# Adventures of Jack Sprout in Beaver Creek Meadow





**PreK-4 Curriculum Guide** 

#### Introduction

Hello, and welcome to the *Adventures of Jack Sprout in Beaver Creek Meadow* curriculum guide. This curriculum is intended to be used as a supplement to what you are already using. Therefore, it would be great for extra practice or for summer time enrichment.

The material is divided into twelve units, each one corresponding to a chapter in *Adventures of Jack Sprout in Beaver Creek Meadow*, and they can be completed at your own pace. Each unit has activities for language arts, character training, social studies, science, mathematics, art, and music. As the teacher, you may choose to do all the activities or just some of them. This curriculum is intended to be suitable for students in PreK-4<sup>th</sup> grade; therefore, choose the activities that are best-suited for your student's individual level and interests. It is hoped that you will find this material appealing because of its flexibility.

With that, have fun as you grow with Jack Sprout and all his Beaver Creek Meadow neighbors!

### **Suggested Schedules**

### Twelve-Day Schedule

Day 1	Chapter 1
Day 2	Chapter 2
Day 3	Chapter 3
Day 4	Chapter 4
Day 5	Chapter 5
Day 6	Chapter 6
Day 7	Chapter 7
Day 8	Chapter 8
Day 9	Chapter 9
Day 10	Chapter 10
Day 11	Chapter 11
Day 12	Chapter12

### **Twelve-Week Schedule**

	Monday	Tuesday	Wednesday	Thursday	Friday
Chapter 1	Language Arts	Social Studies	Science	Mathematics	Art
	Character Training				Music
Chapter 2	Language Arts	<b>Social Studies</b>	Science	Mathematics	Art
	<b>Character Training</b>				Music
Chapter 3	Language Arts	Social Studies	Science	Mathematics	Art
	Character Training				Music
Chapter 4	Language Arts	<b>Social Studies</b>	Science	Mathematics	Art
	<b>Character Training</b>				Music
Chapter 5	Language Arts	Social Studies	Science	Mathematics	Art
	Character Training				Music
Chapter 6	Language Arts	Social Studies	Science	Mathematics	Art
	Character Training				Music
Chapter 7	Language Arts	Social Studies	Science	Mathematics	Art
	Character Training				Music
Chapter 8	Language Arts	Social Studies	Science	Mathematics	Art
	Character Training				Music
Chapter 9	Language Arts	Social Studies	Science	Mathematics	Art
	Character Training				Music
Chapter 10	Language Arts	Social Studies	Science	Mathematics	Art
	Character Training				Music
Chapter 11	Language Arts	Social Studies	Science	Mathematics	Art
	Character Training				Music
Chapter 12	Language Arts	Social Studies	Science	Mathematics	Art
	Character Training				Music

#### **Supplies**

Here is a supply list of everything you will need, including supplies for the craft projects:

Adventures of Jack Sprout in Beaver Creek Meadow (available from

http://www.jacksprout.com/index.html)

"Our Jack Sprout!" lyrics (available from http://www.jacksprout.com/DownloadsPage.html)

"Our Jack Sprout!" song (available from <a href="http://www.jacksprout.com/DownloadsPage.html">http://www.jacksprout.com/DownloadsPage.html</a>)

1 1/2-in. masking tape

Beaver Creek Meadow map (available from <a href="http://www.jacksprout.com/DownloadsPage.html">http://www.jacksprout.com/DownloadsPage.html</a>)

Bird seed

Black marker

Card stock

Cardboard

Chocolate chips

Construction paper

Cotton balls

Crayons, colored pencils, or markers

Encyclopedias

Flour

Geographic map

Glue

Green feathers

Ground flax seed

Growth chart (available from http://www.jacksprout.com/DownloadsPage.html)

Honey

Jack Sprout's garden (available from <a href="http://www.jacksprout.com/DownloadsPage.html">http://www.jacksprout.com/DownloadsPage.html</a>)

Lid Poppin' Kit (available from http://www.jacksprout.com/shop.html)

Map of Beaver Creek Meadow (available from http://www.jacksprout.com/DownloadsPage.html)

Newspaper

Notebook paper

Oil

**Paintbrushes** 

Paper plates (large and small)

Peanut butter

Pebbles

Pencil

Pinecone

Plain white paper

Plastic container with lid

Plastic straw

Plastic wrap

Printer

Quick oats

**Scissors** 

Screw driver

Slivered almonds
Small plastic cups
Soil
Spaghetti
Sticks
Straw or shredded newspaper
String
Styrofoam plates
Tape
Tape measure
Tempera paints
Toilet paper tube
Water color paints
Watering can

The additional information for science and social studies can be obtained from books you already own, books from the library, encyclopedias, or the Internet. The music and artwork can be gotten from CDs and books you may already own, the library, or the Internet.

## Adventures of Jack Sprout in Beaver Creek Meadow PreK-4 Curriculum Guide

I hit a home-run on my Internet search for a homeschool consultant. Tiffany Orthman has taken my twelve-chapter story and created a fantastic PreK-4 curriculum guide! It's a broad-based, in-depth resource that uses a variety of materials with links and other educational ideas. It is easy to use, easy to learn and easy to plan your activities. The characters create the excitement while presenting factual information in a fun and interesting format. Jack Sprout is ready to help you learn how to build a farm!

