Welcome

I'm so excited that you believe nature study has a place in your schedule! While I'm a huge advocate for getting outside and using nature discovery as an outdoor science lab, I also understand there are circumstances where getting outdoors is either difficult or unsavory. That's one of the main reasons I created this series of nature study lessons that can be completed from the comfort of your home or classroom.

Additionally, with so many families and teachers utilizing a "morning time" approach at some point during the school day, I wanted to be sure you have the opportunity to easily include nature study in that precious part of your day.

No matter your motivation, I hope you find these quick lessons to be a meaningful way to teach a wide variety of science topics to your children!

How To Use The Lessons

My hope is that you'll use this curriculum in ways that best benefit your family or classroom. Besides the first lesson, which includes an overview of the topic, there is no other single lesson or assignment that is imperative, so you are welcome to skip and arrange things as you see fit.

The activities are geared mostly toward 1st-8th grade students. Younger and older children can still benefit from the lessons, especially if you are using them as part of a family "morning time" practice. On occasion, you will find a lesson that may be too difficult for younger students. If that happens, simply skip it and circle back around in a year or two.

Since many of the lessons utilize the Internet, it is assumed that the parent or teacher is monitoring all online usage. While all the suggested videos and website links were entirely appropriate for all ages at the time of publication, links can change at a moment's notice. If you come across a link that seems to be dead or leads to a page that isn't pertinent any longer, please contact naturexplorers@gmail.com.

A Tour Through the Guide

Lesson 1

This lesson includes an introductory video that you will not want to miss. It lays the foundation for the lessons that follow. Your children will be encouraged to take notes of some sort during or after the video.

Subsequent Lessons

Each of these lessons are designed to offer you varied levels of participation. You may complete as many of these levels as you like. The only necessary step is Level 1.

Level 1: Extract

Online and print options are provided to teach about each topic. The online options require the least amount of preparation and time. The print options include living literature and/or worthy non-fiction selections.

NOTE: The various online and print options are listed in order from concepts that are easiest to understand to those that are most difficult. Additionally, they will each usually cover slightly different material, so you could go through each one of them over a few days to gather new information if you desire to stick with a subject a little longer.

A few questions are also included to help guide family/classroom discussions or narrations.

(You may stop after this level - or any level here after - depending on your goals.)

Level 2: Explain

A notebooking assignment is provided to help students assimilate what they learned during the "Extract" portion of the lesson. A simple, spiral-bound sketchpad with pencils and colored pencils is usually all that will be necessary for each child.

Level 3: Engage

A hands-on activity is suggested to help children understand the topic a little better - or sometimes just to add a little extra fun.

Level 4: Elaborate

A research-based activity is suggested to help children dive deeper into the topic. Oftentimes, a quick Internet search and follow-up discussion can suffice. However, a simple writing assignment option is always provided for your convenience.

For those who use *Nature Study Made Easy* as part of a "morning time" routine, this research and/or writing level can be assigned to older children during their language arts time.

Level 5: Explore

When you have a super-excited child who would love to get outdoors to discover the topic in nature, a simple nature activity is suggested.

Extras:

Some lessons will include an extra idea or two that I just couldn't pass up sharing with you.

Sample Schedules

Please use these lessons as they work best in your family. Below are several sample schedules to give you ideas for implementation in your home or classroom.

Remember, you will need to complete Lesson 1 in its entirety. These schedules are options for Lessons 2 and onward.

Once A Week No Frills 10-15 minutes	
Extract	Choose one online or print option to learn about the topic.
Explain	Complete the notebooking assignment.

Once A Week 20-30 minutes	
Extract	Choose one online or print option to learn about the topic.
Explain	Complete the notebooking assignment.
One Other Level	Choose Engage, Elaborate, or Explore and complete the directions.

Once A Week 1 Hour	
Extract	Choose one online or print option to learn about the topic.
Explain	Complete the notebooking assignment.
Engage	Complete the hands-on activity.
Elaborate	Complete the research-based activity.

Daily with Extra Literature 10-15 minutes				
Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
Extract	Extract	Extract	Explain	Off
Choose one of the online or print options to learn about the topic.	Choose another of the online or print options to learn about the topic.	Choose another of the online or print options to learn about the topic.	Complete the notebooking assignment.	

