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Third Grade Sample Pages

Hello and welcome to Lavender's Blue Third Grade! Here's what's included in this curriculum (551 pages total):

- 35 weeks of daily main lesson plans
- Third Grade Treasure Map: teaching through the 9-year-change
- Form drawings for the year
- Weekly word families practice
- Songs, poems, games, and math for warm up

Please note that the warm up ideas are not fully planned out "circle time" as in the K-2 curriculum. This section is a first draft and is in progress!

There are six Native American stories and six Chinese folk tales included in the Shelters blocks, as well as full narrative lessons on farming, geography/shelters, measurement. In addition you'll need a few story resources this year:

Farmer Boy by Laura Ingalls Wilder

Thirteen Moons on Turtle's Back by Joseph Bruchac

In the Beginning by Virginia Hamilton

Story bible of your choice (I give my recommendations)

The sample pages below give an overview of the blocks with several sample lessons, a story, and a handful of pictures. I hope this is helpful, and please let us know if you have any further questions at support@lavendersbluehomeschool.com!

Main Lessons

Farmer Boy Math

We begin the third grade year by reading aloud from the beloved classic Farmer Boy, by Laura Ingalls Wilder, and using this as the basis for lessons in arithmetic. This 3-week main lesson block reviews and extends concepts from second grade with a focus on building number sense as well as skills. Here are the objectives and the first three lessons from this block:

OBJECTIVES

1. Review all twelve times tables.
2. Understand the zero times table.
3. Understand multiplication and division with ten.
4. Thorough review of place value.
5. Introduce powers of ten and numbers to the millions.
6. Practice all four processes.
7. Introduce division with remainders.
8. Practice translating word problems to math sentences.
9. Introduce vertical addition and subtraction.
10. Introduce regrouping.

Lesson 1

Practice

Start by reading Chapter 1 (School Days).

Today let's take our own visit to a one-room schoolhouse!

Imagine together what your one-room schoolhouse would look like, how your child would get there, and who would be at school with her. Set up your school and then have an arithmetic lesson. Have fun getting into character and acting it out if you like! Give your child several arithmetic problems to solve on her "slate."

Sample problems:

$25 + 10 =$

$3 \times 5 =$

$4 + 37 =$

$10 \times 2 =$

$56 - 3 =$

$12 \div 3 =$

$19 - 12 =$

$100 \div 10 =$

Recall and Expand

In second grade, we learned all of the times tables. In third grade, we have to keep practicing so you can learn them all by heart. Let's warm up today with the easiest table...what's one times one?

Review the one times table while you toss a bean bag back and forth (you call out the question and your child calls out the answer).

Now there's one very special table we didn't do in second grade. Let's learn it now. Can you use these crayons to show me what one times five looks like? (One pile of five crayons.) And what does two times five look like? (Two piles of five crayons, ten altogether.) Excellent, now what about zero times five? We need zero piles of crayons, so no crayons at all!

What if I say show me zero piles of ten crayons? That's right, it's zero. How about zero piles of 362 crayons? Still zero altogether. So the zero times table is very easy to learn. Zero times anything is just zero!

Toss the beanbag again for the zero times table.

It's time to start planting your Times Table Garden (see Picture 1)! I recommend that you build your drawing step by step with your child each day (each in your own main lesson book) rather than working from a completed drawing. Set this up as a two-page spread in your main lesson book.

Draw six straight garden rows per page. There's nothing planted yet, so we have zero vegetables. Twelve rows of zero vegetables....twelve times zero is zero.

Next plant your pumpkins one by one to show the ones row.

New Lesson

When school is over, it's time to walk home for chores and supper. It's winter in our story, so it's snowing again. Pause and notice the snowflakes falling on your mittens. Recall that snowflakes all have six points or sides but none are exactly alike! Just like nature can build a six-sided snowflake in infinite designs, in arithmetic there are unlimited ways to build each number.

Remember in first grade when we discovered "what is six?" We found that six can be a snowflake, or the number of legs on a bumblebee. It can also be one plus five, or two plus four. Now that you're in third grade I bet you can find all kinds of creative ways to make the number six.

Draw some simple snowflakes and in the center of each put a number. At each of the six sides or points, show one of the ways to make that number (see Pictures 2 and 3).

Reading

Read Winter Evening and Winter Night (Chapters 2-3).

Lesson 2

Practice

Warm up by skip counting the ten and eleven rows forwards and backwards (jumping jacks, skip, march, etc.). Bean bag toss while you practice the ten and eleven times tables.

Plant your ten and eleven rows in your Times Table Garden.

At the chalkboard, write the 0, 1, 10, and 11 rows as vertical columns (neatly lined up side by side). Look carefully together to see the patterns! The ten row is the same as the one row but you add a zero. The eleven row is the ten plus the one row. Optional: Add this as a MLB page (see Picture 4).

Recall the snowflake activity from yesterday and begin a Snowflake Math page in your main lesson book. You can add a couple examples each day this week.

Recall and Extend

Recall the story from yesterday and your visit to the one-room schoolhouse. Work out a few more arithmetic problems on your slate.

Up until now, we've always worked out problems horizontally like this: $5 + 7 = 12$. Now show your child how the problem can also be written vertically and that it means exactly the same thing. Vertical division looks different, so we'll save that for later. Work out a few problems like this:

$$\begin{array}{r} 6 \\ +4 \\ \hline 10 \end{array} \quad \begin{array}{r} 18 \\ -5 \\ \hline 3 \end{array} \quad \begin{array}{r} 7 \\ \times 2 \\ \hline 14 \end{array}$$

Mental math: Almanzo's family keeps many different animals on their farm. He has:

- Six geese, five turkeys, and twenty hens. How many poultry birds altogether?
- Thirty merino sheep divided into two sheep pens. How many in each pen?
- Three sows each have six piglets. How many piglets are born?

New Lesson

Draw this story problem on the board:

Sometimes when Almanzo is putting the stock to bed for the night, he finds that they don't fit evenly into their stalls. One winter the family has five yearling cows and two small pens for the yearlings. Almanzo puts two yearlings in one pen and two in the other. There is still one yearling left over, so he puts her to bed with the older cows. We can't divide five evenly into two parts. We find there is one left over - that's called a remainder.

Use simple drawings or manipulatives (such as math gemstones or dried beans) to practice several remainder problems.

- We have ten horses and three stalls. What's ten divided by three?
- We have twenty-five sheep and six sheep pens. What's twenty-five divided by six?
- We have thirteen sows and two pig pens. What's thirteen divided by two?
- We have nineteen goats and five goat stalls. What's nineteen divided by five?