This curriculum guide was designed by Tiffany I. Orthman, M.Ed. http://www.homeschoolconsultant.webs.com

Copyright © Jack Shoop 2013

#### **Chapter 1: Meet Jack Sprout**

#### **Language Arts**

#### Discuss the title and author of the book and the characteristics of fiction.

Explain to the student that the title of the book is *Adventures of Jack Sprout in Beaver Creek Meadow*. The author is Jack Shoop. This book is a fiction book because it is made up by the author. Although there are some facts in the book, the characters and things that happen in the book are not true.

#### Read Chapter 1 together or independently.

#### Tell how Jack Sprout started out.

Ask the student to tell you how Jack Sprout came to be.

#### Compare and contrast Jack Sprout and his friends.

Fold a piece of paper in half. On one side, write "Jack Sprout." On the other side, write "His Friends." Help the student to list or draw the differences between Jack Sprout and his friends. For example, Jack Sprout remained a sprout, he doesn't get a new green shoot, he can move around, he wears clothes, etc.

#### Write about how Jack Sprout felt about his looks.

Have the student either dictate or write about Jack Sprout's feelings about his looks.

#### Summarize how Jack Sprout broke away from his roots.

Help the student by using words such as "first," "next," "then," etc. Talk about why Jack Sprout needed to leave the field and the process he used for breaking his roots.

#### **Character Training**

#### Identify ways that you are different from your friends.

Have student fold a paper in half. On one side, help the student list his or her characteristics, talents, etc. On the other side, have him or her list different qualities of friends. If the student is not writing yet, have him or her draw a picture of himself or herself and a picture of a friend. Discuss how being different is a good thing and that we should all appreciate one another's differences.

#### Share how you communicate with your friends.

Jack Sprout communicated with his friends through his roots. Ask the student to name some ways that he or she communicates with friends and write down what he or she says. The student can also draw pictures of different communication techniques. Here are some ways that people communicate: speech, body language, facial expression, touch, telephone, fax, e-mail, and social networks. Discuss the importance of clear communication.

#### **Social Studies**

Color the new areas on the map of Beaver Creek Meadow which Jack Sprout visited. As you are doing this, point out the directions north, south, east, and west. Also draw attention to the different land features.

#### Make a concept map of the role you play in your home and community.

Jack Sprout has an important role as a farmer, and everyone has a special role in his or her environment. Write the student's name in the middle of a piece of paper and circle it. Now draw lines reaching out to

other circles that contain the names of family members, social groups, community events, etc. Next to each one, list how the student interacts with that person or group.

#### Create a timeline for the history of Beaver Creek Meadow and Jack Sprout's life.

Lay two pieces of paper end to end and tape them together. Draw a line along the length of the papers. In the middle of the first paper, make a dot for when Jack Sprout sprouts. Continue to add events to the timeline in the order in which they happen in the story. Some events mentioned actually happen before Jack Sprout is around.

#### Science

#### Learn to identify sunflowers.

Use a field guide, encyclopedia, or Internet article to see what a sunflower looks like and to learn what characteristics distinguish it from other flowers.

#### Research the names of full moons.

Farmer Smith told Jack Sprout that he must leave the sunflower field on the Harvest Moon. Use an almanac, encyclopedia, or the Internet to research when the Harvest Moon is and to learn the names of the other full moons throughout the year. There are many different lists of full moons, including Colonial, Chinese, Native American, Celtic, Medieval, Neo-Pagan, and New Guinea lists; but not all of them list a Harvest Moon.

#### Explain how a seed germinates.

Jack Sprout came from a seed. Tell the student that in order for a seed to germinate, there must be the proper combination of water, air, light, and temperature. Once conditions are right, water enters the seed coat and causes the inside of the seed, or embryo, to swell. Next, the seed sends out a root. Then it sends out a shoot. Then the sprout continues to grow into a seedling and then into a plant.

#### **Identify what plants need to grow**

Have the student take a piece of paper and fold it into fourths. At the top of the paper write "What Plants Need to Grow." In each section write soil, light, clean air, and water. Now have the student illustrate each of the four things that plants need to grow.

#### Describe how agriculture is important.

Help the student to list reasons that agriculture is important. Some reasons might be food for humans and animals, jobs, textiles, medicines, and conservation.

#### Make a four-season craft.

Gather red, orange, yellow, green, blue, brown, and white construction paper. Label four pieces of blue construction paper "Spring," "Summer," "Fall," and "Winter." Trace the student's hand and lower arm on the brown construction paper so that it looks like a tree trunk and branches. Cut out four trees and glue them to the blue pieces of paper. For the Spring tree, cut small leaf buds out of green paper and glue them to the branches. For the Summer tree, cut out a large piece of green paper and glue it to the top of the tree so that it looks like all the leaves are there. For the Fall tree, cut out red, orange, and yellow leaves to glue on the tree and on the ground. For the Winter tree, cut out white snowflakes to glue around the bare tree. Other options: Use cotton balls, glitter, real leaves, or anything else you can think of to decorate the trees. Older students might enjoy painting or drawing the trees.

#### **Mathematics**

### Measure height and weight of the student and compare with height and weight at birth.

Jack Sprout grew to be a very big sprout. Discuss how much the student has grown and changed over the years.

#### Measure how tall sunflowers can be.

Sunflowers range in size from 4 ft. to 14 ft. Help the student use a tape measure to measure 4 ft. and 14 ft. on the floor.

#### Art

#### Draw pictures of Grandma Elderberry, Farmer Smith, and Jack Sprout.

If necessary, read the descriptions of these characters again so that the student can imagine what they look like. If the student does not know what a prairie dog, squirrel, or sprout look like, find pictures in an encyclopedia or online.

