

Step Outside

Studies in Creation for Young Children



Teacher Manual

K - 3

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List of Books & Materials Needed to Complete Step Outside

Core

- Step Outside Teacher Manual (used for all levels)
- Naxos "Animals in Music" CD (used for both K & 1)
- "Step Outside Student Pages - Level K" (one set for each student)
- Christian Liberty Nature Reader Book 1 3rd edition (used for Level 1 only)
- "Step Outside Student Pages - Level 1" (one set for each student)
- Christian Liberty Nature Reader Book 2 3rd edition (used for Level 2-3 only)
- Christian Liberty Nature Reader Book 3 3rd edition (used for Level 2-3 only)
- "The Four Seasons" CD (used for Level 2-3 only)
- "Step Outside Student Pages - Level 2-3" (one set for each student)

Suggested Supplementary Read Alouds

- Tree by Brita Teckentrup (K-1)
- Make Way for Ducklings by Robert McCloskey (K-1)
- A House is a House for Me by Mary Ann Hoberman (K-1)
- The Bear That Heard Crying by Natalie Kinsey-Warnock & Helen Kinsey (K-1)
- The Icky Bug Alphabet Book by Jerry Pallotta & Ralph Masiello (K-1)
- Miss Rumphius by Barbara Cooney (K-1)
- Blueberries for Sal by Robert McCloskey (K-1)
- Over and Under the Pond by Kate Messner (K-1)
- Counting Is for the Birds by Frank Mazzola Jr. (K-1)
- Goodnight Moon by Margaret Wise Brown (K-1)
- The Flower Alphabet Book by Jerry Pallotta & Leslie Evans (K-1)
- A Walk in a Forest by Maria Dek (K-1)
- The Country Artist: Beatrix Potter (2-3)
- Rocks in His Head by Carol Hurst (2-3)
- The Moon Book by Gail Gibbons (2-3)
- My First Book About Backyard Nature by Patricia Wynn & Donald Silver (2-3)
- The Bears on Hemlock Mountain by Alice Dalgliesh & Helen Sewell (2-3)
- Charlotte's Web, Stuart Little, and Trumpet of the Swan by E.B White (2-3)
- The Burgess Animal Book for Children by Thornton W. Burgess (2-3)
- The Burgess Bird Book for Children by Thornton W. Burgess (2-3)
- The Burgess Seashore Book for Children by Thornton W. Burgess (2-3)
- Seed Babies by Margaret Warner Morley (2-3)
- Birds of the Air by Arabella B. Buckley (2-3)
- Other nature themed books of your choice

Table of Contents

| | |
|--------------------------------------------|-----|
| Introduction | 4 |
| The Student, the Fish, and Agassiz | 8 |
| How to Use This Book | 14 |
| Setting Your Goals | 16 |
| Sample Schedules | 17 |
| Sample Nature Journal Pages | 18 |
| Materials You Will Need | 19 |
| “So...What Might a Nature Walk Look Like?” | 20 |
| Kindergarten Weekly Schedule | 23 |
| Kindergarten Nature Walk Activities | 133 |
| Kindergarten Nature Project Activities | 140 |
| Kindergarten Memory Work | 152 |
| Grade 1 Weekly Schedule | 156 |
| Grade 1 Artist & Composer Biographies | 232 |
| Grade 1 Nature Walk Activities | 246 |
| Grade 1 Nature Project Activities | 251 |
| Grade 1 Memory Work | 259 |
| Grades 2-3 Weekly Schedule | 261 |
| Grades 2-3 Nature Walk Activities | 326 |
| Grades 2-3 Nature Project Activities | 356 |
| Grades 2-3 Memory Work | 374 |
| Quick and Easy Field References | 377 |
| Reference Books, Guides, and Other Helps | 390 |
| Plant Press and Bird Feeder Plans | 394 |

Introduction

A Brief Pep Talk

Nature study - the very mention of these two words conjures up all sorts of images in the minds of people. The environment as a whole is a fashionable topic these days, but despite the efforts of many of some engaged in natural science, or of many environmentalists, to pervert the study of nature to advance their own selfish agenda, nature study must remain what God has always intended it to be. Plainly put nature study consists of "simple, truthful observations" of the world around us. It leads ultimately to a better understanding of who we are and who God is.

Of course, this cannot be accomplished through nature study alone. We need the light of God's Word to explain our observations and to put them in perspective. Left to ourselves we too often lift up the creation and worship it while we are, in fact, commanded to worship the Creator and to glorify Him in all that we do. Examples of the former are all around us. The evening news runs another story about people chaining themselves to trees, or ramming fishing boats, or glibly referring to "Mother Nature" or "Mother Earth". Even Christians can inadvertently get caught up in this thinking. After climbing a mountain and gazing over the surrounding countryside, we may marvel at the beauty of the scene without giving a second thought to the One who created everything by the power of His spoken Word. The Lord said, "Be!"...and it was.

Therefore, it must always be kept in mind that while leading children through the study of nature, we should stick close to the goal. What is that goal? *We want to cultivate in our children the skill of accurate observation and to help them understand all that they observe.* Of course, this understanding is formed within the bounds of God's sovereign purposes that all creation will glorify Him and that man was made to have dominion over all the works of His hands. A study of nature done in this way will leave thoughtful children pondering their role as good stewards of the earth and its resources. They will be released from the oppressive slavery of radical environmentalism with its elevation of nature to god-like status and its wagging finger in the face of all mankind. They will be free to see nature as God's handiwork; something to be used and enjoyed by man, yet not abused. The Bible's dominion mandate can never be used by those who are looking for an excuse to ravish the environment for their own selfish gain.

Nature study is the way science should be learned at an early age. First of all, it gives children *a practical and helpful knowledge of the world around them*. Second, it *cultivates a child's imagination*. Third, it *develops a regard for what is true and offers a means for expressing it*. Fourth, nature study *builds up a love for what is beautiful*. Fifth, it *encourages a healthy love for the out of doors*, something increasingly important in our sedentary society.

All children, no matter where they live, should have the opportunity to "step outside" to do some nature study. It should not, however, be a forced, clinical exercise, but gently encouraged by parents or teachers. How? *Modeling nature study is one of the best ways to encourage it*.

When adults consistently are out of doors (working in the garden, walking through the forest, or playing at the park) young children tend to gain an interest in the same things. *Encouragement* will promote a child's interest. When an adult shows genuine interest in the flower, worm, or leaf that a child brings them, that child is more likely to take an interest in the study of nature. *Scheduling* time to be out of doors is a crucial factor in supporting a decision to do a nature study. We often get caught up in getting the math, reading, writing, and household chores done, but don't give a second thought to the health benefits of time out in the fresh air. As a sidebar, also consider the many ideas and opportunities that arise during the nature study in terms of possible writing topics (How many times have you heard your older children say that they have nothing to write about?); studies in math (symmetry of a leaf); history (uses of the forest in pioneer times); music (listen to the birds); art (study of colour or composition); reading (If you have never read poetry about nature while sitting in a natural setting, you're missing a real treat!); and, of course, science.

Equip children with simple materials to heighten their interest. A field notebook, several pencils with erasers, and their senses must be considered basic essentials for a nature study. However, as you progress in skill and interest, consider a good hand lens, binoculars, plastic specimen bottles with covers, a good set of coloured pencils, waterproof knapsack, handbooks and field guides and anything else that can make your time out in the open more enjoyable and profitable. These will encourage further and closer investigation. *Help children understand more of what they are observing*. Tell them what you know but don't be afraid to say "I don't know." Have a supply of resources at home to aid you in clarifying information. Encyclopedias, handbooks, field guides, pictures, and the Internet are all helps

that can shed more light and add depth to the child's nature study. Obviously, they are supplements only and are never to be used in place of the actual observation, but these resources make your job a lot easier. With them, you will be more likely to not guess at your child's question, but say, "Let's find out!"

Nature study can take place almost anywhere. To be sure certain locations lend themselves to the observation of a wider variety of life forms, but life is virtually everywhere. Even city sidewalks can often reveal an ant struggling with a bit of bread crumb. The point is you don't have to live in the country to study nature. *Be open to spontaneous opportunities for nature study and you will have few problems finding things to study.*

Another potential obstacle to nature study is the weather. Depending on where you live, there will be times when it is too hot, too cold, too stormy, even too dangerous to go outside. However, don't wait around for the perfect day. To do so is to miss opportunities to study aspects of the natural world only available to those who are willing to venture out when the weather is less than ideal. Dress appropriately, make sure books and other materials stay dry, always make safety your first priority, and there should be few days when you are absolutely stuck indoors.

Still another barrier to a love for nature study is *the modern habit of indoor entertainment.* TV, radio, computers, video games, hand-held devices of all descriptions, movies, even reading, crafts, and organized indoor sport can become a consuming passion and sap all desire to be active out of doors. Quite simply there is no better way to combine learning, physical exercise, and develop a love for God's creation than regular work, play, and leisure out of doors.