Reading

Read Surprise and Birthday (Chapters 4-5).

Lesson 3

Practice

Skip count the two row forwards and backwards (jumping jacks, skip, march, etc.). Bean bag toss while you practice the two times table.

Plant the two row in your Times Table Garden.

Add a couple examples to your Snowflake Math page.

Recall and Extend

Recall the story from yesterday and practice a few arithmetic problems on the slate. Give these problems orally and show your child how to write them as math sentences (give as much help as needed). Alternate horizontal and vertical format.

- One day Father finishes 24 shingles but the next day he only finishes 13. How many altogether?
- He finishes 11 the next day, then 11 the next. How many shingles are there now?
- By Friday he has 59 shingles and he wants to end the week with 65. How many must he finish on Saturday?
- The shed roof needs repairing on Saturday, so Father takes 8 shingles, 32 nails, and one hammer along to do the job. How many shingles are left from this week's work?
- Mother dyed 100 skeins of yarn this year and she has already knitted 27. How many skeins are left?
- Mother is organizing her yarn into baskets, putting equal numbers in each one. She has 32 skeins of blue and 4 baskets. How many go in each basket?
- She has 25 skeins of red and 5 baskets. How many in each?

Review your work on division with remainders. What happens when we try to divide equally, but we have something left over? Mother has only 5 skeins of undyed white wool left, and two baskets. She puts two in each basket and has one left over.

Here's how we write this as a math sentence: $5 \div 2 = 2 \text{ r.}1$. We read this "five divided by two equals two remainder one."

Do a few more division with remainder problems and have your child write them down. Continue using manipulatives or simple drawings if your child needs concrete examples to understand this.

New Lesson

In the story, Mother dyes brown yarn as well as red, yellow, and blue. They used only natural dyes, and didn't have as many color options as we do now. Can you remember all the colors of the rainbow in order?

Draw a rainbow in vertical stripes on the board (or on paper). Moving right to left, you have striped columns of red, orange, yellow, green, blue, indigo/purple, violet. Recall using colors to learn place value in second grade. Does your child remember where to put the ones, tens, hundreds, and thousands? Review as much as needed!

Now let's learn how to do place value with much larger numbers! After the thousands, we have ten thousands (blue), hundred thousands (indigo), and millions (violet).

Practice naming the colored place value columns and reading numbers up to the millions. Then give your child numbers to write correctly into the columns. Show him where to put the commas for large numbers.

Have your child draw a beautiful place value rainbow into his main lesson book (see Picture 5).

Reading

Read Filling the Ice House and Saturday Night (Chapters 6-7).

Farming

There are three Farming blocks this year (Autumn, Winter, and Spring/Summer) for a total of eight weeks. The autumn focus is on harvesting and preserving, the winter focus is on grains and fibers, and spring focuses on planting the garden, soil and seeds, bees, and dairy. There is a simple container story running throughout that paints a picture of life on a small modern family farm and several project suggestions for you to choose from in each lesson. This main lesson is highly adaptable to your family's interests! At the end of each lesson your child will write and draw about that day's project, recipe, or field trip in his farming journal. Below are the objectives and three lessons from the autumn farming block.

OBJECTIVES

1. Learn about the seasonal life of the modern family farm.
2. Spend time in the garden and helping with the harvest.
3. Get to know a local farm in your area.
4. Learn about several methods of preserving food.
5. Get project-based experience in measurement.
6. Keep a journal of your projects and experiences.

Lesson 9

Recall and Story

Recall last week's projects and story.

Early in the morning, Carly goes down to the barn to take care of the horses. She feeds and waters them and cleans out their stalls and yard. She brushes the horses and talks to them, and sprays them down with fly spray to help keep those nasty biters away. Then she lets open the pasture gate so they can go graze on the green

grass. She shovels the manure into a wheelbarrow and dumps it in the compost pile.

At mid-day, Carly heads back to the barn. She has apples or carrots and fresh hay for the horses. The horses come back for their treats, and she closes the pasture gate. Cattle and sheep can graze all day long, but horses will get tummy aches if they eat too much green grass! They spend the rest of the day in their yard where they have plenty of space but not too much grass. In the afternoon or early evening, Carly goes for a trail ride, and some days she teaches a riding lesson or two. She's back after dinner to brush down the horses once again, feed them fresh hay, and put them in their stalls for the night.

Mark's early morning chore is moving cattle and sheep to new pasture. In the crisp early morning, he puts on a jacket and boots and heads up the hill to the pasture. The pasture is surrounded by a strong electric fence that keeps the animals in - but more importantly, it keeps predators out! Inside the big fence, the pasture is criss-crossed with flexible white nets. These are electric fences too, but they can be easily pulled up and moved to new places. First Mark unhooks the solar powered battery from the white netted fence to turn off the electricity. Then he can safely open up a fence line to let the animals through. They know the routine, and are eager to move to fresh grass!

Next Mark uses the UTV (utility task vehicle) — that's like a very small truck, the size of a golf cart, that's used in the fields for farm work such as carrying heavy loads of water to the animals. He hooks the UTV up to the chicken coop, which is on wheels, and pulls it into the pasture section where the big animals were grazing yesterday. Then he unhooks the UTV and drives it out of the section, and re-attaches the fence line. Now he can open up the coop and let the chickens out!

The cattle and sheep eat fresh green grass all summer and fall, until the snow comes to cover the pasture. Their manure fertilizes the pasture to keep the grass growing well. The chickens eat weeds and grass, but mostly love to eat bugs, and there are always plenty of flies and beetles where the big animals have been

grazing recently. Mark likes to move the animals to a new spot every morning. The cattle and sheep rotate around the pasture, and the chickens follow behind.

Now Mark checks that the animals have plenty of fresh water, and grain in the feeder for the chickens, and that the fences are back on. Then he heads back down the hill for breakfast and a hot cup of coffee. In the evening around sunset, he'll come back up to check on the animals and collect the eggs. The chickens have a natural instinct to go into their coop to roost at night, where they'll be protected from predators. Once they're safely inside, Mark closes the coop, his last chore of the day.

At Little Sprouts Farm, the garden needs attention all summer long. But the animals are the first priority! All year, in all weather, the barn and pasture chores get done first thing and last thing each day.

Project Time

Do you know anyone who raises farm animals, or is there a local farm you can visit to meet the animals? Better yet, look for an opportunity to help with the barn chores and collect eggs!

Purchase local pastured eggs. Look at the color of the yolks. Healthy chickens raised on pasture lay eggs with deep yellow yolks - you can really see the difference! The weeds and bugs they eat are full of vitamins and minerals, and that makes the eggs healthier for you too.