Go online and search for Vincent van Gogh's sunflower paintings and read his biography. Or check out a book from the library about van Gogh.

#### Music

#### Sing "Our Jack Sprout!"

Find the lyrics and music at <a href="http://www.jacksprout.com/DownloadsPage.html">http://www.jacksprout.com/DownloadsPage.html</a>.

List what "Our Jack Sprout!" says about Jack Sprout.

#### Listen to The Four Seasons by Antonio Vivaldi.

You can purchase a CD, check one out from the library, or search for *The Four Seasons* by Vivaldi on the Internet.

#### Read about Vivaldi

Check out a book from the library, use an encyclopedia, or use the Internet to research Vivaldi.

#### **Chapter 2: Jack Sprout Meets Fred Beaver**

#### **Language Arts**

Read Chapter 2 together or independently.

#### Summarize what happened in the chapter.

Have the student write a brief summary of what happened in the chapter. If the student is not writing, have him or her dictate the summary or let him or her create a picture of what happened.

#### Choose words from the chapter to use as spelling and vocabulary words.

Vocabulary words to consider: cruising, nearby, successful, meadow, burly, settler, and caretaker. Have the student find them in the chapter, look them up in a dictionary, list synonyms or antonyms, or use them in sentences.

#### Tell what things Jack Sprout has learned so far.

Help the student write what Jack Sprout has learned. Some things he has learned include that he needs a farmhouse, where to get the trees cut for lumber, and who will saw the lumber.

#### **Character Training**

#### Role-play helping each other.

Let the student choose to be either Jack Sprout or Fred Beaver. Then pretend to fix Fred Beaver's dam. Together, think of other situations to help each other, such as cleaning, cooking, doing laundry, or carrying a heavy load.

#### Discuss where you make new friends.

Friends can be made in play groups, social events, or extracurricular activities. Talk about how to get to know other people and begin friendships through polite conversation. Practice asking each other questions and giving answers.

#### Describe what a good neighbor is like.

Take a sheet of paper and write "A Good Neighbor" at the top. Then help the student list the characteristics of a good neighbor. They could include being friendly, respecting others and their property, being helpful, and watching out for others. Let the student decorate the list if he or she chooses.

#### **Social Studies**

Color the new areas on the map of Beaver Creek Meadow which Jack Sprout visited. As you are doing this, point out the directions north, south, east, and west. Also draw attention to the different land features.

### Predict how the common good would have been affected if Jack Sprout had not helped Fred Beaver.

Ask the student what would have happened if the beaver dam had broken. Ask who would have been affected and how. Ask if Beaver Creek Meadow would have been the only places affected. Ask if Jack Sprout could have waited to help Fred Beaver.

#### Create a concept map of Beaver Creek Meadow's economy.

Take a piece of paper and write "Jack Sprout" and "Fred Beaver" anywhere. Circle the names. Draw arrows from one to the other and along each arrow write how each one helped the other one and other characters in the story.

### Make a list of each new location in Beaver Creek Meadow. Then list the characteristics of each location.

Discuss with the student how each location is best-suited for the characters found there and the activities they do.

#### Add to the Beaver Creek Meadow timeline.

#### List Fred Beaver's responsibilities in Beaver Creek Meadow.

Help the students to write about what Fred Beaver does. If the student cannot write, have him or her draw a picture of Fred Beaver doing his job.

#### Science

#### Read about creeks, ponds, and beavers.

Check out a book from the library, use an encyclopedia, or use the Internet for information about creeks, ponds, and beavers.

#### Explore a creek or pond nearby.

Take a trip to a park or nature center if you do not have a creek or pond near your home.

#### Make a beaver dam.

Weather permitting, go outside and build a beaver dam. First, gather sticks and twigs. Then collect dirt in a bucket or other container. Add water to make mud. Now use the sticks and twigs to construct a dam and cover them with mud. Use a garden hose to simulate a stream. Let the student make observations about how much water is collecting in the pool and whether the dam is big enough to hold back all the water. If a good amount of water has collected behind the dam, break the dam to observe a small flood.

#### Start Lid Poppin' Kit.

#### Study the diagram of a sunflower seed

A diagram of a sunflower seed is available from the following website: <a href="http://www.biology-resources.com/plants-seeds.html">http://www.biology-resources.com/plants-seeds.html</a>. Diagrams may also be found in books about sunflowers.

#### **Mathematics**

#### Measure how big a circular sawmill blade can be.

Circular sawmill blades can be as big as 9 ft. across. Have the student take a tape measure and measure 9 ft.

Count the seeds in the sprout kit.

#### Measure how much soil is in the sprout kit.

Use measuring cups, measuring spoons, and a kitchen scale to measure how much soil is in the package.

#### Determine the size of the planting area by square and cubic inches.

For square inches, have the student measure the length and width of the container and multiply the numbers. For cubic inches, have the student measure the length, width, and depth of the container and multiply all three together.

Record air temperature near the sprout kit and track it.

Track the number of days taken to grow an edible crop.

Track total amount of water used for the sprouts.

#### Art

#### Make a pond picture.

Gather green, blue, and brown construction paper. Cut a pond shape out of the blue paper and glue it to the green paper. Now use the brown paper to cut out a beaver dam, trees, and Fred Beaver. Use

more green paper to cut out reeds to go in the pond and leaves for the trees. Other options: Use real twigs, grass, and cotton balls. The student may also paint or draw a picture of a pond.