However, without a doubt, *the chief obstacle to starting and maintaining the nature study habit is the parent.* As parents we easily fall prey to the Tyranny of the Urgent. "We just don't have time today, dear." "I'm just too busy." "I'm too tired." "Why don't you just read for awhile?" How many times do our children hear our excuses? Now to be sure there are times when we cannot take children on a nature walk or we may live in an area where it would be unthinkable to send them out on their own; however, we would like to challenge parents to consider the great many benefits not only for the child but for us as well. Many adults today do not get enough exercise, have stress levels that are out of control, or simply need some time to get out of the house for just a bit. Homeschooling moms especially must make it a priority to incorporate this opportunity into their school week. *Get*

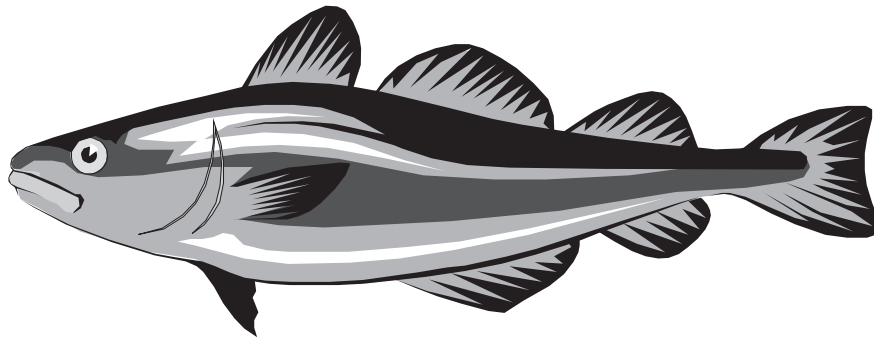
help with baby-sitting or crowd control if you must, but you will not regret the many benefits afforded to those who make it a habit to get out to do nature study with some or all of their children at least once a week. Who knows? You may find yourself scheduling nature study into your "school time" more than once per week!

It's time to take early grade science outdoors! The benefits are just too precious to put it off any longer. Increased respect for the world around us; cultivation of the imagination; higher regard for the truth as revealed through God's creation; development of a love for what is beautiful; establishment of a healthy lifestyle that raises fitness levels, reduced tension and stress, and bringing families together. Can you really think of a good reason why nature study should not be a regular part of your week?

The story goes that a farmer was once asked how much land he owned. His response was gold. "I don't own none of it," he drawled. "I'm just looking after it for a while." If only we all could see our earthly possessions in this light. The reality is that we don't own anything here. We're all citizens of another place and God has given us the mandate to be good stewards of His wonderful gifts while we sojourn here. The environment is one such gift. We are not to abuse it ruthlessly. At the same time, we are not to worship it. Christians get blamed for many of the problems that apparently face the environment today. Maybe much of this criticism is rightly deserved. But Christians are the only people on this planet who have the insight and the mandate to be true environmentalists. Nature study for children is simply one step for Christians to get back in the game and bring the light of God's Word to this important contemporary issue.

The Student, The Fish, and Agassiz
By the Student
(An exercise for parents/teachers.)

Biographical Note: Louis Agassiz, 19th century naturalist and teacher became famous for his classification of many of the species of plants and animals in the world and for the development of the study of natural history at Harvard University where he became a professor in 1848. But Agassiz is probably more fondly remembered for his ability as a teacher. Agassiz had a passion for nature study that began when he was a young boy growing up in Switzerland. It was at this time that he developed a love for being out of doors: watching, walking, waiting for his next exciting discovery. The young Louis also learned the joy of studying God's world. He never lost that sense of wonder and as a master teacher he passed it onto his students, impacting them in their learning and work. But, more importantly Agassiz inspired a passion for life. People who knew him came away changed. His enthusiasm was infectious and his search for truth was insatiable. His death in 1873 left a hole in the scientific world. Those who desire to study nature will do well to remember one of his well know mottoes, "Never be afraid to say, 'I don't know.'"



It was more than fifteen years ago that I entered the laboratory of Professor Agassiz, and told him I had enrolled my name in the scientific school as a student of natural history. He asked me a few questions about my object in coming, my antecedents generally, the mode in which I afterwards proposed to use the knowledge I might acquire, and finally, whether I wished to study any special branch. To the latter I replied that while I wished to be well grounded in all departments of zoology, I proposed to devote myself specifically to insects.

"When do you wish to begin?" he asked.

"Now", I replied.

This seemed to please him, and with an energetic "Very well," he reached from a shelf a huge jar of specimens in yellow alcohol.

"Take this fish," he said, "and look at it; we call it a Haemulon (Hem-yu-lon); by and by I will ask what you have seen."

With that he left me, but in a moment returned with explicit instructions as to the care of the object entrusted to me.

"No man is fit to be a naturalist," said he, "who does not know how to take care of his specimens."

I was to keep the fish before me in a tin tray, and occasionally moisten the surface with alcohol from the jar, always taking care to replace the stopper tightly. Those were not the days of ground glass stoppers, and elegantly shaped exhibition jars; all the old students will recall the huge, neck-less glass bottles with their leaky, wax-besmeared corks half eaten by insects and begrimed with cellar dust. Entomology was a cleaner science than ichthyology, but the example of the professor, who unhesitatingly plunged to the bottom of the jar to produce the fish, was infectious; and though this alcohol had "a very ancient fish-like smell", I really dared not show any aversion within these sacred precincts, and treated the alcohol as though it were pure water. Still I was conscious of a passing feeling of disappointment, for gazing at a fish did not commend itself to an ardent entomologist. My friends at home, too, were annoyed, when they discovered that no amount of eau de cologne would drown the perfume which haunted me like a shadow.

In ten minutes I had seen all that could be seen in that fish, and started to search for the professor, who had, however, left the museum; and when I returned, after lingering over some of the odd animals stored in the upper apartment, my specimen was dry all over. I dashed the fluid over the fish as if to resuscitate it from a fainting-fit, and looked with anxiety for a return of the normal sloppy appearance. This little excitement over, nothing was to be done but return a steadfast gaze at my mute companion. Half an hour passed, an hour, another hour; the fish began to

look loathsome. I turned it over and around; looked at it in the face - ghastly; from behind, beneath, above, sideways, at a three-quarters' view - just as ghastly. I was in despair; at an early hour I concluded that lunch was necessary; so, with infinite relief, the fish was carefully replaced in the jar, and for an hour I was free.

On my return, I learned that Professor Agassiz had been at the museum, but had gone and would not return for several hours. My fellow students were too busy to be disturbed by continued conversation. Slowly I drew forth that hideous fish, and with a feeling of desperation again looked at it. I might not use a magnifying glass; instruments of all kinds were interdicted. My two hands, my two eyes, and the fish; it seemed a most limited field. I pushed my finger down its throat to see how sharp its teeth were. I began to count the scales in the different rows until I was convinced that that was nonsense. At last a happy thought struck me - I would draw the fish; and now with surprise I began to discover new features in the creature. Just then the professor returned.

"That is right," said he; "a pencil is one of the best set of eyes. I am glad to notice, too that you keep your specimen wet and your bottle corked."

With these encouraging words he added, - "Well, what is it like?"

He listened attentively to my brief rehearsal of the structure of the parts whose names were still unknown to me: the fringed gill - arches and movable operculum; the pores of the head, fleshy lips, and lidless eyes; the lateral line, the spinous fin, and forked tail; the compressed and arched body. When I was finished, he waited as if expecting more, and then with an air of disappointment, -

"You have not looked very carefully; why," he cautioned, more earnestly, "you haven't seen one of the conspicuous features of the animal, which is as plainly before your eyes as the fish itself; look again, look again!" and he left me to my misery.

I was piqued; I was mortified. Still more of that wretched fish! But now I set myself to my task with a will, and discovered one new thing after another, until I saw how just the professor's criticism had been. The afternoon passed quickly, and when, towards its close, the professor inquired, -

"Do you see it yet?"

"No," I replied, "I am certain I do not, but I see how little I saw before."

"That is next best," said he earnestly, "but I won't hear you now; put away your fish and go home; perhaps you will be ready with a better answer in the morning. I will examine you before you look at the fish."

This was disconcerting; not only must I think of my fish all night, studying, without the object before me; but also, without reviewing my new discoveries, I must give an exact account of them the next day. I had a bad memory; so I walked home by the Charles River in a distracted state, with my two perplexities.

The cordial greeting from the professor the next morning was reassuring; here was a man who seemed quite as anxious as I that I should see for myself what he saw.

"Do you perhaps mean," I asked, "that the fish has symmetrical sides with paired organs?"

His thoroughly pleased, "Of course, of course!" repaid the wakeful hours of the previous night. After he had discoursed most happily and enthusiastically - as he always did - upon the importance of this point, I ventured to ask him what I should do next.

"Oh, look at your fish!" he said, and left me again to my own devices. In a little more than an hour he returned and heard my new catalogue.

"That is good, that is good!" he repeated, "but that is not all; go on." And so, for three long days, he placed that fish before my eyes, forbidding me to look at anything else, or to use any artificial aid. "Look, look, look," was his repeated injunction.

This was the best entomological lesson I ever had - a lesson whose influence has extended to the details of every subsequent study; a legacy the professor has left me, as he has left it to many others, of inestimable value, which we could not buy, with which we cannot part.

A year afterward, some of us were amusing ourselves with chalking outlandish beasts upon the museum blackboard. We drew prancing star-fishes; frogs in mortal

combat; hydra-headed worms; stately craw-fishes, standing on their tails, bearing aloft umbrellas; and grotesque fishes, with gaping mouths and staring eyes. The professor came in shortly after, and was as amused as any, at our experiments. He looked at the fishes.

"Haemulons, every one of them," he said. He turned to me and said, "You drew them."

True; and to this day, if I attempt to draw a fish, I can draw nothing but Haemulons.

The fourth day, a second fish of the same group was placed beside the first, and I was bidden to point out the resemblances and differences between the two; another and another followed, until the entire family lay before me, and a whole legion of jars covered the table and surrounding shelves; the odor had become a pleasant perfume; and even now, the sight of an old, six inch, worm-eaten cork brings back fragrant memories!