Cook with eggs today. Your third grader can learn how to cook eggs all by himself and become an independent breakfast chef! Here are some possibilities:

- **Scrambled, fried, or hardboiled eggs**
- **French toast**
- **Popovers**
- **Vanilla custard**

Farming Journal

Lesson 10

Recall and Story

Recall yesterday's project and story.

Carly's pantry shelves are groaning. There are jars of jam and fruit preserves, pasta sauce, salsa, dried herbs for tea, and pickles galore. She sighs with satisfaction every time she walks in and sees row upon row of good food, preserved while it was fresh from the garden, and ready to eat any time of year. She doesn't need to go to the store very often, she just pops into her pantry!

Carly takes a peek into a large crock on the pantry floor. Looks like the sauerkraut is coming along nicely! Carly's favorite way to preserve cabbage is to make tangy sauerkraut. Her grandkids like to help make the big crocks of fermented cabbage, too. First the heads of cabbage are shredded and salted. The salt draws water out of the cabbage. Then comes the fun part - you have to mash and pound the cabbage to get all the juices out! The cabbage gets packed into the crock until it's all packed in tight under the liquid. A few big cabbage leaves held down with clean rocks will keep the cabbage submerged. It needs to be packed down because if it touches the air, it can get moldy. Over the next couple weeks or so, good bacteria ferment the cabbage and produce lactic acid. This preserves the cabbage for a long time, and makes it tasty, too! When the sauerkraut is ready, Carly puts it in large mason jars and stores them in the cool root cellar.

Project Time

Today make lacto-fermented vegetables! Here are a few possibilities:

- **Sauerkraut**
- **Spicy cabbage kimchi**
- **Beet kraut**
- **Carrots and cauliflower**

Look up the correct proportion of salt for your vegetable of choice and quantity. You don't need a crock for this — it's a good idea to start with a smaller batch in a quart-size mason jar! Be sure to sterilize your jar first, and keep the fermenting vegetables fully submerged. When it's ready, move to the fridge or other cold storage.

Farming Journal

Lesson 11

Recall and Story

Recall yesterday's project and story.

While Carly and Mark slept, a freezing frost settled over Little Sprouts Farm. They woke at first light to find the farm was a sparkling fairyland. They bundled up well and headed out for chore time, boots crunching on frosted grass.

Most of the harvest is safely tucked away. Today is the day to bring in the winter squashes! All summer long the winter squashes and pumpkins grew heavy on thick vines under bushy leaves. The frost has withered the vines, making them easy to pick. Mark harnesses up his draft horses, Sunshine and Moonlight, and hitches them to the wagon. They walk up and down the rows of squash while Mark loads the wagon. Then they drive over to the house, and Carly helps Mark carry all the squashes down to the root cellar. Next they drive over to the orchard to pick the last of the apples.

The root cellar stays cool through the heat of summer because it's underground. In winter it stays above freezing. This is the best place to store pumpkins, winter squash, potatoes, carrots and other root vegetables, cabbages, onions, garlic, and apples. Carly puts the biggest, roundest pumpkin in a special spot - that's the one for making a Jack-o-lantern!

Project Time

Cook with winter squashes today. Here are some possibilities:

- **Butternut squash or pumpkin soup**
- **Roast and puree pumpkin for the freezer**
- **Pumpkin pie**
- **Scoop out and toast pumpkin seeds**

Note that pumpkin puree can be safely frozen but not canned.

Farming Journal

Trees and Building

This main lesson is all about trees, tools, and working with wood. In the first week you'll take tree walks and learn about the trees in your neighborhood. In the second week you'll practice using simple tools like hammer and nails, hand saw, and sandpaper. The third week is unscripted — you'll do your first woodworking project and plan out a larger building project to complete over the course of the year (using instructions from one of the recommended how-to books such as Carpentry for Children). Along the way you'll also introduce the topic of shelters (a big one this year!), build a simple shelter in the woods, and explore how your own house was built. Here is lesson one on trees:

Lesson 1

Do you have a favorite tree? What kinds of trees grow in your neighborhood?

There's something special about a tree. Like any plants, trees start off as small seeds. A tree seedling might stand only an inch high at first. Maybe you've seen maple seedlings in the woods or pine seedlings growing in the grass in your yard. They're little, easy to pull, and vulnerable. But the tree is a patient plant. It grows steadily year after year until it dwarfs all the other kinds of plants. You know a tree when you see it!

When you look at a tree, you might notice how large its trunk is, and how tall. The tree's trunk is its stem, but it's a mighty stem that holds up a lot of weight. You might notice the bark that protects the trunk. Each tree has its own kind of bark. What you can't see inside the trunk is how much water and sap is flowing up and down from the roots to the leaves.

If you look up, you'll notice the branches and leaves overhead. That's the tree's canopy. Each tree has its own kind of leaves. The leaves have a secret job to do. They are busy soaking up sunshine, water, and gases, and mixing them together to make sap. The sap is a special kind of sugar. It's the tree's food. The leaves also get

rid of oxygen, which the tree doesn't need. And who does need the oxygen? We do! Trees keep our air fresh.

Look down, and you might see some tree roots up above the soil. But most of the tree's roots are hidden in the earth. A tree spreads its roots very deep and wide. Those roots are anchors that keep the tree from tumbling over. They also soak up water, of course, and minerals from the soil. A tree needs a lot of water to stay healthy.

I wonder what kind of tree you're imagining? Does it have flat green leaves with an interesting shape that change color and fall in the autumn? Those are the broadleaf or deciduous trees. Or does the tree have cones and long, thin needles that stay green year-round? Those are the evergreen or conifer trees.

Does your tree have any flowers? Not at this time of year! But trees are flowering plants. In the spring, you might notice the beautiful lovely smelling flowers of the apple, cherry, or orange trees. Other trees have flowers that are hidden and hard to spot. They might look more like a feather duster to you than a flower. If you're able to find some tree flowers in the spring, notice how much pollen comes off on your hand when you brush them. Wind blows the tree pollen to different flowers, and now the tree can make seeds.

Tree seeds are very interesting. Some are nuts in hard or prickly cases. Others look like smooth shiny beans sitting safely in a long pod or taking a ride in a spinning helicopter. The conifer trees store their seeds in cones. Those seeds are hard for a person to get out, but a squirrel can make short work of it!

So trees have their own kind of bark, leaves, flowers, and seeds. They also have their own kind of shape. Trees can grow rounded, pointed, narrow and tall, or even drooping like the willow. You can learn what makes each kind of tree special, and be able to spot them and name them at any time of year. Let's take a walk and find out what kind of trees live near you.