#### Make a paper plate beaver.

Visit <a href="http://www.dltk-kids.com/animals/mplatebeaver.htm">http://www.dltk-kids.com/animals/mplatebeaver.htm</a> for instructions on how to make a paper plate beaver.

#### Music

#### Listen to "Air on the G-String" by Bach.

You can purchase a CD, check one out from the library, or search for "Air on the G-String" by Bach on the Internet.

#### Read about Bach.

Check out a book from the library, use an encyclopedia, or use the Internet to research Bach.

#### Listen to "Water Music" by George Frideric Handel

You can purchase a CD, check one out from the library, or search for "Water Music" by Handel on the Internet.

#### Read about Handel

Check out a book from the library, use an encyclopedia, or use the Internet to research Handel.

#### Describe how music makes you feel

Ask the student to describe how he or she feels when listening to different types of music.

#### **Chapter 3: Jack Sprout Meets Sawdust Miller**

#### **Language Arts**

Read Chapter 3 together or independently.

#### Choose words from the chapter to use as spelling and vocabulary words.

Vocabulary words to consider: sturdy, secretary, oxygen, carbon dioxide, currents, bare. Have the student find them in the chapter, look them up in a dictionary, list synonyms and antonyms, or use them in sentences.

#### Visualize the chapter.

Have the student draw a series of pictures depicting the flight of Whoopee and Stretch.

#### Summarize the chapter.

Have the student write a brief summary of the chapter. If the student is not writing yet, take dictation or let him or her draw pictures of the story.

#### Distinguish between facts and fiction within the chapter.

Take a piece of paper and fold it in half. On one side write "Fact" and on the other side write "Fiction." Now choose pieces of the chapter that are fact and fiction and list them in the appropriate column. Examples of fact are sawmills make lumber, blue herons live near water, and conservation is important. Examples of fiction are woodchucks work in sawmills, little blue herons are secretaries, and whooping cranes haul heavy logs.

#### **Character Training**

#### Make a list of ways to help each other.

Help the student to list ways to help members of the family. For example, helping siblings with chores, helping parents cook, or helping to clean the house.

#### Describe ways in which people are different.

Have the student verbally talk about things that make people different from one another. Some differences would be language, geographic location, occupation, etc.

#### Tell how different people have different purposes in life.

Help the student to understand that people have different purposes in life. For example, people that are good at writing make good stories. People that like to help others become teachers.

#### **Social Studies**

#### Color the new areas on the map of Beaver Creek Meadow which Jack Sprout visited.

As you are doing this, point out the directions north, south, east, and west. Also draw attention to the different land features.

#### Create a concept map of Beaver Creek Meadow's economy.

Add Sawdust Miller's, Whoopee's, and Stretches names to the concept map and draw arrows connecting him with other characters.

### Make a list of each new location in Beaver Creek Meadow. Then list the characteristics of each location.

Discuss with the student how each location is best-suited for the characters found there and the activities they do.

#### Add to the Beaver Creek Meadow timeline.

#### Research unions and their function in the past and present.

Check out books from the library, use an encyclopedia, or use the Internet to learn about unions.

#### Read about sawyers and sawmills.

Check out books from the library, use an encyclopedia, or use the Internet to gather information about sawyers and sawmills.

#### Read about logging and lumberjacks.

Check out books from the library, use an encyclopedia, or use the Internet to learn more about the logging industry and what lumberjacks do.

#### Science

#### Read about forests, conservation, woodchucks, and whooping cranes.

Check out books from the library, use an encyclopedia, or use the Internet to learn more about forests, conservation, woodchucks, and whooping cranes.

#### Use a field guide to identify trees mentioned in the book and growing in your area

Trees mentioned in the book include Birch, Silver Oak, Redwood, and Douglas Fir. If none of the trees are found in your area, identify the types of trees that do grow in your area.

#### Draw pictures of things made of wood

Take a piece of paper and write "Things Made of Wood" at the top. Then help the student think of items made of wood. Some things to include might be furniture, houses, paper, and playground equipment.

See if the sunflower seeds have germinated. Predict when the lid on the sprout kit will pop.

#### Look for the roots of the sunflower sprouts and list what root do for plants.

Help the student list what roots do. For example, they take in water and nutrients, give the plant stability, store food, and prevent soil erosion.

#### Diagram the sprouts.

Have the student look closely at the sprouts then draw what he or she observes. Help the student to label parts of the sprout that are visible.

#### **Mathematics**

Record air temperature near sprout kit and track it.

Track the number days taken to grow an edible crop.

Track total amount of water used for sprouts.

Calculate the number of hours from planting to lid popping open on sprout kit.

Measure the sprouts each day and mark the growth chart.

#### Measure out the wingspan of a whooping crane.

Help the student to measure out 8 feet. This is how big the wingspan of a whooping crane is.

#### Art

#### Look at pictures of the trees mentioned in the chapter and paint or draw them.

Use a field guide, encyclopedia, or the Internet to search for images of Birch, Silver Oak, Redwood, and Douglas Fir.

#### Paint a picture of a sawmill.

Use a book, encyclopedia, or the Internet to locate a picture of a sawmill and have the student use watercolors to paint it.

#### Music

#### Listen to "Appalachian Spring" by Aaron Copland.

You can purchase a CD, check one out from the library, or search for "Appalachian Spring" by Aaron Copland on the Internet.

#### Read about Aaron Copland.

Check out a book from the library, use an encyclopedia, or use the Internet to research Aaron Copland.