The whole group of Haemulons was thus brought in review; and, whether engaged upon the dissection of the internal organs, the preparation and examination of the bony framework, or the description of the various parts, Agassiz's training in the method of observing facts and their orderly arrangement was ever accompanied by the urgent exhortation not to be content with them.

"Facts are stupid things," he would say, "until brought into connection with some general law."

At the end of eight months, it was almost with reluctance that I left these friends and turned to insects; but what I had gained by this outside experience has been of greater value than years of later investigation in my favourite groups.

Questions to Consider

1. Why was Professor Agassiz pleased with the student's response that he was ready to begin right away?
2. What general lesson can be learned from Agassiz's statement, "No man is fit to be a naturalist who does not know how to take care of his specimens."?
3. Why do you suppose the student was only allowed to use his eyes, a pencil, and paper to observe the fish?
4. How did the student's approach in studying the fish change the second time he sat down in front of it?
5. What scientific principle is demonstrated in Agassiz continually sending the student back to observe the fish?
6. What does it mean when Agassiz says, "Facts are stupid things until brought into connection with some general law."?

How to Use This Book

This book is designed for homeschooling parents (or others) who desire to do nature study but feel they need some help getting started. For years we have encouraged parents to do nature studies with their elementary aged children as a way to develop skills in observation and a love for learning about the outdoors. Too often we have heard that, while greatly desirable, this aspect of the curriculum has fallen to the side. More often than not the reason has been that parents lacked the knowledge to adequately cover what they felt was necessary for a *real science course*. To help in this regard we have put all that we felt was needed to begin a nature study for young children. Step Outside - K-3 is meant to be used with children in Kindergarten to Grade 3. It is left to the parent to decide which level is best suited to the child. We can take no responsibility, however, if you all happen to get so enthusiastic about a particular discovery that you spend extra time and effort doing further research and discussion.

Furthermore, we have chosen to add other components that are often neglected or that parents don't have time for, such as *music and art appreciation, memory work, copybook work and reading*...all with a nature theme. We have purposely designed the course to have plenty of flexibility. You may choose to complete the course as shown in the weekly schedule, which has been designed for a four day school week. However, you may choose to save one day as your "nature day" and complete the reading(s), nature walk, nature project, and art/music component on this day. Memory work and copybook would still happen daily. There are many ways in which you can individualize this course to suit your needs. Please see sample schedules on page 17.

The readings, music, and art are designed with narration questions. We believe that the best way for children to learn and retain information in this stage is through oral narration. The questions help to prompt young learners. Children should also be encouraged to use full sentences when narrating. (One little known benefit of answering questions orally in complete sentences is that it introduces the concept to the child long before they are ready to write something original on their own. You won't be sorry that you required this of your child early.) Suggested answers are included to help the parent. Of course do not stop with the nominal number of questions that we have provided. Feel free to extend the lesson with further research and discussion.

As the parent/teacher you will be "driving the bus" to make sure nature study gets done! We strongly suggest that you take time to look through the guide if you haven't already done it. Go back and read the introduction and think about the benefits of adding regular nature study to your curriculum. Read the account of Professor Louis Agassiz and seriously consider the questions posed at the end of the narrative. This will help you to better understand not only his methods and motivations, but will aid you in working through this material. It will also help you to clarify your own goals and approach. Knowing why you are doing something will go a long way toward insuring success in this endeavour.

Even though this guide book will provide you with plenty of content and ideas on how to use it, you may also want to set some more specific goals for your family....maybe something you've always wanted to do but never got around to. Take time to read the goals page that follows this section, and consider what your goals for the coming year will be.

*Look over the "sample schedules" pages to get an idea of the various ways you might structure your nature study this year. There are *four options* - one of which should work for almost any situation.*

Following the sample schedules you will find some *sample nature journal pages*. These are real samples from real children. Notice the variance in the quality of work and the things different children observe. However, this is only provided as a guide for you. Do not limit your child to these observations if she/he shows an inclination to take a study further.

Take a look at the many helps provided in this guide. There are suggestions for *nature walk activities, nature projects, memory selections, suggested read alouds, as well as quick and easy field references and other resources.*

The *student package* that you purchased will give you ready made pages for many of the exercises contained within the weekly schedules found in this guide. These include *penmanship/copybook work and nature journal pages*. The pages are three-hole punched and should be inserted in a binder as your child completes them.

You will even find a *suggested list of materials* as well as a section on *what a typical nature walk might look like*. There is only one thing left...gather the materials that you will need and **GET STARTED!!!**

Setting Your Goals

Hopefully you have taken time to read through the introductory notes in this book. You have also read the story about Professor Louis Agassiz and considered the questions that followed it. If you are like most people, you may even benefit from going through this material again. You have also read the section on how to use this book. If you think you are now ready to proceed, take time to write some specific goals that you would like to accomplish in relation to nature study over the next few months. Some of these may be similar to those covered in this program, but you may have some unique circumstances that need to be addressed. Whatever it is that you decide is important to you, take time to write it down. These goals will help you stay on track with what you want to accomplish. Revisit them often. Monitor and adjust as needed to make sure that you are successful. What follows is an example of a possible list of goals. Yours may be more or less specific.

Goals for the Doe Family Nature Study 2019-2020

1. Follow the suggested "Four Day School Week" suggested in Step Outside - K-3.
2. Improve overall fitness through regular time outdoors.
3. Focus on a study of wild flowers from spring to autumn.
4. Use book How to Draw Wildflowers to improve drawing skills and observation.
5. Build and maintain a bird feeding station throughout the year.

Sample Schedules

Four Day School Week

*as seen in weekly schedule

Reading, Art/Music, Nature Walk, Nature Project can be done in any order.

Monday: Reading, Memory Work, Penmanship/Copybook

Tuesday: Art/Music, Memory Work, Penmanship/Copybook

Wednesday: Nature Walk, Memory Work, Penmanship/Copybook

Thursday: Nature Project, Memory Work, Penmanship/Copybook

Friday: Free Day or Catch-Up Day

Nature Day

*Choose any day of the week to use as a Nature Day

Monday: Memory Work, Penmanship/Copybook

Tuesday: Memory Work, Penmanship/Copybook

Wednesday: Memory Work, Penmanship/Copybook

Thursday: Memory Work, Penmanship/Copybook

Friday: Reading, Art/Music, Nature Walk, Nature Project

Nature Walk Everyday

Monday: Reading, Memory Work, Penmanship/Copybook, Nature Walk

Tuesday: Art/Music, Memory Work, Penmanship/Copybook, Nature Walk

Wednesday: Nature Walk, Memory Work, Penmanship/Copybook

Thursday: Nature Project, Memory Work, Penmanship/Copybook, Nature Walk

Friday: Nature Walk

Nature Project Once a Month

*Reduce nature projects to once a month

Monday: Reading, Memory Work, Penmanship/Copybook

Tuesday: Art/Music, Memory Work, Penmanship/Copybook

Wednesday: Nature Walk, Memory Work, Penmanship/Copybook

Thursday: Memory Work, Penmanship/Copybook (Monthly Nature Project)

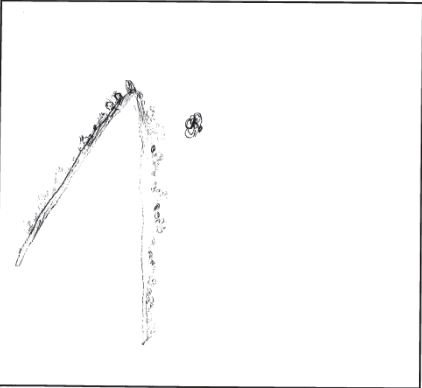
Friday: Free Day or Catch-Up Day

Sample Nature Journal Pages

AGE 6

NAME Trinity DATE MARCH 19
 I WENT TO the woods
 WITH my mommy

WEATHER (circle one or more)

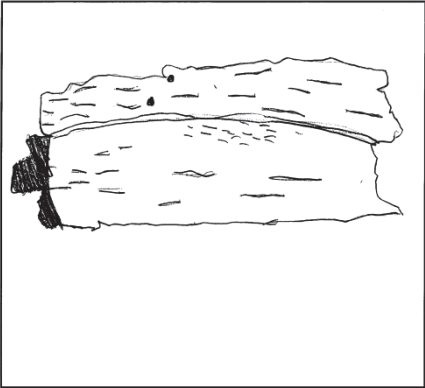


This is a fatterback stick and cone.

AGE 8

NAME Evelyn DATE March 19th 2019
 I WENT TO the woods
 WITH my mommy

WEATHER (circle one or more)




I found it in the wood. It is bark from a birch. I love birch it is my favorite kind of tree.

AGE 10

NAME Ellia Rose DATE March 19th 2019
 I WENT TO our field
 WITH my mom

WEATHER (circle one or more)



This tree is a speckled Alder. In winter they are red and bloom in summer. There are buds on the branch and male catkins at the end in this picture.

Materials You Will Need

As mentioned in the introduction, you don't need much to start a nature study. In fact every effort has been made to make completion of this program as painless to your pocket book as possible. The following list of materials is divided into two parts: Necessary and Supplementary. There is also a list of read aloud suggestions on page 2 of this manual. While these are, of course, just suggestions, we strongly urge you to buy or borrow as many of these as possible. You can, of course, add/use your own favourite nature themed books.