Tree Walk

Take a walk in the woods or your neighborhood. Notice which trees you recognize easily and which ones you don't. For example, what kind of tree drops a pile of acorns to the ground? Notice differences in bark, leaves, seeds, cones, and shape of the trees near you. Can these clues help you identify them in a field guide?

What colors are the leaves right now? Gather fallen leaves of all different colors, sizes, and shapes to bring home with you. See which ones you can identify.

Leaf Crafts

Choose the most beautiful leaves to press (heavy books work well as leaf presses) or preserve by dipping in melted beeswax. You can also do leaf rubbings. Place leaves under copy paper and rub over the top with a block crayon. If you do this with watercolor paper (you'll have to rub hard), you can paint over the top in blue for a beautiful watercolor resist painting.

Shelters

Third grade includes three main lesson blocks on shelters and stories (nine weeks total). These are integrated geography and language arts blocks with a lot of rich content and a mix of project and main lesson book work. The fall and spring blocks focus on Native American cultures and the winter block takes you to ancient China. Below are the objectives and a week of sample lessons from Shelters I.

OBJECTIVES

1. Take first steps into the study of geography.
2. Learn about the ways of life of Native Americans and Inuit/Aleut living in different geographical regions of North America.
3. Enjoy stories from these regions and spark an interest in and respect for Native Americans.
4. Gain an understanding of how people live on the land (feed, clothe, and shelter themselves) in different landscapes and climates, using the resources available.
5. Begin learning how to summarize narrative information.

Lesson 9

Introduce the Peoples of the Pacific Northwest

Now we have met the peoples of the treeless tundra, and the woodlands peoples. There is another woodland for us to visit, the ancient forest of the Pacific Northwest. Along the northwest coast of America there is a forest that lies between the mountains and the ocean. Warm ocean breezes blow across the land. But the cold arctic breezes don't reach this forest — they are stopped by the mountains. The mountains also trap the clouds, so that the coast is very wet and rainy. There are seasons in this forest, but it never gets very hot, and it never gets very cold. And

what do you think happens when a forest grows where the weather is mild and it rains much of the time? The trees here grow....and they grow....and they grow! Some of the largest trees in the world are in the ancient forest of the Pacific Northwest. Let's take a visit to the peoples of the Pacific Northwest coast.

Close your eyes and imagine standing in an evergreen forest. It's dark and damp in the forest, and overhead is a towering canopy of trees. Cedar, fir, spruce, and pine grow to enormous proportions here. Most of the trees are evergreen. The canopy is dense and not much sunlight filters through.

You open your eyes and adjust to the darkness of the forest. You breathe in the salty air, step over the soft ground of mosses, and push your way through clumps of ferns. Soon you hear the sounds of the men working in the forest. You step behind a giant spruce and peek out. You want to watch the men working without being scolded and sent home.

Today the men are cutting planks to repair some roofs that were damaged by high winds. There are three massive tree trunks, freshly felled this week, lying on their sides. Men and boys are cutting the branches off of one. Another is already being cut into planks. The men work carefully, hammering wedges into the split with adzes. They are skilled and will cut long, even, straight boards without splitting them. Another tree is being prepared to fell. The bottom of the trunk is packed all around with wet clay. A ring of trunk is left free of clay, and here a small slow burn is carefully tended. When the charcoal is cooled, it will be chiseled away, until the trunk is easier to pull down with strong ropes in just the direction the men want it to fall.

The air is full of the good, sweet smell of cedar. You watch for a bit and then jog quickly and quietly back home. Your mother will miss you at your weaving if you stay away too long! Your village sits on a bluff overlooking the powerful sea. It's windy here, and often raining, but never too cold. You reach the village and pause, out of breath, looking out over the ocean. Far out on the horizon, your favorite sight of all, a pod of porpoises dancing through the air and sea. Closer in, many large dugout canoes are out to sea, the men fishing or hunting for sea mammals. On the

rocky shore below the bluff, a dugout canoe is being made. You lie down on your stomach and inch towards the edge to get a closer look. The great cedar log is hollowed out with a slow and careful burn, then carved into a beautiful canoe fit for the open ocean. Your village has many canoes for fishing, hunting, and traveling.

You're startled to hear your name — mother is calling! You scramble up but not before she sees you and shakes her head. She knows you would rather be outside, and is half smiling, half scolding as she walks you back to your loom. You step inside your house, through the doorway that faces the sea. It's an enormous house built of huge cedar planks, big enough for several families to live in, and only one of several houses in your village. There are large paintings covering the walls inside and out. If you listen closely, one day you might hear them speak.

Inside, many women and girls are at work, while the younger children play. The women are cooking, weaving mats and soft cloth, hanging fish to dry, sewing clothing, and preparing cedar bark. You wear a long dress of soft, warm cedar bark tied over one shoulder. Your arms and shoulders are bare in the summer and fall, but when the winter chill comes you'll have a cedar bark cloak to wrap around your shoulders. Before the cedar bark can be woven, it must be soaked and beaten with a paddle to soften it. Then it's rolled into strong thread. The threads are woven on a simple upright wooden frame. Sometimes the men will also bring mountain goat wool for weaving. If the goat is not needed for food, the men will catch and shear the goat, and then release it back to the mountains!

Your village almost always has plenty to eat. There is plentiful game in the ancient forest — deer, elk, mountain goat, and bear. There are berries and nuts in the woods all summer. The men are skilled at hunting sea mammals from their canoes — seals, sea lions, and even whales. There is shellfish and seaweed to gather on the shore. The ocean is full of fish. And in spring and fall, the salmon leave their ocean home to travel up the rivers in huge numbers. When the salmon run, you feast for days, and still have plenty of fish to dry for later. Your people are not farmers, as the sea and forest have always provided the food you need.

When it's nearly time for the evening meal, you go to the spring with your wooden cooking box and fill it with fresh water. Then back at home you add pieces of deer meat, with camas root, fish oil, and juniper berries. Stones are heating by the fire, and you add them carefully to the cooking box. The hot stones make the water boil and cook the meat. While you tend the stew, you have time for your own thoughts. You look around your big house. Everywhere is wood - wood floor, walls, platforms, roof. The families who live in this strong, safe house are cozy in their cedar bark clothing, sitting on woven mats. You think of the giant trees of the ancient forest and how they give of their wood for your people, and you smile.

Form Drawing

Practice Form Drawing 3 (see Pictures section). Imagine the strong ocean waves crashing against the shoreline.