#### Listen to "Der Nassbaum (The Walnut Tree)" by Robert Schumann

You can purchase a CD, check one out from the library, or search for "The Walnut Tree" by Robert Schumann on the Internet.

#### Read about Schumann

Check out a book from the library, use an encyclopedia, or use the Internet to research Schumann.

#### **Chapter 4: Jack Sprout Meets Pierre Le Tru**

#### **Language Arts**

Read Chapter 4 together or independently.

#### Briefly recount the chapter.

Have the student briefly mention the most important information of the chapter either orally or written.

#### Practice research skills.

Help the student use a dictionary, encyclopedia, library catalogue, or the Internet to look up information about solar power, wind power, or water power.

Tell how Pierre Le Tru will make Jack Sprout's solar panels and how they will work. Help the student to write out all the steps of how the solar panels for Jack Sprout's roof will be made and how they will work.

#### Write a persuasive paragraph.

Help the student to write a persuasive paragraph about the advantages of wind, solar, and water power.

#### **Character Training**

#### Identify things people do outside for fun.

Pierre Le Tru played in the woods and up in the trees with his friends. Have the student draw pictures of things that he or she does outside for fun.

#### Describe how you solve problems.

When Pierre Le Tru found out that his father had cut down his favorite tree, he was very angry. Ask the student what he or she would do in the same situation. Role-play conflict resolution with the student.

#### List ways to show respect for the environment.

Pierre Le Tru was upset that too many trees in Beaver Creek Meadow were being cut down because it was taking beauty and enjoyment away from others. Have the student list ways that he or she can be a responsible steward so that other people can have enjoyment.

#### **Social Studies**

#### Color the new areas on the map of Beaver Creek Meadow which Jack Sprout visited.

As you are doing this, point out the directions north, south, east, and west. Also draw attention to the different land features.

#### Create a concept map of Beaver Creek Meadow's economy.

Add Pierre Le Tru's name to the concept map and draw arrows connecting him with other characters.

### Make a list of each new location in Beaver Creek Meadow. Then list the characteristics of each location.

Discuss with the student how each location is best-suited for the characters found there and the activities they do.

#### Add to the Beaver Creek Meadow timeline.

#### Use a problem-solving organizer to solve Pierre Le Tru's problem.

Take a piece of paper and fold into fourths. In the upper left corner write "The Problem." In the upper right corner write "Possible Solutions." In the lower left corner write "Outcomes of Possible Solutions." In the lower right corner write "Best Solution." Help the student use this organizer to solve the problem of too many trees' being cut down in Beaver Creek Meadow.

### Talk about why residents in Beaver Creek Meadow were burning wood instead of something else.

Wood was what was available in Beaver Creek Meadow. Talk about how people in other geographic locations would have used some other source of fuel such as coal, natural gas, propane, fuel oil, or buffalo chips. Discuss how people use the resources that are available to them.

#### Science

#### Read about water, wind, and solar power and foxes.

Check out books from the library, use an encyclopedia, or use the Internet to read about water, wind, and solar power and foxes.

#### Explore the flow of water and bodies of water.

Use a map to show streams, rivers, ponds, lakes, and oceans. Explain that small bodies of water flow together to form larger bodies of water and that eventually all water goes to the ocean.

#### Illustrate the roots of the sprouts.

Have the student look at the roots of the sprouts and then draw what he or she sees. Help the student to label the root tip and root hairs.

#### Describe how the roots hold the soil in place.

Take a coffee filter and fill it with soil. Explain to the student that the coffee filter is like the roots of the sprouts. Now pour a bit of water into the soil and observe how the water flows through, but the soil stays in the filter. Roots hold soil in place by acting like a net, slowing down the flow of water, and spreading out the flow of water.

Note on which day the lid of the sprout kit begins to bulge.

Measure the sprouts when the lid pops open.

#### **Mathematics**

Check sprouts and measure them.

Record air temperature near sprouts.

Track the number of days taken to grow an edible crop.

Track total amount of water used for sprouts.

#### Calculate the rate of crop growth daily by percentages.

To calculate the percentage of growth, subtract the current height of sprouts from the previous height of sprouts. Now divide that number by the previous height of sprouts. Lastly, convert the decimal to a percentage.  $\frac{Current\ height-previous\ height}{Previous\ height} \times 100.$  For example, if the previous height is 2 inches, and the current height is 3 inches, the percentage of growth would be as follows:  $\frac{3-2}{2} \times 100 = \frac{1}{2} \times 100 = 0.5 \times 100 = 50\%$  increase.

#### Measure how big Jack Sprout's wooden windmill will be.

Pierre Le Tru said that the blades on the windmill will be 8 ft long. Help the student to measure 8 ft with a tape measure. Since the blades will be arranged in a circle, how many feet across will the windmill be? Show the student that two 8 ft blades across from one another makes the windmill 16 ft across.

#### Art

Go online and search for Claude Monet's painting *Tulip Field with the Rijnsburg Windmill* and read his biography. Or check out a book from the library about Monet.

#### Make a windmill.

Visit <a href="http://www.dltk-kids.com/world/netherlands/mwindmill.htm">http://www.dltk-kids.com/world/netherlands/mwindmill.htm</a> for instructions about how to make a windmill.

#### Paint Tulip Field with the Rijnsburg Windmill.

Have student finger paint a picture of Monet's Tulip Field with the Rijnsburg Windmill.