Necessary

- Step Outside Teacher Manual K-3 (used for all levels)
- Naxos "Animals in Music" CD (used for both K & 1)
- "Step Outside Student Pages - Level K" (one set for each student)
- Christian Liberty Nature Reader Book 1 3rd ed. (used for Level 1 only)
- "Step Outside Student Pages - Level 1" (one set for each student)
- Naxos "Four Seasons" CD (used for both 2 & 3)
- Christian Liberty Nature Readers Books 2 & 3 3rd ed.(used for Level 2 & 3)
- "Step Outside Student Pages - Level 2 & 3" (one set for each student)
- Senses (Pay attention to what is going on around you. Improves with use.)
- Common Sense (NEVER put yourself or anyone else in a dangerous situation.)
- Three-Ring Binder (Holds your student pages.)
- Pencils and Erasers. (Buy good ones!)
- Proper Clothing (Suitable for the weather and terrain.) Layers are key!

Supplementary

- Knapsack or Satchel
- Hand Lens
- Binoculars
- Coloured Pencils (good ones)
- Water Colours and Brushes
- Camera
- Plastic Bottles or Bags (Avoid harm to animals & extensive damage to plants.)
- Microscope (Not for the trip...to be used at home for further investigation.)
- Butterfly Net
- Field Guides and Other Helps (Listed in Resource Section of this book.)

"So...What Might a Nature Walk Look Like?"

Thus far we have given you a lot of information:

- A Pep Talk
- A Story
- Some Questions
- How to Use This Manual
- Encouragement to Set Goals
- Sample Schedules
- Examples of Nature Journal Pages
- Things needed: Necessary and Supplementary

But you might be wondering, *"What will my nature walk look like?"*

The correct answer, of course, is, *"Who knows?"*

Wasn't that helpful? All kidding aside the correct answer really is impossible to pin down. There are just too many factors to accurately predict what will happen when you take your children outside on a nature walk. However, if you have followed the structure and suggestions provided in this manual and done a bit of planning, here is what might happen.

It's Thursday afternoon and your four day school week has gone great. All the book work is done. Lunch has been consumed. You have packed a knap sack with pencils, erasers, a few small field guides, the necessary student page for the nature journal, a notepad or two, a few specimen bottles and plastic bags, a snack, some water, a camera.....well....let's just say you are ready.

Your plan is to go out for just one hour and walk a trail that is very close to your home. The weather is fine and you're feeling like Super Mom. You instruct your two children to stay close to you and don't go running away from you as soon as they get to the trail. Ok...off you go!

As you enter the forest where the trail is located, you are immediately surrounded by sounds, smells, and a wide variety of trees, bushes, and small flowers. You see a few birds, a squirrel, and...something that slithered under that log. You take a deep breath. *"Now what?"* you wonder. Anxiety begins to arise from within even as you struggle to shove it back down.

Thankfully one of your children notices an ant struggling along a tree trunk carrying something that looks like a dead creature. You all gather round. What follows is wonderful.

You ask questions that will promote careful observation:

1. *What do you see?*
2. *Why do you suppose that ant is carrying that dead creature?*
3. *Can you recognize what the dead creature is?*
4. *Can you describe the ant? The creature?*
5. *Where do you think the ant is going?*
6. *How do you think that little ant can carry a thing that is larger than it is?*
7. *Do you think the ant can see us? If so, how?*
8. *Can you draw the ant carrying the creature?*

Have your children complete their nature journal page as carefully and accurately as possible. Maybe they will want to add some more to it when they get home. No worries.

Did you get answers to all your questions? Maybe. Some you may know. Others might have to be researched when you get back. It's all good.

Oh...and your hour is just about up. You haven't even walked the entire trail. But, it's a nice day. You decide to stay a bit longer, eat your snack....maybe even investigate what slithered under that log. Nah! Maybe you'll check that another day! For now you decide to simply enjoy your small triumph. You think, *"Hey! I can even come back here to walk the rest of the trail another day!"* You begin to consider the possibilities and look forward to your next trip.

And that is a simple nature walk. You see...anyone can do it!

Kindergarten



Kindergarten Weekly Schedule

Week 1: Days 1 - 4

Day 1: Read "In the Beginning" on the next page to your child and ask the questions provided.

There is no copybook page for the child to complete today. But, parent, please read "Some Thoughts on Penmanship" found in the student pages.

Read aloud *Genesis 1: 1-2* using whatever version of the Bible you prefer. You have three weeks to memorize these two verses so go at whatever pace that is the most comfortable for you and your child.

Day 2: Art: Today's art focus is the "Horse and Arrows" found in Lascaux Cave. Show the picture found on page 26 to your child. Allow them to study it for a moment and then ask the narration questions.

Complete the Day 2 Copybook page from the student pages.

Continue working on the memory selection.

Day 3: Choose a Nature Walk activity found on pages 133 to 139 for the appropriate season and complete the activity today.

Complete the Day 3 Copybook page from the student pages.

Continue working on the memory selection.

Day 4: Choose a Nature Project activity found on pages 140 to 151 for the appropriate season and complete the project today.

Complete the Day 4 Copybook page from the student pages.

Continue working on the memory selection.

*Remember to read aloud to your child throughout the week using the books from the reading list or other nature themed books of your choice.

"In the Beginning..."

The very first sentence in the Bible says, "In the beginning God created the heavens and the earth." This is a very important thing for us to understand because it tells us that before there was anything else, God existed. God has always been. God as Father, Son, and Holy Spirit has always existed as something we call the Trinity and God needed nothing from anyone or anything.

However, for His own glory, God decided that other things should exist. Therefore, God began to create. Now you and I need other materials if we are going to create something. For example, if I asked you to draw a picture of a flower, you would probably make sure you had a piece of paper and a pencil or crayon. Then you could draw. However, you couldn't draw that picture without materials to work with. That is easy for you and me to understand. But God began to create without the use of anything...just Himself and His commands. The Bible tells us that God began, saying, "Let there be..." and things started to appear. Pretty amazing!

This year you will learn about God's incredible creation. We hope you have fun doing that, but before you start that, over the next few weeks, we are going to learn a bit more of what the Bible says about God and about what He created. Today let's look at the first two verses of Genesis.

"In the beginning God created the heavens and the earth. The earth was without form, and void; and darkness was on the face of the deep. And the Spirit of God was hovering over the face of the waters." (Genesis 1:1-2)

It's hard to imagine the earth looking any different than it does to you and me today, but the Bible says that it did. The Bible tells us that, in the beginning, the earth and the heavens had no form and God's Spirit hovered over it. The Children's catechism says that God is a Spirit and does not have a body like people do. A Spirit is something that cannot be seen and we cannot see God although He always sees us.

But what does it mean that the earth and heavens had no form? That is hard to understand. However, let's imagine some water. If we put the water in a glass, it takes on the form of the glass. (Parent: Try this if you think it will help the child understand better to see it visually.) Now take the water and pour it from the glass into a bowl. What do you notice? That's right! It takes on the form of the

bowl. Well the Bible says that in the beginning the earth had no form. It had no definite shape. It was just floating around shapeless, and God's Spirit was hovering over it....keeping it, watching it, getting ready.

Next time we will learn what God began to do with that shapeless form....how He started to make it into the world that we know today...a world that He was making ready for people....people like you and me.

1. Who existed before anything else? God existed before anything else.
2. How would you describe the earth when God first created it? The earth was formless/shapeless.
3. How did God create? God created by using his word/commands.

"Horse and Arrows" - Found at Lascaux Cave



Your child should be encouraged to answer in full sentences. Suggested answers are underlined.

1. What is this animal? This animal is a horse (or pony.)
2. When do you think this painting was made? Answers will vary.

Week 2: Days 5 - 8

Day 5: Read "Let There be Light" on the next page to your child and ask the questions provided.

Complete the Day 5 copybook page from the student pages.

Continue working on the memory selection from last week.

Day 6: Music: Today, you will be listening to "The Lark Ascending," by Ralph Vaughan Williams. You will find this in "Animals in Music" CD 2 Track 4. This is a long piece so feel free to only listen to a portion of it or have it on in the background while doing another activity. Then ask the narration questions below. Your child should be encouraged to answer in full sentences. Suggested answers are underlined.

1. What do you think about this piece of music? Answers will vary.
2. What animal do you think you hear? Answers will vary. If they do not know, you can give them a hint by pointing them to the title of the piece.
3. What is a lark? A lark is a bird.

Complete Day 6 copybook page from the student pages.

Continue working on the memory selection

Day 7: Choose an activity from the Nature Walk activity section found on pages 133 to 139 for the appropriate season and complete it today.

Complete Day 7 copybook page from the student pages.

Continue to work on the memory selection.

Day 8: Choose an activity from the Nature Project section found on pages 140 to 151 for the appropriate season and complete it today.

Complete Day 8 copybook page from the student pages.

Continue to work on the memory selection.

*Remember to read aloud to your child throughout the week using the books from the reading list or other nature themed books of your choice.

"Let There be Light..."

Last time we learned that in the beginning God was already in existence, hovering over the heavens and the earth which had no form; and that He began to take the formless heavens and earth and do something with it. And this is what He did!

"Then God said, 'Let there be light'; and there was light. And God saw the light, that it was good; and God divided the light from the darkness. God called the light Day, and the darkness He called Night. So the evening and the morning were the first day." (Genesis 1:3-5)

Now here is something that we can begin to understand. God created light and He divided the first day into light and darkness. Even now we call the light time Day and the dark time Night...just as God designed it. So, you can see how God began to take that formless shape we read about before and began to give it some shape. But remember when we noted that we would need a pencil and paper to draw a picture of a flower? How did God create the Day and Night? That's right! He spoke. God created by speaking. He is so powerful that His Word is all that He needs to make something happen. Let's read on...