- **Practice moving the waves with your arms.**
- **Then try making waves with both arms, one wave cresting while the other recedes in an overlapping rhythm, just as waves fall over each other as they reach the shore.**
- **Now try this on your back, with your legs in the air tracing the form!**
- **Have your child practice drawing this form in the sand or dirt, on the chalkboard, and finally on paper with beeswax stick crayons. Use your dominant hand to draw both parts of the form separately.**
- **Just for fun, try drawing with your non-dominant hand as well, or with both hands in tandem!**

Copywork

Have your child make a copywork page from your example, using a selection from Thirteen Moons on Turtle's Back.

Shelter Model

This week you'll create a model of a northwest coast plank house. If you have the book Houses of Wood, begin by reading or browsing through it together. Consider what materials you'll need and gather them in one place. You might want to make a house of cardboard, or popsicle sticks to look like planks. You could use something like Kapla blocks for a more realistic-looking shelter.

Lesson 10

Recall and Extend

Recall what you've learned about the peoples of the Pacific Northwest coast. Ask your child to tell you about the shelters the peoples of the Pacific Northwest lived in. How did they build these shelters, and what materials did they use?

You've learned about the peoples who lived in the ancient forest of the Pacific Northwest, in the mild wet climate between the ocean and mountains. These peoples, such as the Haida, Tsimshian, Tlingit, Nootka, Kwakiutl, and Coos, were skilled hunters, fishers, and woodworkers. Their enormous homes, seaworthy canoes, and almost all of their belongings were made of wood or bark. The forest was full of giant trees, and cedar was the most prized for building homes and making clothes. Food was plentiful so there were large populations in these coastal villages and the people didn't farm. The peoples of the Pacific Northwest coast are known for their wooden homes as well as their carvings and paintings. In some villages, the walls were painted to look like real or imaginary creatures. In others, giant poles were carved and painted with symbols and animals that were important to the people — these are called totem poles.

Further south, along the Pacific coast, the climate was drier and warmer. The forests were filled with oak trees rather than giant evergreens. The California coastal peoples, such as the Chumash, Pomo, Yuki, Salinas, Yahí, and Wintun, did

not build wooden houses and each family had their own home. Related families lived together in small permanent villages, and often made temporary villages when they travelled to hunting grounds. They travelled on foot or made rafts to go by water, and needed light-weight shelters. Many families lived in a small tipi covered in brush, bark, or woven rush mats. Others made pithouses walled with earth. The people wore animal skin or bark clothing, with furs in cold weather. They were expert weavers and made many baskets.

Like the northwest peoples, these coastal peoples were fishers, hunters, and gatherers, and did not farm. They hunted rabbits, deer, ducks, geese, seals, and sea otters. They fished in rivers and the ocean and gathered shellfish. They also gathered insects to eat, especially caterpillars and grasshoppers. They gathered many different wild plants, berries, and nuts in the woods. And they ate a lot of acorns! Acorns are easy to gather in an oak forest, but they're not easy to prepare for eating. They have a very bitter taste. To make the acorns palatable, the coastal peoples shelled and dried the acorns, then pounded them into flour. Then they poured several washes of hot water over the flour to rinse out the bitterness. The acorn flour could be cooked like porridge, or baked.

Drawing

Draw a main lesson book picture on a 2-page spread (see Pictures). Leave plenty of room for writing in the summary.

Shelter Model

Begin creating your model shelter!

Lesson 11

Recall and Draft Summary

Recall what you've learned about the peoples of the Pacific Coast. What does your child remember about the land and climate, and how people fed, clothed, and sheltered themselves?

You might like to focus just on the Pacific Northwest region for your summary. As your child recalls, write a few notes about key details on the chalkboard. Then decide together what are the five (or so) most important things to know about what life was like for the people of the Pacific Northwest. Help your child create five complete sentences about those five important things (while you scribe them on the board). Next decide what order your sentences should go in and label them 1 - 5. Then ask your child to listen while you read the summary in order. Does she want to make any changes?

Leave the summary on the board for now. Sometime before tomorrow's lesson, write the final summary onto your own drawing. Your child will copy from your model during tomorrow's lesson.

Form Drawing

Recall your form drawing from Lesson 9 and practice a bit. Have your child draw this as a border for her copywork page.

Shelter Model

Continue working on your model shelter.

Lesson 12

Review

Ask your child to imagine he gets to take a trip and stay for a week with a family from the Pacific Northwest of long, long ago. What would his visit be like? How would he spend his days? What would be hard to get used to, and what would be the most fun?

Write Summary

Have your child copy the final summary into her main lesson book.

Wrap Up Projects

Wrap up all your projects and main lesson book pages from this week:

- **Your shelter model**
- **Drawing and summary**
- **Copywork and form drawing**
- **Reading from Houses of Wood**

Tell Story

Come child, out of the damp night air, and follow the crowds into the chief's house. The villagers are gathering, the great fire is lit, and it is time to tell our stories.

How Fox Brought the Forests (Snoqualmie)

Long ago, there were no trees on the earth. There were grasses and bushes, but not a tree anywhere. All the cedar and spruce, pine and fir, were kept up in Sky Land by Moon.

Moon decided to visit the earth, so he called to Spider to make him a good rope. Spider spun a rope from the clouds to the mountaintops. And Moon took a break from ruling Sky Land, and slid down the rope to earth.

Blue Jay saw that there was no Moon in the sky. A curious and clever bird, he grabbed his friend Fox, also a curious and clever creature. They dipped and flew and ran and sniffed until they found that rope touching the tops of the mountains and disappearing up into the clouds. They climbed the rope, Blue Jay pecked a hole in the clouds, and they went into Sky Land.

Fox sniffed around a lake. Blue Jay perched on a tree branch and looked all around. All around the lake were trees. Cedar and spruce, pine and fir. Lovely-smelling, life-giving trees. In the lake below, beavers swam. They had built a dam in the lake, the first home made from trees. Fox found a hole, and Blue Jay stayed on his perch, and when morning came they found that Moon had come back home to Sky Land.

Moon set a trap for a beaver in the lake. Fox turned himself into a beaver and swam into the trap. Moon thought he had caught a beaver, and took the trap home. But when Moon wasn't looking, Fox slipped out of the trap.

Fox stayed in the shape of a beaver and used his sharp teeth to gnaw away at Spider's rope. Then he took all those trees. He pulled them up and made them small and tucked them under his arm. Then Fox and Blue Jay hopped onto the rope with the trees. It broke at the gnawed place with a loud "snap!" and Fox and Blue Jay floated back down to the mountaintop.