#### **Music**

#### Listen to "Hymn to the Sun" by Nicolai Rimsky-Korsakov

You can purchase a CD, check one out from the library, or search for "Hymn to the Sun" by Nicolai Rimsky-Korsakov on the Internet.

#### Read about Rimsky-Korsakov.

Check out a book from the library, use an encyclopedia, or use the Internet to research Rimsky-Korsakov.

#### **Chapter 5: Jack Sprout Meets Barley and Iris Miller**

#### **Language Arts**

Read Chapter 5 together or independently.

#### Choose words from the chapter to use as spelling and vocabulary words.

Vocabulary words to consider: prairie, pricked, and melodic. Have the student find them in the chapter, look them up in a dictionary, list synonyms and antonyms, or use them in sentences.

#### Recall what happened as Jack Sprout was swimming.

Have the student tell in his or her own words what happened to Jack Sprout as he was swimming in Beaver Creek.

#### Write about a time when you were in danger.

Help the student to write about a time when he or she was in danger and what the outcome was.

#### Illustrate the chapter.

Have the student draw or paint pictures about what happened in the chapter.

#### **Character Training**

#### Discuss safety and the importance of paying attention.

Jack Sprout nearly had an accident because he was not paying attention to his surroundings. Help the student write a list of ways to stay safe such as do not play with matches, always look before crossing the street, and wear your seatbelt.

#### Explain how adults get what they need from work.

The stories so far have introduced a lot of characters. Each one has a job that they do to help others, and they receive what they need as well. Take a piece of paper and fold it in half. On one side, help the student list or draw pictures of different jobs that adults do. On the other side, have the student list or draw pictures of the things that adults get in return for their work.

#### **Social Studies**

#### Color the new areas on the map of Beaver Creek Meadow which Jack Sprout visited.

As you are doing this, point out the directions north, south, east, and west. Also draw attention to the different land features.

#### Create a concept map of Beaver Creek Meadow's economy.

Add Barley and Iris Miller to the concept map and draw arrows connecting them with other characters.

### Make a list of each new location in Beaver Creek Meadow. Then list the characteristics of each location.

Discuss with the student how each location is best-suited for the characters found there and the activities they do.

#### Add to the Beaver Creek Meadow Timeline.

#### Do a cost-benefit analysis for Barley and Iris Miller.

Fold a paper in half. On one side write "Cost." On the other side write "Benefit." Help the student to list some costs to Barley and Iris Miller such as having to go gather seeds, grind flour, and bake food. Now help the student list some benefits such as having seeds to trade and grind, having flour to trade, and having food to trade and eat.

#### Draw pictures of products that come from the flour mill.

Have the student draw pictures of all the products that come from Barley and Iris Miller. Some products mentioned are seeds, flour, rolls, cakes, breads, and more.

#### Talk about social norms.

The social norm in Beaver Creek Meadow was to not swim between the paddle wheels, but Jack Sprout did not know that and no one thought to tell him. What are some things within your family or community that are social norms? That is, what are the expected behaviors within your group that are not necessarily expressed as rules?

#### Science

#### Read about flour mills and paddle wheels

Check books out from the library, use an encyclopedia, or use the Internet to learn more about flour mills and paddle wheels.

#### Use field guides to identify different types of birds and plants.

Some of the plants mentioned in the chapter are millet, safflower, and thistle. The birds mentioned are sparrows, pheasants, cardinals, goldfinches, and canaries. If these plants and birds are not found in your area, go outside and see how many local plants and birds you can identify.

#### Explore heirloom seeds and how to gather seeds from plants.

Check books out from the library, use an encyclopedia, or use the Internet to learn more about heirloom seeds.

#### Show the cotyledons on the sprouts.

#### **Describe photosynthesis.**

Plants use chlorophyll to capture energy from sunlight. Then they take that energy and combine it with carbon dioxide (CO2) that it takes in through its leaves and water (H2O) that it takes in through its roots. This creates glucose (C6H12O6) and oxygen (O2). The plant uses the glucose for food and releases the oxygen into the air for humans to breathe.

#### **Mathematics**

#### Measure how big a millstone would be.

Some hand powered millstones could be 1 ft. in diameter. Most water-powered millstones would be 3-4 ft. in diameter. Help the student to measure 1, 3, and 4 ft.

Check sprouts and measure them.

Record air temperature near the sprouts.

Track number of days taken to grow an edible crop.

Track total amount of water used for sprouts.

#### Calculate the rate of crop growth daily by percentages.

To calculate the percentage of growth, subtract the current height of sprouts from the previous height of sprouts. Now divide that number by the previous height of sprouts. Lastly, convert the decimal to a percentage.  $\frac{Current\ height-previous\ height}{Previous\ height} \times 100.$  For example, if the previous height is 2 inches, and the current height is 3 inches, the percentage of growth would be as follows:  $\frac{3-2}{2} \times 100 = \frac{1}{2} \times 100 = 0.5 \times 100$ = 50% increase.

#### Art

Go online and search for Pieter Bruegel the Elder's painting *The Harvesters* and read his biography. Or check out a book from the library about Bruegel.

#### Make a water wheel.

Visit <a href="http://howto.wired.com/wiki/Build\_a\_Plastic\_Cup\_Waterwheel">http://howto.wired.com/wiki/Build\_a\_Plastic\_Cup\_Waterwheel</a> for instructions on how to make a water wheel.