"Then God said, 'Let there be a firmament in the midst of the waters, and let it divide the waters from the waters.' Thus God made the firmament and divided the waters which were under the firmament from the waters which were above the firmament; and it was so. And God called the firmament Heaven. So the evening and the morning were the second day." (Genesis 1:6-8)

Here we read that God continues to bring form to His creation. In verses 3-5 He created Day and Night. Now He separates the sky from the water in verses 6-8. The world is beginning to look a bit more like something we recognize, isn't it? There is Day and Night. There is Sky and Water. But God is not done forming His creation.

"Then God said, 'Let the waters under the heavens be gathered together into one place, and let the dry land appear; and it was so. And God called the dry land Earth, and the gathering together of the waters He called Seas. And God saw that it was good.'" (Genesis 1: 9-10)

The next act of bringing form to His creation sees God bringing land up from the water that covered all the Earth. This formed the land that we walk on and the seas that we swim in. Now God's creation is really starting to look like something. It has Day. It has Night. It has Sky. It has Water. It has Land. It has Seas. God has formed His world. Do you think God stopped there? No He didn't.

Let's try to understand what God does next by thinking about a house. When someone builds a house, they work hard and use all the materials they have to make something into the shape of a house. Once the house is built, we can say that it has the shape or form of a house. But a house with nothing in it, isn't really much of a house. It needs to have stuff inside the house so that people can live in it and be happy. And that is kind of what God does next. He fills up His creation with all sorts of good things that will glorify Him and also be useful to the creatures He is about to put in His new creation. Next time we will read more about that.

1. What does God do first with His formless Creation? He makes light and dark/Day and Night.
2. Then what does God do? He separates the sky from the water.
3. What is the final act that God does on the second day of creation? He forms the land and the seas.

Week 3: Days 9 - 12

Day 9: Read "God Fills His Creation" on the next page to your child and ask the questions provided.

Complete the Day 9 copybook page from the student pages.

Continue working on the memory selection.

Day 10:

Art: Today's art focus is "Studies of Flowers and Butterflies," by Joris Hoefnagel. Show the picture found on page 34 to your child. Allow them to study it for a moment and then ask the narration questions.

Complete the Day 10 copybook page from the student pages.

Continue working on the memory selection.

Day 11: Choose a Nature Walk activity found on pages 133 to 139 for the appropriate season and complete the activity today.

Complete the Day 11 copybook page from the student pages.

Continue working on the memory selection. Today is the last day to work on this. Tomorrow, you will be finding someone to recite the selection to.

Parent Note: Here are some things to look for when your child is reciting.

- *Enunciation: make sure your child pronounces every word distinctly*
- *Volume: your child should be speaking loudly enough for everyone to hear; make sure your child is not mumbling*
- *Speed: Your child should speak slowly and remind him to take his time!*

Day 12: Choose a Nature Project activity found on pages 140 to 151 for the appropriate season and complete the project today.

Complete the Day 12 copybook page from the student pages.

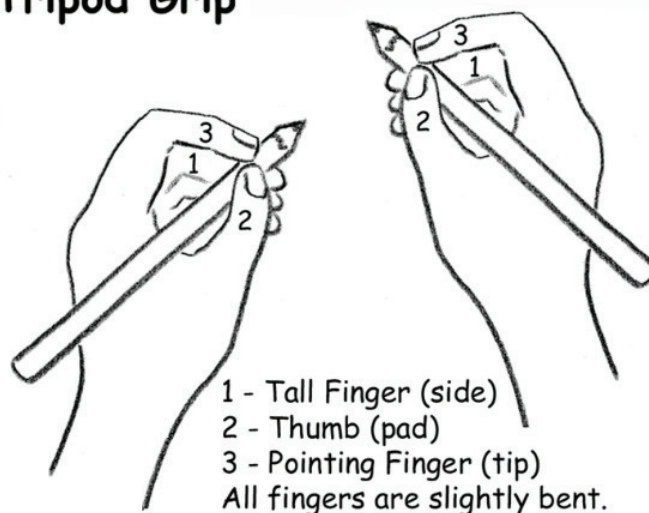
Today, find family or friends to recite the memory selection to.

*Remember to read aloud to your child throughout the week using the books from the reading list or other nature themed books of your choice.

Some Thoughts on Penmanship


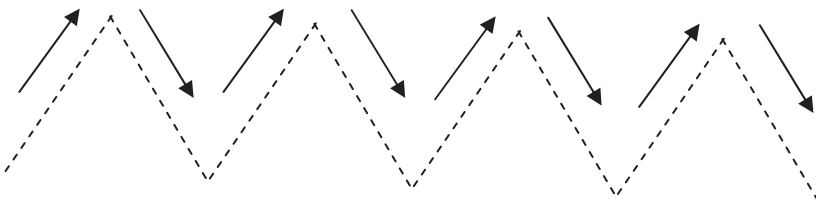


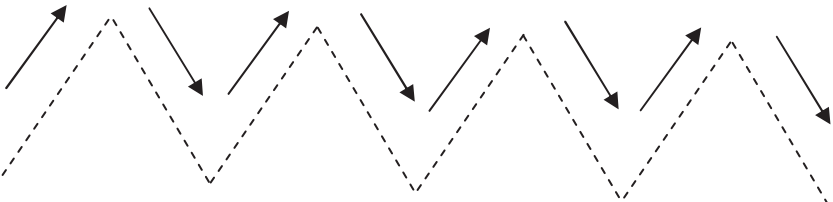


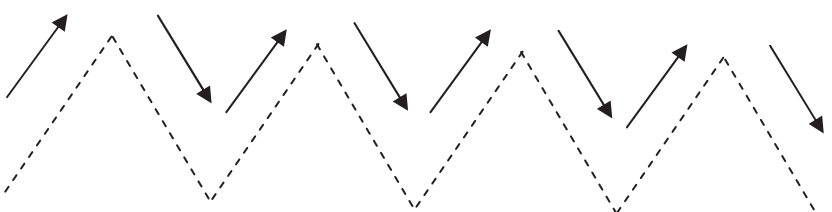


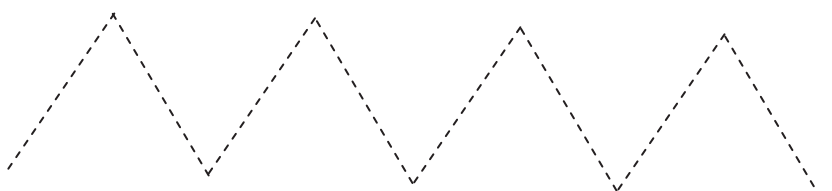

1. Most children will be ready for penmanship around the age of 5 or 6.
2. Before you begin get your child a good pencil (not too long) and an eraser.
3. Shorter, fatter pencils are better for little hands.
4. Use the tripod method for holding a pencil. (Thumb, pointer, tall finger)
5. The three fingers holding the pencil are the *GO* fingers. The two free fingers are the *STOP* fingers. Use *GO* and *STOP* if you see issues with the way the child is holding the pencil. Have your child hold a small coin with the two free fingers if they have trouble keeping them off the pencil.
6. Encourage a relaxed grip to relieve stress and neater printing.
7. Be positive!
8. Encourage good posture while sitting in a chair at a table.
9. Be Patient! Penmanship is a difficult skill for most children to learn.
10. Practice and develop fine motor skills in other ways: setting the table neatly, folding laundry, arranging toys, cutting paper, various crafts, art, colouring, LEGO, playing games like Jenga, using clay for modeling, stringing beads, etc.