Moon looked up when he heard the rope break. He saw his trap was empty. He followed the footprints outside and came to the lake. He saw that the trees were gone. He followed the footprints to the hole in the clouds and saw that the rope was gone. "One of the Below People has tricked me!" said Moon. He called for Spider to make him a new rope but Spider was asleep.

Below, Fox and Blue Jay were busy. They took each tree and planted it deep in the soil. They planted the cedar and spruce, the pine and fir. They planted and watered the trees and let them grow tall. They planted them over the slopes of the mountains, and around the shores of the lakes, and all the way to the edge of the sea. Soon the great forest covered the land. And Moon never got the trees back up to Sky Land.

Measurement

This four week main lesson block covers the history of measurement, along with arithmetic practice and lots of hands-on experience with estimating and measuring. We cover length, distance, volume, weight, time, and money. Here are the objectives and first two lessons from this block:

OBJECTIVES

1. Practice arithmetic: division with remainders, vertical addition and subtraction with regrouping, and multiplying and dividing by multiples of ten.
2. Teach the history of measurement, and make connections with studies in farming and geography.
3. Introduce formal measurement—length and distance, liquid and dry volume, weight, time, and money—with lots of estimation and hands-on practice.
4. Practice arithmetic with measurement conversion problems.
5. Practice using money, including making change, and telling time on the analog clock.

Lesson 1

Arithmetic Practice

Written problems:

$$19 + 23 =$$

$$51 + 38 =$$

$$42 + 42 =$$

Mental math:

What's 49 plus 5?

What's 102 plus 12?

What's 71 plus 11?

Review multiplying numbers by 10. Do these problems together at the board. What's 9 times 10? What's 90 times 10? What's 900 times 10?

Toss a beanbag back and forth and give several problems like these:

What's 13 times 10?

What's 62 times 10?

What's 412 times 10?

Practice the 12 times table. Ask your child to recite the row forwards and backwards (12, 24, 36....), and then write it up on the board.

Introduction

In this main lesson block, we're going to explore measurement. What kinds of things do you measure? What tools do you use? When do you measure carefully, and when do you just estimate or "eyeball" a measurement?

We often think of measurement as how big something is or how much it weighs. We can also measure many other things, such as how hot or cold something is (temperature), how much electricity it sends (voltage), how brightly a lightbulb shines (wattage), and how many threads are in a woven fabric (thread-count). We measure time using clocks and calendars. We use money as a measurement of the value or cost of a thing.

Go on a measurement hunt around the house. Look for items with measurements displayed on them (for example, food packages, containers, pens, clocks, dollar bills, tools).

Reading

Read the book Magnus Maximus, A Marvelous Measurer by Kathleen Pelley (optional, but highly recommended!).

New Lesson

We have all kinds of tools that we use to measure. We use rulers, measuring cups, thermometers, scales, and more. The ruler at your house measures the exact same way as the ruler at your neighbor's house. This is how we know exactly what someone means when they say, "This paper is eleven inches long," or "I am four feet eight inches tall." When we use a recipe from a cookbook, and it calls for two cups of flour, we use a measuring cup to measure it out so we're putting in exactly the right amount of flour. Our neighbor can follow the same recipe and use a measuring cup to put in the same amount of flour. Measurements and measuring tools allow us to be precise. They help us to give exact information and to make comparisons. If your dog weighs twenty pounds, and your neighbor's dog weighs thirty pounds, you know exactly what that means, and you will get the same result by using any scale that measures weight in pounds.

How would you measure how long something is if you didn't have a ruler? How would you measure out an exact amount of flour without a measuring cup? How would you know how much something weighs without a scale?

Long, long ago, people didn't have measuring tools like these. So what did they use to measure? The very first measuring tool was the human body! Here are some common early measurement units:

- **Digit (width of thumb)**
- **Hand (across the palm, five fingers together)**
- **Span (from outstretched pinky to thumb)**
- **Cubit (elbow to tip of outstretched middle finger)**
- **Foot (length of foot)**
- **Pace (length of stride)**

Take one medium-sized object in the room (such as a coffee table) and have your child measure it using *all* of the units above—compare! Point out to your child that we have to include a unit with our measurements. If you say the room is "twelve long" that doesn't mean anything. "Twelve paces long" gives more information.

Next measure several different things around your house. Choose the best unit to measure with. Is it easier to measure the size of a room with digits or paces? How about the size of a paper clip? Note your measurements on the chalkboard including the unit. For example, Room—12 paces wide; Table—5 cubits long; Mug—6 thumb widths high. Both teacher and child should measure so you can compare. If possible, have other family members add their measurements as well and look at the range of responses! A room might be thirty toddler paces wide and only ten daddy paces wide.

What are some other ways you could use your body as a unit of measurement? Let your child come up with some other ideas (such as wrist width or nose length) and measure a few things. What are the most practical ways to use the body for measurement?

Imagine you have decided to build a small one-room cabin in the wilderness. You want it to be big enough to live in but not so big it takes too long to build. And of course, you want to take care that the front and back walls are the same length, and the side walls are the same, so that you have a room that is rectangular in shape. You are in the wilderness so you don't have any measuring tools. How could you mark off the length of your walls? Go ahead and measure out a small room using paces as your measurement unit (indoors or in the backyard). Take care to keep your paces as even as possible so your walls are matching lengths. (What happens if child and parent split the measuring task and each measures out a wall with paces—does that work?)

Now imagine that your building project is a success and you write a letter to a friend describing how you built it and exactly what the measurements are. If your friend follows your plan to build his own wilderness cabin, is it going to end up the same size as yours?

Main Lesson Book

Choose three to six measurement units from the list above (digit, hand, etc.). Draw the body part in your main lesson book and label with the measurement unit. Give an example of something measured using that unit.

Lesson 2

Arithmetic Practice

Written problems:

$44 - 33 =$

$67 - 13 =$

$81 - 4 =$

Mental math:

What's 58 minus 5?

What's 177 minus 12?

What's 360 minus 40?

Review dividing numbers by 10. Do these problems together at the board. What's 60 divided by 10? What's 600 divided by 10? What's 6000 divided by 10?

Toss a beanbag back and forth and give several problems like these:

What's 150 divided by 10?

What's 330 divided by 10?

What's 2850 divided by 10?

Practice the 12 times table. Ask your child to recite the row forwards and backwards (12, 24, 36...), and then write it up on the board.

Recall and Extend

Recall yesterday's lesson. How did people first begin to measure things? Did everyone come up with the same measurements? If you asked two different carpenters to build you a table five cubits long, two cubits wide, and three cubits high, would you end up with two matching tables?