#### Make a pinecone birdfeeder

Visit <a href="http://www.busybeekidscrafts.com/Pinecone-Birdfeeder.html">http://www.busybeekidscrafts.com/Pinecone-Birdfeeder.html</a> for instructions on how to make a pine cone birdfeeder.

#### Music

#### Listen to "The Firebird" by Igor Stravinsky

You can purchase a CD, check one out from the library, or search for "The Firebird" by Igor Stravinsky on the Internet.

#### **Read about Stravinsky**

Check out a book from the library, use an encyclopedia, or use the Internet to research Stravinsky.

#### **Chapter 6: Jack Sprout Meets Early Worm**

#### **Language Arts**

Read Chapter 6 together or independently.

#### **Explain the meaning of what Jack Sprout said.**

Have the student explain what Jack Sprout meant when he said, "It's not easy being me, but it's fun at the same time." What are some challenges that Jack Sprout has overcome so far? What fun things has Jack Sprout experienced so far? Have his big ears been an advantage or disadvantage?

#### Research the creatures that live in the soil.

Have the student list the creatures that Early Worm said live in the soil. Then have the student look them up in an encyclopedia, science text book, or on the Internet.

#### Explain how worms improve the soil.

Have the student verbally recount how worms improve soil.

#### Write a letter to Early Worm.

Since Early Worm is not able to be out in the sun for very long, writing a letter would be a good way to communicate with him. Have the student pretend to be Jack Sprout and write a letter to Early Worm.

#### **Character Training**

#### Discuss the importance of watching out for others.

After Jack Sprout nearly cut Early Worm in half with the shovel, Jack Sprout became more aware of the safety of others. Talk about how we should always be aware of the well-being of others, especially those that are smaller or weaker.

#### Write down ways to solve problems creatively.

Jack Sprout came up with a creative way to talk to Early Worm while he was underground because he did not think that a straw could be used only for drinking. Help the student write some ways to come up with creative solutions to problems. Some ways to creatively solve problems might include asking questions about both the problem and the solution, taking a break, getting other opinions, breaking a problem down, and writing down ideas.

#### Role-play what to do if you have hurt or offended someone.

What did Jack Sprout do when he found out that he had angered Early Worm? Role-play this and other situations in which someone is hurt or offended.

#### **Social Studies**

#### Color the new areas on the map of Beaver Creek Meadow which Jack Sprout visited.

As you are doing this, point out the directions north, south, east, and west. Also draw attention to the different land features.

#### Create a concept map of Beaver Creek Meadow's economy.

Add Early Worm to the concept map and draw arrows connecting him with other characters.

### Make a list of each new location in Beaver Creek Meadow. Then list the characteristics of each location.

Discuss with the student how each location is best-suited for the characters found there and the activities they do.

#### Add to the Beaver Creek Meadow Timeline.

#### Talk about how needs are met by family and friends.

Jack Sprout needs Early Worm to make his soil ready for planting. Early Worm needs food from the scraps that others bring him. Help the student name some ways in which they have their needs met and meet the needs of others.

#### Describe how Early Worm and his workers will get to Jack Sprout's field.

Transportation has played a major role in society throughout history. Talk about all the different ways to travel, including how Early Worm and his workers travel.

#### Science

#### Read about worms and soil life.

Check out books from the library, use an encyclopedia, or use the Internet to learn more about worms and soil life.

#### Get a soil test kit and test the soil of your garden or yard.

Soil test kits can be purchased from lawn and garden stores or online. After testing the soil, determine what you need to do to improve it for better plants.

#### Build a worm farm.

Visit <a href="http://earthangelmumma.blogspot.com/2011/02/worm-farm-that-even-your-kids-can-make.html">http://earthangelmumma.blogspot.com/2011/02/worm-farm-that-even-your-kids-can-make.html</a> for instructions on how to make your own worm farm.

#### Apply observations of sprouts to what is known about the life cycle of plants.

Plants start out as seeds. The seeds are germinated. The first root and stem develop. Leaves begin to grow. The plant produces flowers. The flowers are pollinated to produce seeds. At what stage are the sprouts in your kit?

#### List the advantages of composting the leftover soil and roots.

Once the sprouts have been harvested, you can compost the leftover soil and roots. Help the student to list the advantages to composting. Some of the advantages include less garbage, good fertilizer, improved soil health, and erosion prevention.

#### **Mathematics**

**Check sprouts and measure them** 

Record air temperature near the sprouts.

Track the number of days taken to grow an edible crop.

Track total amount of water used for sprouts.

#### Calculate the rate of crop growth daily by percentages.

To calculate the percentage of growth, subtract the current height of sprouts from the previous height of sprouts. Now divide that number by the previous height of sprouts. Lastly, convert the decimal to a percentage.  $\frac{Current\ height-previous\ height}{Previous\ height} \times 100.$  For example, if the previous height is 2 inches, and the current height is 3 inches, the percentage of growth would be as follows:  $\frac{3-2}{2} \times 100 = \frac{1}{2} \times 100 = 0.5 \times 100 = 50\%$  increase.

#### Measure how big earthworms can be.

Nightcrawlers can range in size from 3 ½ in to almost 12 in. Help the student to measure these lengths.

#### Art

#### Learn about Great Piece of Turf by Albrecht Dürer and read his biography.

Visit <a href="http://www.gardendesign.com/art-botany-albrecht-durers-great-piece-of-turf">http://www.gardendesign.com/art-botany-albrecht-durers-great-piece-of-turf</a> and <a href="http://www.picturingplants.com/2011/03/albrecht-durer-great-piece-of-turf.html">http://www.picturingplants.com/2011/03/albrecht-durer-great-piece-of-turf.html</a> to learn about the connection between art, soil, and plants.