Tripod Grip



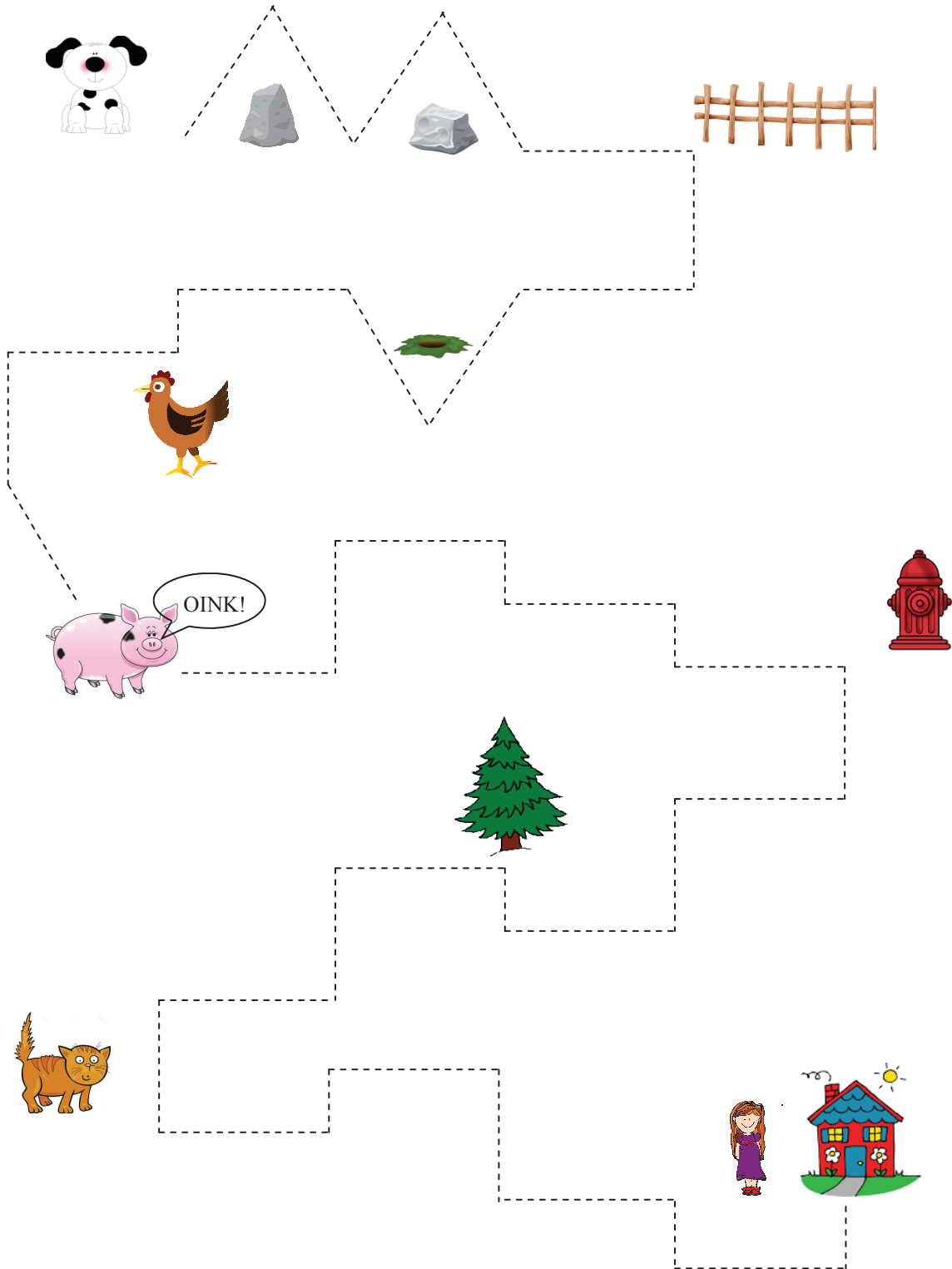
Walking Up and Down the Hill

Trace the dotted lines as you walk up and down the hills with Jan.

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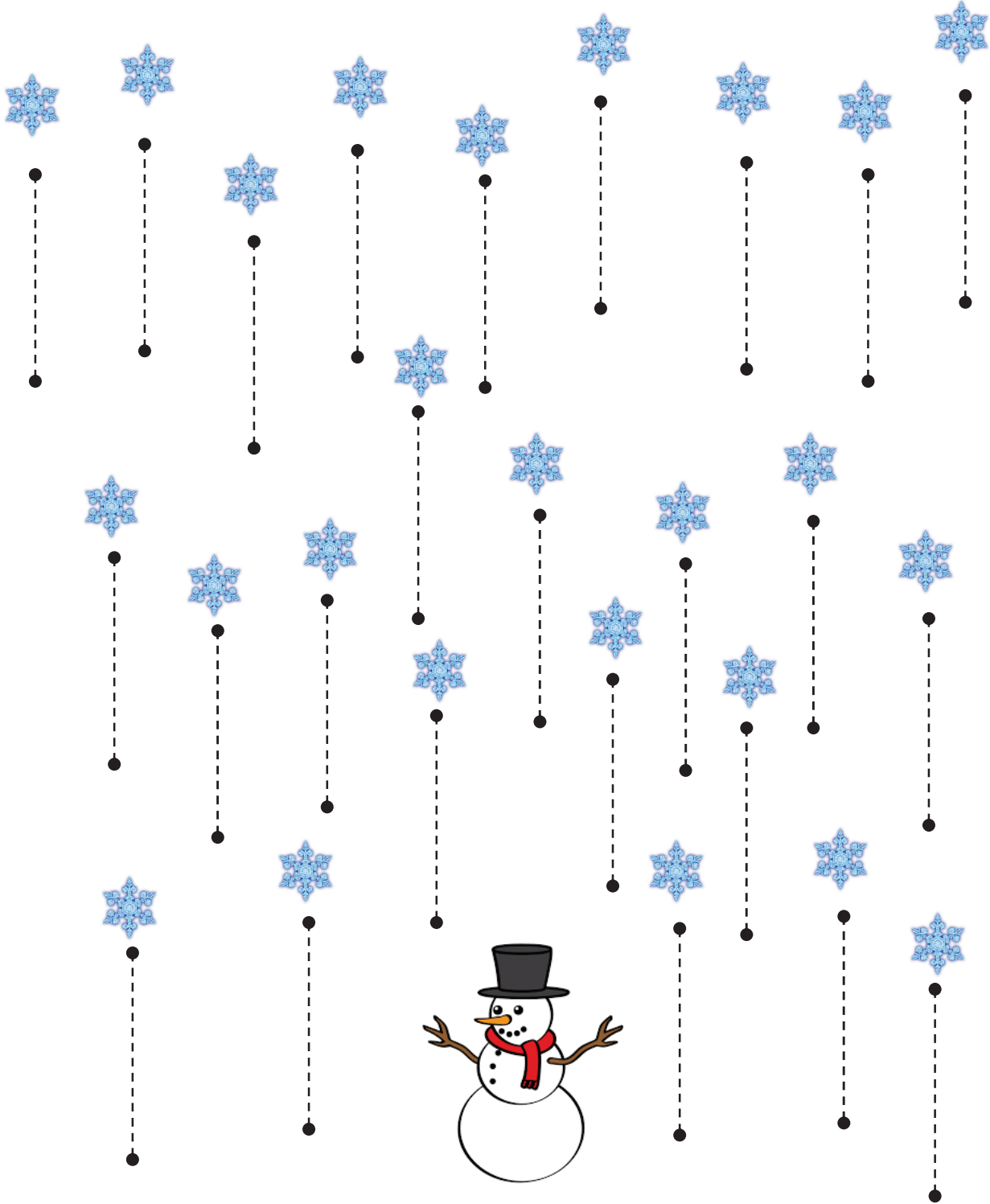
Spot Is Hungry

Trace the dotted lines to help hungry Spot get home to Jan.



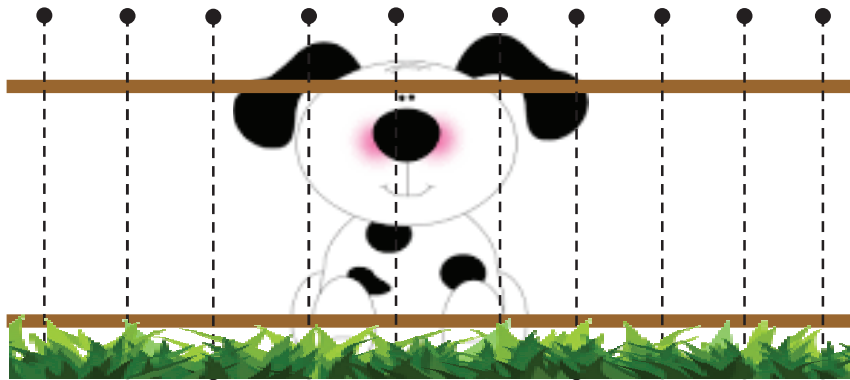
Snowflakes Falling

Trace the dotted lines to show the snowflakes falling.



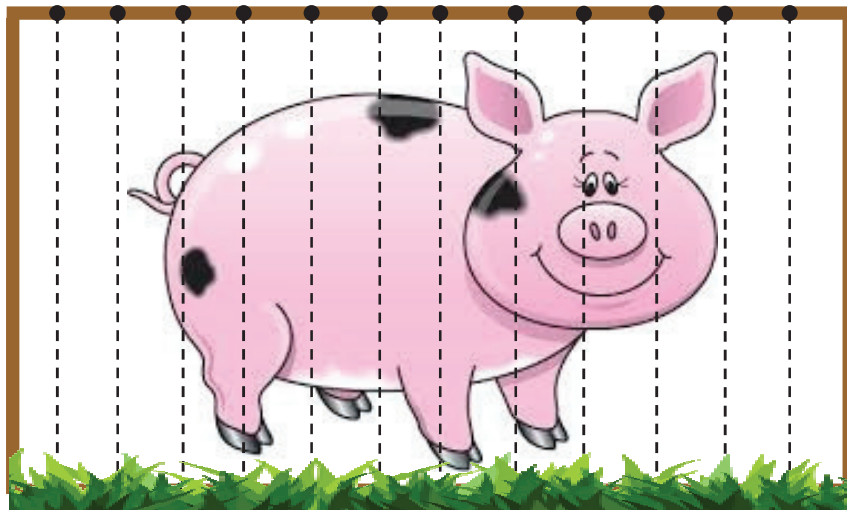
Keep Jan's Dog Behind the Fence

Trace the dotted lines to finish the fence for Jan's pet dog.



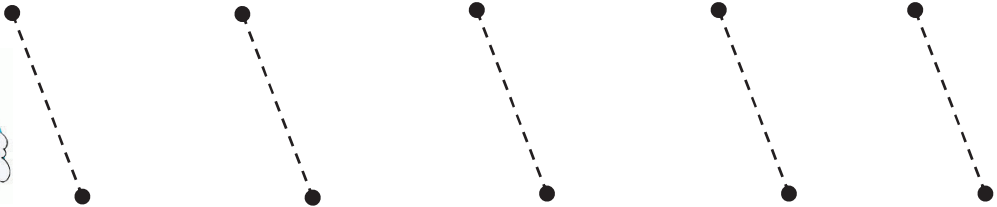
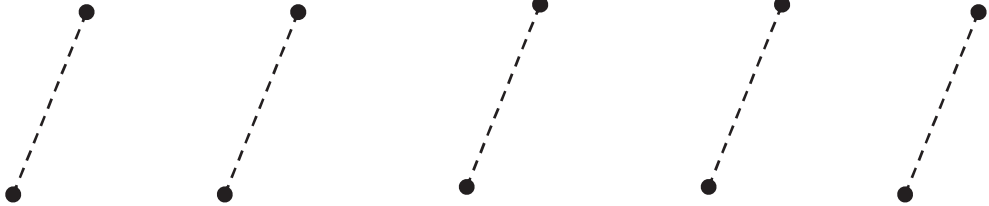
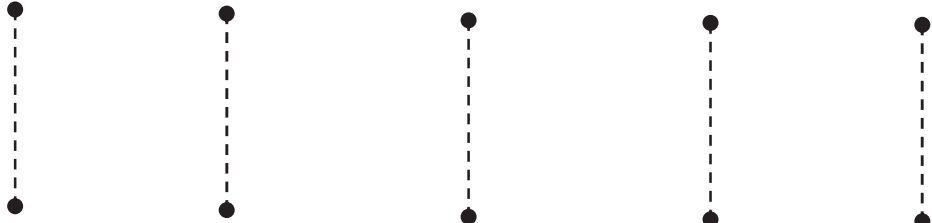
Keep Jan's Pig in the Pen

Trace the dotted lines to finish the pen for Jan's pet pig.