Daily with Varied Levels of Higher Order Thinking Skills 10-20 minutes				
Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
Extract	Explain	Engage	Elaborate	Explore or Off
Choose one of the online or print options to learn about the topic.	Complete the notebooking assignment.	Complete the hands-on activity.	Complete the research-based activity.	Complete the outdoor activity if you wish.

Loop Schedule
You may use either of the daily schedules that you prefer to work through the assignments at your own pace. This is for those who may only get to nature study 2-3 times a week during morning time, for example. In this instance, if you choose the daily schedule with extra literature you would still plan 3 Extract lessons in a row, followed by 1 Explain lesson. On Monday, for example, you would read an online or print option to learn about the topic. If you don't get back around to nature study until Thursday, you would still do the next lesson, which would be reading from another online or print option. If you don't get back to nature study until the following Tuesday, you will still do the next lesson, which is reading yet another online or print option. And finally, when you cycle back to nature study the next time, you would be at the notebooking lesson.

Lesson 2 - Space

One of the key components of a habitat which affects the life and health of **living organisms** is the **space** (or the physical area) in which they live. Remember, where plants and animals live is where all of their **resources** like food, water, shelter, and potential mates come from.

The ability to find food, water, shelter, and mates is largely determined by the space that plants and animals have within a habitat. Depending on the species, some organisms need just a small amount of space to live and grow, while others need a great deal of space.

Plants, for example, must have plenty of space for their roots to extend into the soil to obtain nutrients that are necessary for growing and thriving. Smaller plants may only need very limited space. For instance, a dandelion's shallow roots don't have to grow very far into the soil and, as long as they get plenty of sunshine, they only need a little room in order to grow a few inches high. While massive trees like giant redwoods, on the other hand, with diameters of 15 feet or more, need a considerable amount of space to reach as tall and wide as they do. They also need much more underground room for roots, as well as access to lots more water.

Animals like carpenter ants need only a few square inches for an entire colony to dig tunnels underground and to locate plenty of food. Whereas some species like the solitary and territorial cougar require 50-175 square miles to hunt for prey and find a mate. Giraffes need on average around 35 square miles of space, but they also need open "height" space since they are so tall. Do you think a thick forest habitat would work for a tall giraffe?

Extract

Easier
Video: Anthills

Video: Redwoods
Harder

Discussion Questions

1. Look outside. How would you describe the space if you were a butterfly? (*Answers will vary. Commonly, students will say there is a lot of space for a butterfly to find shelter, food, water, and mates.*)
2. Look outside. How would you describe the space if you were a grizzly bear? (*Answers will vary depending on the size of the space. Likely they will say there is not enough space to find a safe shelter and enough food.*)

Explain

In your nature journal, draw a very simple map of the space you see when you look outside. Add one happy animal to your map that would have plenty of room to live and find necessary resources in the space. Then add one sad animal to the side of your map that wouldn't have enough room to live and/or find enough necessary resources in the space.

Engage

If you have small, plastic toy animals, gather them for this activity. If you don't have toy animals, get a package of animal crackers from the grocery store.

Place one of each type of animal in a brown paper bag. Takes turns grabbing one animal from the bag and discussing what kind of space you think it probably needs. Consider its size, the foods it eats, the water it drinks, and where it takes shelter.

If you aren't sure, simply ask google for some help. You'll probably notice a lot of biome words during google searches that will be a great addition to this activity!

Elaborate

Animals sometimes have to compete for space. If there are too many of one type of animal in an area, there may not be enough places to live, enough food or water, or even enough mates to go around.

Red-tailed hawks are interesting birds of prey that claim specific territories of land. They work hard to defend their territories so that other hawks don't live or hunt there. Research to learn about red-tailed hawks and their unique territorial behaviors.

Sketch a red-tailed hawk in your nature journal and write a few notes about the things you learn.

Explore

The next time you're on a walk outside, make sure to notice the space around you. Be very watchful of the animals and how they use the space. It would be nice to start a page in your nature journal where you jot down the names of animals that seem to need a lot of space vs. those that don't seem to need very much at all.

Extra

Video: Red-tailed Hawks