live? Is the animal native to your area? If not, where did it originate and how did it come to live in your area?
- ❖ Can you tell if the item is from a male or female? Do males and females within the species you selected have different colorations?
- ❖ What does the animal usually eat? What animals or plants are its predators?
- ❖ What strategies does it use to survive? How do those evolve over time?
- ❖ How does the item you found help the animal in its survival—for example, how do feathers help protect a bird from changes in temperature?
- ❖ Does the animal use camouflage? What areas does it prefer to hide in? What strategies does the animal use to protect itself from predators?
- ❖ If the animal leaves tracks on the ground, what do the tracks look like? Can you identify the animal by its tracks?
- ❖ What sounds does the animal make? How does it use sounds to communicate with other animals?
- ❖ Does the animal migrate? If so, what is its migration pattern? When does it migrate?
- ❖ Does the animal have a territory? If so, how large is the territory? Does it mark its territory? If so, how? How does it protect its territory?
- ❖ How fast can the animal move? How far does the animal usually travel in one day?
- ❖ Does the animal live alone or in groups? Are there any other species of animals that are usually found near the animal that you selected?
- ❖ Is the animal usually active during the day or night?
- ❖ Are there any legends or folktales associated with the animal (for example, foxes)?

Other items from nature:

- ❖ You will have different questions for different types of items. For example, if your item is a growth, you might be curious about the following things:
 - What plant is your growth usually found on?
 - Is it a parasitic or helpful companion to its host?
 - In what seasons does your item appear?
- ❖ If your item is a rock, you might be curious about the following things:
 - What types of minerals does your rock contain?
 - Does the mineral play any important part in human history (for example, gold)?
 - How was your rock formed?
 - How has it been shaped by its environment?
- ❖ What other things from nature do you wonder about or would like to learn more about? Below are some ideas to get you started:
 - What type of bird do you hear every morning singing outside your window? The website www.audobon.org has great resources to help you identify birds. How do the bird's calls change throughout the day?

- Have you ever wanted to grow something from seed? Your Nature Wonder Hour is a perfect time to learn how and to try it out.
- Have you ever wondered if you could use cricket chirps to figure out the approximate outside temperature? You can count the number of cricket chirps in 14 seconds and add 40. This will provide you the approximate temperature in degrees Fahrenheit.

Experience the World of Your Favorite Fictional Characters by Creating a Nature Journal from their Point of View

- ❖ Gather a notebook to use as a nature journal and a pen or pencil, and, if you'd like, colored pencils or markers.
- ❖ Pick a book where the outdoors plays an important part. Look for a book where much of the action is set outdoors
- ❖ Find a relaxing spot to read.
- ❖ Start exploring. As you read, make a notes and drawings in your journal about the natural world of the main character. Some questions you might answer include those below:
 - What season is it?
 - What is the weather like?
 - What plants does your character encounter?
 - What animals are active during the day in that area?
 - What animals are active during the night in that area?
 - Write down or draw what your character sees, hears, touches, smells and tastes as they explore their world.
 - If you're not sure, do some research about the natural world of your main character.
 - If your area is similar to that of the main character, you can make leaf rubbings and press flowers and leaves in your nature journal.
 - Record how the natural world of your character changes over the course of the book.
 - Record how the character responds to the challenges in the natural environment. What obstacles does the natural environment present? What strategies does the character use? How do those strategies evolve over time? How did the character grow and change as a result of facing those challenges?
- ❖ Use your nature journal to record other things in your character's natural environment that interest you.
- ❖ Research at least one fun fact about each natural element that interests you and write it in your journal
- ❖ If you were the main character, what would you do differently? What resources would you use in nature to help you stay safe and healthy? What items would you pack before heading outdoors in that environment?

Start Your Morning Happier - with Nature – the Challenge

- ❖ You can check out this short Youtube video to learn how to make your day better by starting your morning in nature: <https://www.youtube.com/watch?v=N3rTxeTxUfw>

Make Your Day Happier- with a 5-Minute Flower Arrangement from Nature- the Challenge

- ❖ You can check out this short Youtube video to learn how to start your day by destressing in nature by gathering natural textures to create a 5-minute flower arrangement to brighten your day: <https://www.youtube.com/watch?v=5Oxr7Z9qf74>

Make Your Evening Happier- with Nature- the Challenge

- ❖ You can check out this short Youtube video to learn ways to unwind each evening- with nature: <https://www.youtube.com/watch?v=EnDaWfscNzs>

Nature Scavenger Hunt Challenge

- ❖ Go on a nature scavenger hunt and try to find items mentioned in the book that you are reading. How many can you find? Another challenge is to try to find an item from nature that starts with each letter of the alphabet.

No Rules Reading Challenge

- ❖ If you'd like to make your reading more interesting and spend time in nature, you can download the free "No Rules Reading" bookmark at <https://johackl.com/activities/for-readers/no-rules-reading>

Make Your Summer More Fun—with the Outdoor Adventure Bookmark Challenge

- ❖ You can download a free Outdoor Adventure Bookmark at <https://johackl.com/wp-content/uploads/2020/06/CC-FINAL-10-Things.pdf> and check out this short Youtube video to learn ways to make your summer more fun by spending time in nature <https://johackl.com/activities/for-readers/try-outdoors/>

Bloom Bing Challenge

- ❖ Each week, make a list of flowers that you expect to bloom in your area and share it with your friends. Create your own Bloom Bingo sheet by selecting flowers that you believe will bloom soon and arrange them on your Bingo card. You can download a bloom bingo card at <https://johackl.com/wp-content/uploads/2020/04/bloom-bingo-sheet.pdf>. Snap a photo or write the location of each flower as it comes into bloom and mark it on your Bingo card. What challenges did the plants overcome in order to produce blooms?

Outdoor Skills Challenge

Are you ready to build your outdoor skills and increase your grit and ability to stick with things? Try the challenges below:

- ❖ Research how to use a compass and a map to navigate an unknown, yet safe area. Use these methods to navigate a trail in a local park.
- ❖ Research how to make a sundial, build one, and use it to tell the time outdoors.
- ❖ Research how to predict the weather from things in nature such as clouds and animal behavior. See if you can accurately predict upcoming weather.
- ❖ Research how to make a reading nook outdoors by using items found in your natural environment. Build and use it at least 3 days a week. After your reading time, make a list of things that you are grateful for that week.