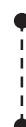
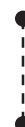
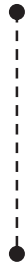
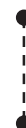
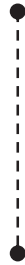
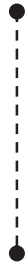
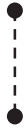
Rainy, Windy Day!

Trace the raindrops as they fall this way and that.



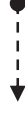
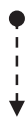
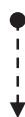
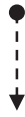
Tall and Short

Trace the tall and short line.



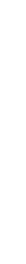
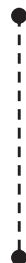
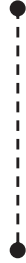
Tall and Short...Again

Complete the tall and short lines.



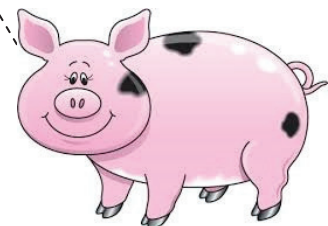
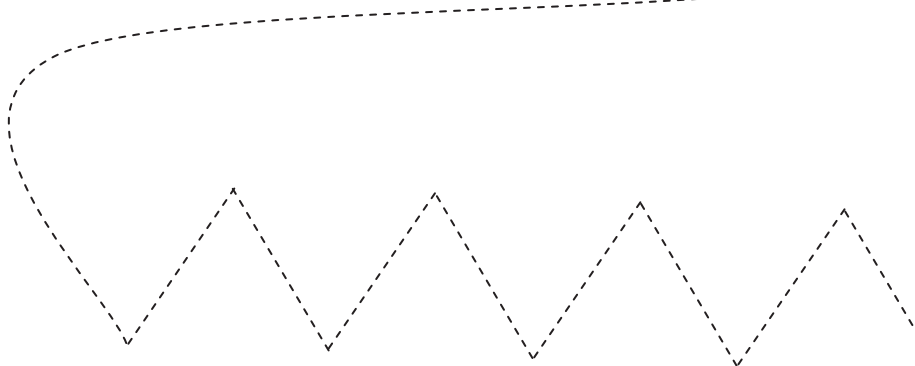
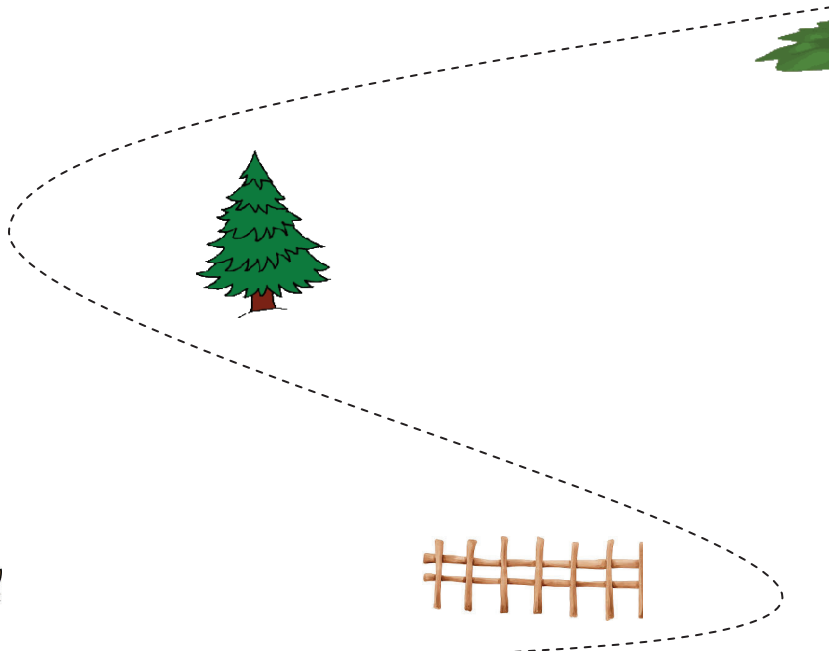
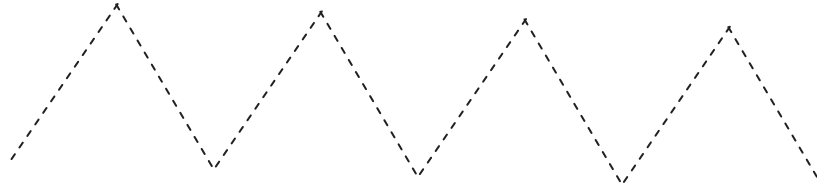
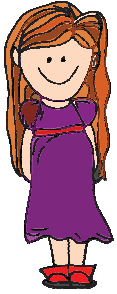
Round and Round and Up and Down

Trace the dotted lines.



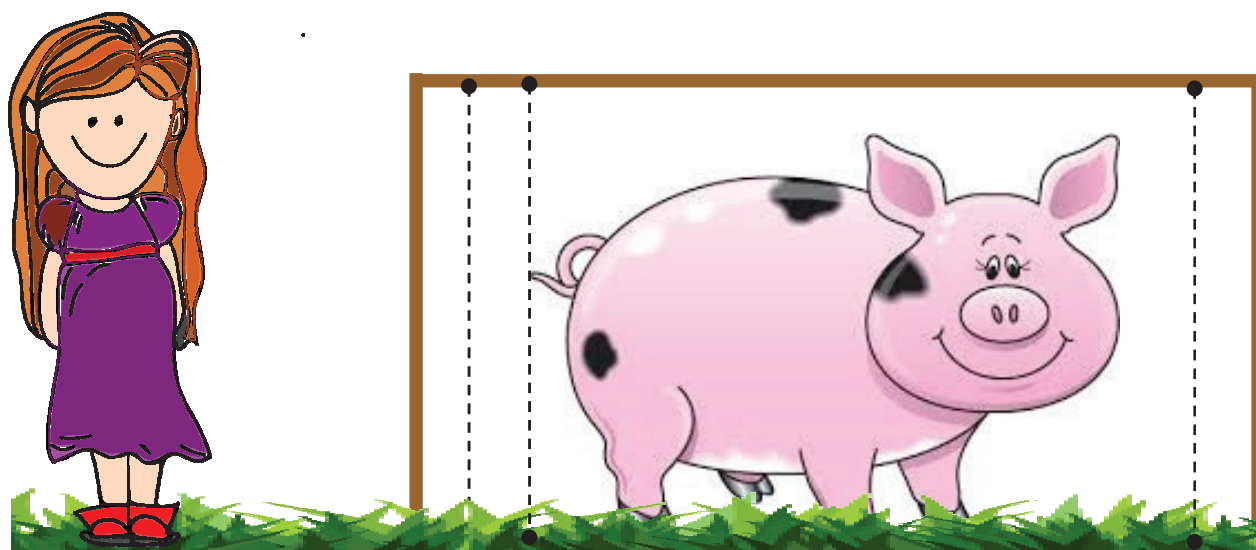
Help! Jan's Pig Escaped

Trace the dotted lines to chase Jan's pig.



Hurrah! You Caught Jan's Pig!

Draw straight lines to help Jan build a pen to keep her pig safe.

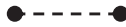
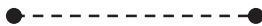
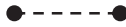
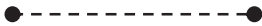
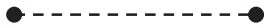


You will need at least 10 lines.
Can you count them?