Long ago in Egypt, the Pharaohs ruled over the fertile land that surrounded the great Nile river. They ruled over many people and a vast amount of treasure. They built fabulous cities and grand temples for their gods. The Pharaohs believed that they themselves were gods, and that they would live on forever after death. They wanted to build very special, enormous tombs where they could be buried along with treasures and all sorts of ordinary things they would need in the next life, such

as furniture and food. Several of these tombs were built in a pyramid shape. These pyramids were built so carefully and so well that they can still be seen today in the land of Egypt.

A pyramid shape is square at its base, and has four sides, but each of those sides is a triangle shape. (Optional: Cut out four identical triangles and arrange them to show the shape of a pyramid.) The largest pyramid, the Great Pyramid of Giza, took over 20 years to build! It was built of 2,300,000 blocks of stone. Each stone had to be measured and cut and then brought to the building site and put into place.

To build something so complex and so important, the architects, builders, and workers all needed to use the same unit of measurement. It would never do to have each stone cutter cutting the blocks of stone to size based on his own span, cubit, and foot measurements! What would happen then?

So what do you think the ancient Egyptians did to solve this problem? They created a *standard* for measurement. The Pharaoh used his own body to create the standard. A Royal Master Cubit was carved of black granite using the length of the Pharaoh's cubit. Then many cubit rods were made to be the exact same length as the Royal Master Cubit. People throughout the land could use the cubit rods for measuring and know that they were measuring the same lengths as anyone else in Egypt. The Great Pyramid of Giza was measured in modern times and each side was found to be a precise 440 royal cubits in length (that's about 756 feet). The pyramid stood 280 royal cubits in height—that's about 481 feet—which made it the highest man-made structure in the whole world for almost 4,000 years!

Cut a large piece of watercolor paper or poster board into measurement sticks based on your child's measurements (Cubit, Foot, Hand, and Digit). Practice measuring a few things with your new measuring sticks. Notice that you can both use the same measuring stick and find the same result. Remember to use units with your measurements. You might find you need to combine units in order to measure accurately. For example, a table might measure two cubits, one foot, and two hands long.

New Lesson

The Romans were another ancient people who were very skilled at building. The Romans conquered many other lands to create a vast empire. Throughout their empire they built roads, military forts, bridges, walls, aqueducts, and cities. The Romans were excellent engineers and builders. They were good at planning, working efficiently, and building quickly. One thing that allowed them to be such good builders was their system of measurement. Everywhere in the enormous Roman Empire there were architects, engineers, builders, and soldiers who all used the same system to measure and build. They liked to perfect their system for how to build a city or a road in the most accurate and efficient way, and then use that same system every time.

The Romans also used the foot as their basic unit of measurement. The foot in Ancient Egypt, Ancient Rome, and modern times are all about the same length—approximately the length of an average man’s foot. We don’t know how the Romans decided on the length of their standard Roman Foot (or Pes), but it had a standard length that was the same throughout the empire. A Roman engineer could draw a plan for a new bridge and send it to a city 200 miles away, and the builders there could follow the plan using the standard foot as measurement.

Just as we do today, Romans also divided their foot measure into twelve equal parts. Each smaller part was called an Uncia. Does this sound familiar? Our word “inch” comes from the old Roman word “uncia.” In Roman times, like now, twelve inches made a foot.

Using the foot and digit measuring sticks you made earlier, have your child check how many digits fit into a foot. Also check how close the digit (thumb width) is to the uncia (length of second thumb joint). Does her foot measure approximately twelve uncia? You can also check this by tracing her foot on a large sheet of paper and then measuring out the uncia with her thumb.

Here are the Roman units of measurement:

- **Uncia (one twelfth of a foot; approximately length of second thumb joint)**
- **Pes (foot; also twelve uncia)**
- **Pace (length of two steps of a Roman soldier; five feet)**
- **Decempedia (ten feet)**
- **Mile (one thousand paces; two thousand steps; 5000 feet)**

The Romans were a very disciplined people. Young Roman men trained to serve in the army. Roman soldiers were taught to march together in precise formation. They had to step exactly in rhythm with the other soldiers around them. They also had to keep their stride length the same. This way the whole army could march together and stay together. They kept up a very quick pace, too! In Roman times, a “pace” was considered the length of a Roman soldier’s double step. This became a standard unit of measurement equal to five feet.

Our word for “mile” also comes from the Romans. This ancient word means “one thousand.” The Roman mile was equal to one thousand paces, or five thousand feet. This is very similar to our modern mile (which now equals 5,280 feet).

Look at a ruler and notice that it is one foot long and divided into twelve inches. Compare the size of the foot ruler to the size of your child’s foot and your own (compare to all the family members’ feet or shoes if you like). Practice showing the length of one foot and one inch using your hands. Take note of where the zero inch mark is positioned (exactly at the end or a bit indented). It’s important to line up the zero inch mark correctly when measuring.

On a large sheet of paper, have your child draw three concentric squares using the ruler as a straightedge and measurement tool (sides are 12 inches, 6 inches, and 1 inch in length). Show your child the abbreviations for foot (ft.) and inch (in.) and label the sides of the squares.

Main Lesson Book

Write a summary into the main lesson book:

Early measurements were based on the body, such as the length of a foot. The great civilizations used standard measurements to become skilled builders. The Egyptians used the royal cubit to design the pyramids, and the Romans measured the size of their empire in miles. Our modern mile, foot, and inch are very close to the Roman mile, pes, and uncia.

Trace around your ruler, mark off the inches, and label "1 foot = 12 inches".

Hebrews

There are two language arts main lessons based on the stories of the ancient Hebrews. You'll read from the story book of your choice (or tell the stories) and your child will make a colorful main lesson book with pictures and story retellings. You'll also introduce the cursive capitals and four parts of speech in the first block. In the second block you'll review parts of speech and learn about apostrophes, contractions, and possessives. Here are the objectives and two lessons from Hebrews 1:

OBJECTIVES

1. Enjoy and become familiar with the iconic stories of the Ancient Hebrew people.
2. Practice summarizing stories.
3. Create a beautiful main lesson book.
4. Continue practicing cursive and learn the capital letters.
5. Begin learning the parts of speech.

Lesson 3

Practice Creation Story

Have your child practice telling the creation story while holding up each painting. Work on clear, appropriately dramatic delivery with good diction!

Recall and Cursive Practice

Recall the stories of Adam, Eve, Cain, and Abel.

Practice your new capital cursive letters. Today, add the step of connecting capitals to the rest of the word. Note that a few of these cursive capitals do not connect (O, P, V, W) and H has a tricky connection at the middle. In the story Adam named the animals. See if you and your child can come up with at least one animal for each letter that you learned yesterday and write it in cursive with an initial capital letter.