1 2 3 4 5 6 7 8 9 10

Long and Short

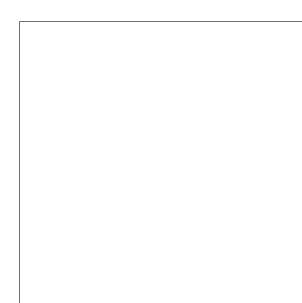
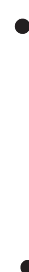
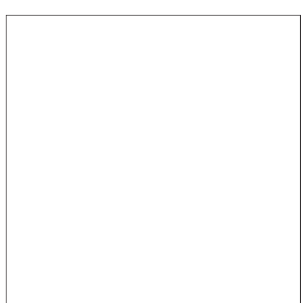
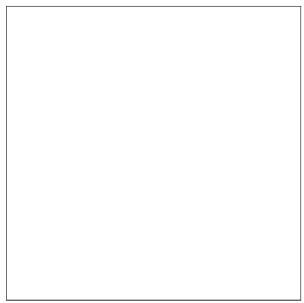
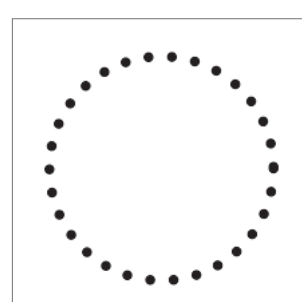
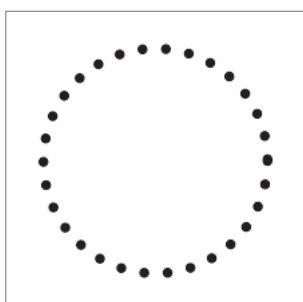
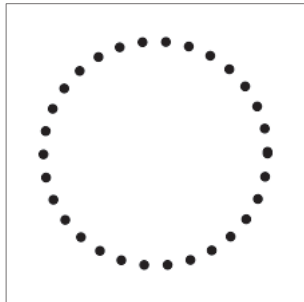
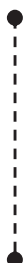
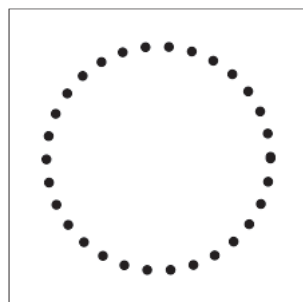
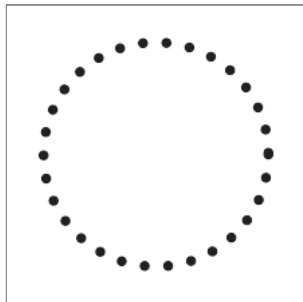
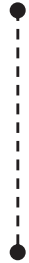
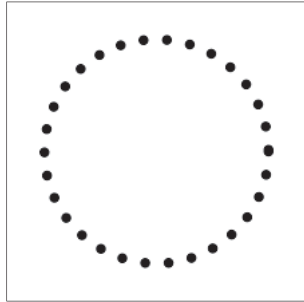
Trace the long and short line.



Round and Round and Up and Down

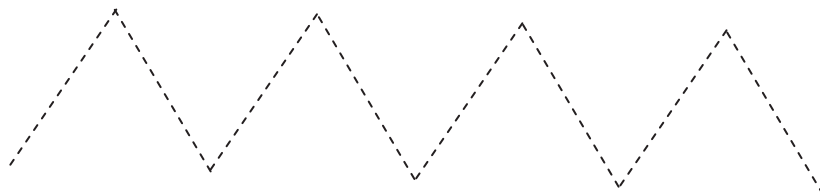
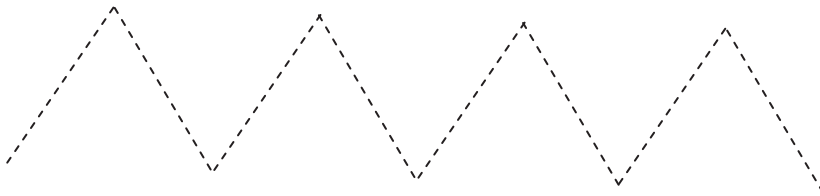
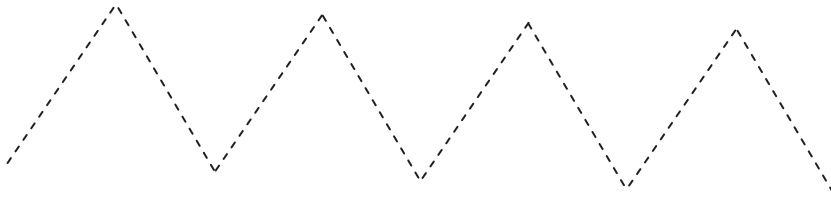
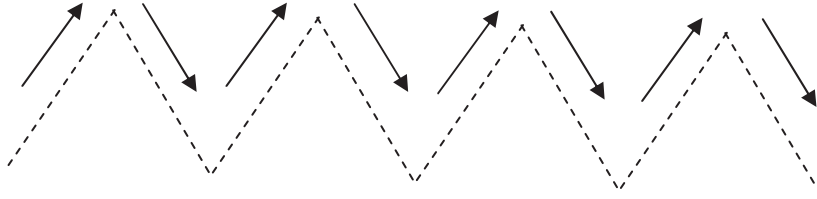
Trace the dotted lines.

In the last row draw neat circles and straight lines.



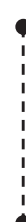
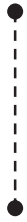
Walking Up and Down the Hill

Trace the dotted lines as you walk up and down the hills with Jan.
Follow the same arrow pattern in the last three rows.



The Snow Is Blowing!!

Trace the snowflakes as they blow around.
Finish drawing the snowman.



Show Us What You Have Learned!

In the first row draw a straight vertical line in each box.

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In the second row draw a straight horizontal line in each box.

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In the third row draw a straight slanted line to the left in each box. ↙

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In the fourth row draw a straight slanted line to the right in each box. ↘

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In the fifth row draw a neat circle in each box.

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Show Us What You Have Learned Again!

For each row draw a straight vertical line in the first box, a straight horizontal line in the second box, a straight line slanted left in the third box, a straight line slanted right in the fourth box, and a neat circle in the fifth box.

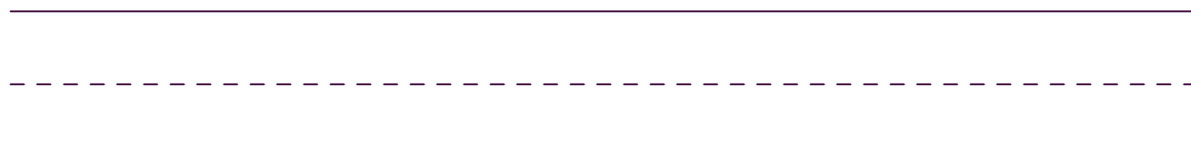
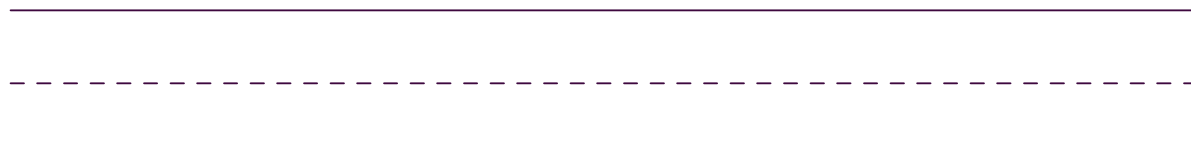
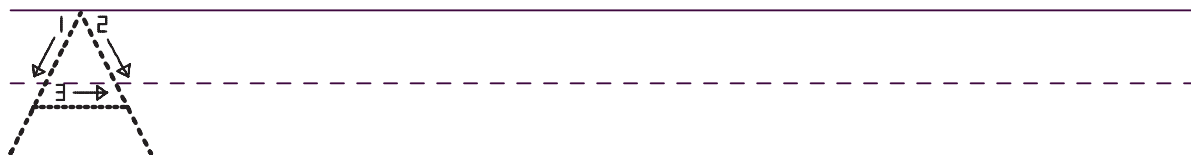
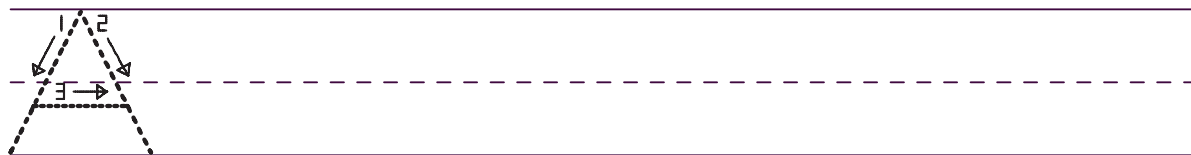
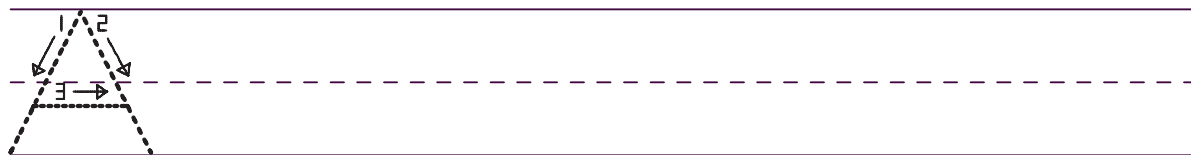
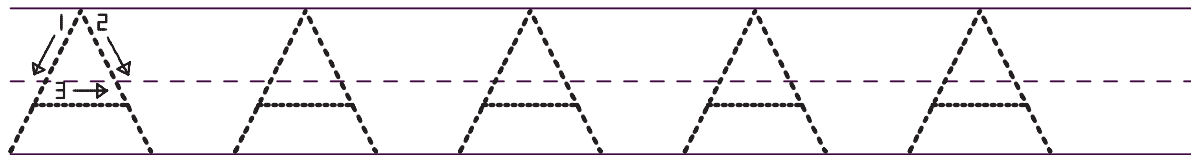
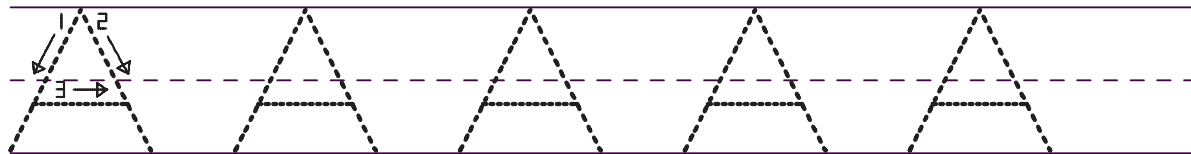
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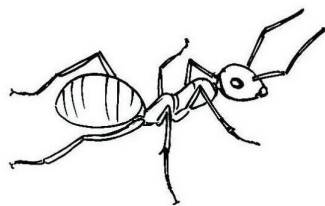
Blank handwriting lines for independent practice.

ant ant ant ant

ant ant ant ant

ant

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NAME _____ DATE _____

I WENT TO _____

WITH _____

WEATHER (circle one or more)