Summary

Help your child write a brief summary for each story into his main lesson book. Decide whether you would like your child to write in print or cursive. Also think ahead about the amount of writing that's appropriate for your child each day. Any initial capital letters that haven't been learned yet can be written in print.

Grammar

Adam gave each animal a name. We have names for all the animals and birds and plants we see around us. There are also names for all the objects in your house. We use *naming words* all the time! These naming words are called nouns. Anything that can be named - a person, place, thing, or even an idea - is a noun.

Take a nouns tour around your house. Look for nouns everywhere!

Tell Story

Tell the story of Noah.

Lesson 4

Perform Creation Story

At some point today or this weekend, have your child perform the creation story (holding up the paintings for each day and reciting in a clear voice) for an audience (even if the audience is just one other family member!).

Recall and Cursive Practice

Recall the story of Noah. Introduce the cursive capital E and practice any other letters that have been tricky so far.

Grammar

Review nouns or naming words. Have your child tell you several nouns. Then tell your child you're going to talk about Noah's ark and you want her to raise her hand every time you say a noun! Paint a picture with your words ("Noah's ark was enormous. Every animal could ride aboard! There were giraffes and peacocks, gazelles and lions, owls and kangaroos...") Speak slowly enough that your child can identify the nouns and help as needed. It's fine to emphasize the nouns with your voice. Remember this is just an introduction and parts of speech will be covered in more depth in fourth grade.

Ask your child to make a list of Nouns in his English notebook.

Drawing and Summary

Draw Noah's Ark and write a short summary into the main lesson book.

Tell Story

Tell the story of the Tower of Babel.

Pictures

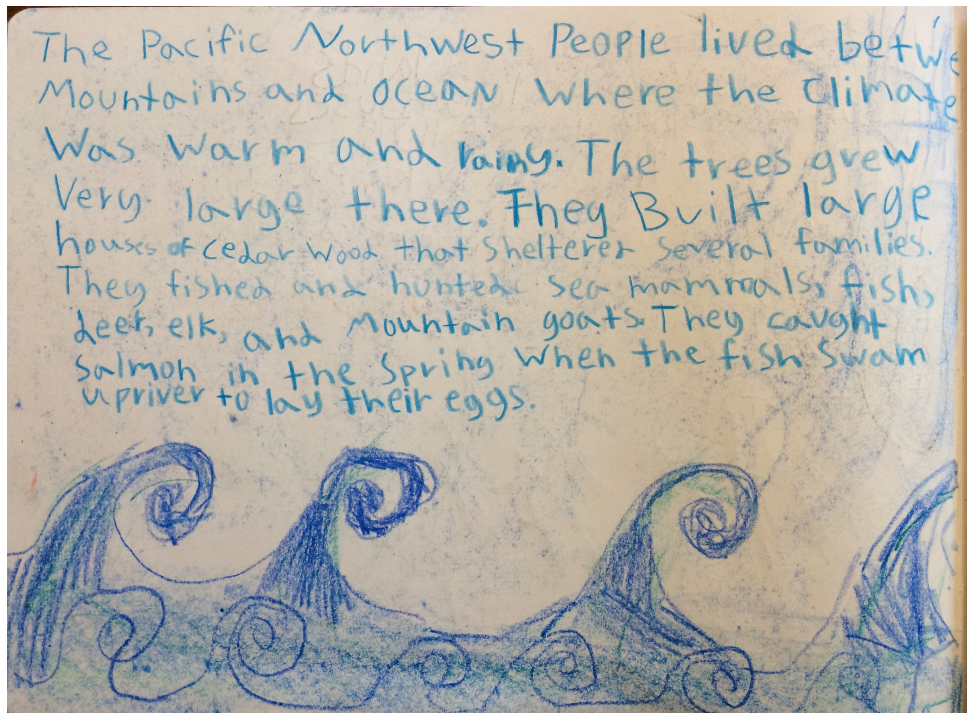
Main Lesson Book

Farmer Boy Math - Times Table Garden (page one)

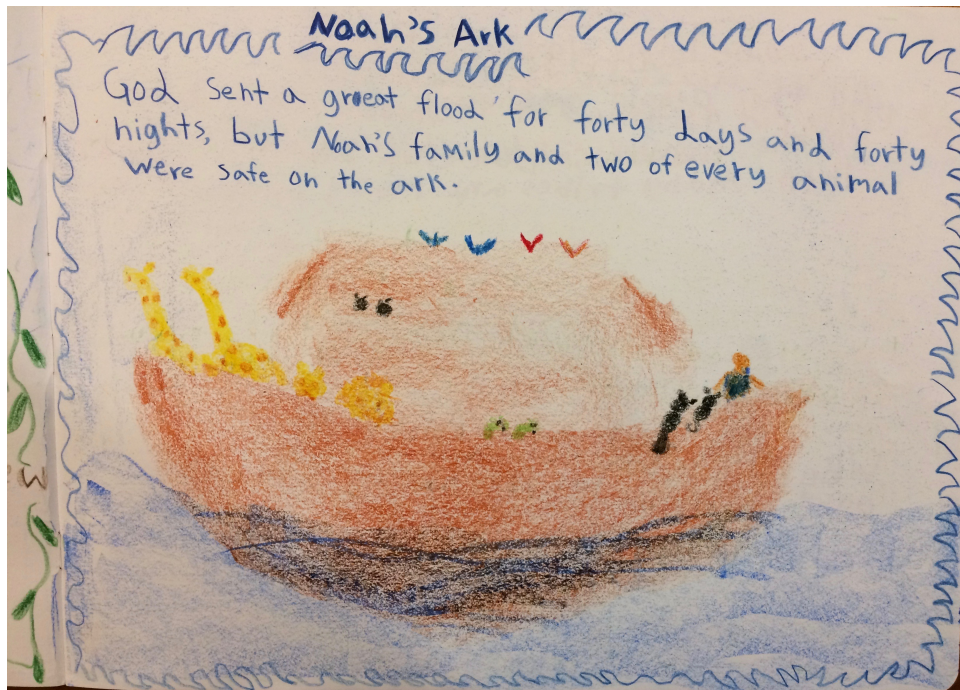


- 1 - Pumpkins
- 2 - Bean sprouts
- 3 - Eggplants
- 4 - Strawberries
- 5 - Basil
- 6 - Carrots

Shelters - Pacific Northwest



Hebrews - Noah



Hebrews - Jonah



Form Drawings