#### Paint with cooked spaghetti.

Since spaghetti looks like worms, go to <a href="http://www.kidactivities.net/post/Worms-for-Fun!.aspx">http://www.kidactivities.net/post/Worms-for-Fun!.aspx</a> for instructions on how to paint with cooked spaghetti.

#### Music

#### Sing "Our Jack Sprout!"

Find the lyrics and music at <a href="http://www.jacksprout.com/DownloadsPage.html">http://www.jacksprout.com/DownloadsPage.html</a>.

#### Read the lyrics to "Our Jack Sprout!"

Discuss how the lyrics sound different when they are read than when they are sung.

#### Act out "Our Jack Sprout!"

Let the student act out the song with body movements and props.

#### **Chapter 7: Jack Sprout Meets Oliver Otter**

#### **Language Arts**

Read Chapter 7 together or independently.

#### **Practice punctuation.**

Have the student find and copy one sentence from the book that contains each of the following: comma, period, exclamation point, semicolon, question mark, and hyphen.

#### Choose words from the chapter to use as spelling and vocabulary words.

Vocabulary words to consider: direct, patrols, fleet, talons, shoreline, and aching. Have the student find them in the chapter, look them up in a dictionary, list synonyms or antonyms, or use them in sentences.

#### Retell what happened in the chapter.

Ask the student to retell what happened in the chapter.

#### Connect the chapter to real life.

Ask the student to tell about a time when he or she was at a river, on a boat, or at the beach.

#### **Character Training**

#### Discuss the importance of not taking something without asking.

Pierre Le Tru told Jack Sprout that he must ask Oliver Otter before taking river rock. Ask the student to tell what would happen if people did not ask permission to use things.

#### Discuss how each person is responsible for his or her own work.

Captain Berry told Jack Sprout that everyone was here to help him but that he needed to do his work himself. Help the student list the things that he or she is responsible to do. Ask the student how it feels to have a job well done.

#### **Social Studies**

#### Color the new areas on the map of Beaver Creek Meadow which Jack Sprout visited.

As you are doing this, point out the directions north, south, east, and west. Also draw attention to the different land features.

#### Create a concept map of Beaver Creek Meadow's economy.

Add Oliver Otter and Captain Berry to the concept map and add arrows connecting them with other characters.

### Make a list of each new location in Beaver Creek Meadow. Then list the characteristics of each location.

Discuss with the student how each location is best-suited for the characters found there and the activities they do.

Add to the Beaver Creek Meadow Timeline.

#### Make a list of rules for Beaver Creek Meadow.

Based upon what the student has learned so far about Beaver Creek Meadow, help him or her to make a list of rules that keep the community running smoothly.

#### Practice using a map.

Locate Beaver Creek, Westside Creek, and the docks. Which direction will Captain Berry and Jack Sprout have to go to get to Oliver Otter near the Ocean?

#### Discover what everyone in Beaver Creek Meadow needs.

Help the student to list things that everyone in Beaver Creek Meadow needs. Include physical, social, and emotional needs.

#### Science

#### Read about rivers, boats, the seashore, and otters.

Check out a book from the library, use an encyclopedia, or use the Internet to learn more about rivers, boats, the seashore, and otters.

#### When sprouts are 6" to 7" tall harvest with scissors and eat.

You may eat the sprouts by themselves, mix them with a salad, or add them to a sandwich.

#### Give an example of what the sprouts taste like.

Ask the student to describe the flavor of the sprouts.

#### Describe what will happen if the sprouts are allowed to grow in a pot.

You may choose to transplant some of the sprouts to the ground or to a pot, depending on the weather. Ask the student what he or she thinks will happen to the transplanted sprouts.

#### **Mathematics**

**Check sprouts and measure them** 

Record the air temperature near the sprouts.

Track the number of days taken to grow an edible crop.

Track the total amount of water used for sprouts.

#### Calculate the rate of crop growth daily by percentages.

To calculate the percentage of growth, subtract the current height of sprouts from the previous height of sprouts. Now divide that number by the previous height of sprouts. Lastly, convert the decimal to a percentage.  $\frac{Current\ height-previous\ height}{Previous\ height} \times 100.$  For example, if the previous height is 2 inches, and the current height is 3 inches, the percentage of growth would be as follows:  $\frac{3-2}{2} \times 100 = \frac{1}{2} \times 100 = 0.5 \times 100 = 50\%$  increase.

Cut and measure the sprout crop harvest by weight and volume

#### Art

Go online and search for Edouard Manet's painting *Boating* and read his biography. Or check out a book from the library about Manet.

#### Make a paper plate otter.

Visit <a href="http://www.daniellesplace.com/html/OtterCrafts.html">http://www.daniellesplace.com/html/OtterCrafts.html</a> for instructions on how to make a paper plate otter.

#### Music

#### Listen to "Petite Suite (In the Boat, Cortege, Minuet, Ballet)" by Claude Debussy.

You can purchase a CD, check one out from the library, or search for "Petite Suite (In the Boat, Cortege, Minuet, Ballet)" by Claude Debussy on the Internet.

#### Read about Debussy.

Check out a book from the library, use an encyclopedia, or use the Internet to research Debussy.

#### **Chapter 8: Jack Sprout's House Raising**

#### **Language Arts**

Read Chapter 8 together or independently.

#### Ask the student what he or she would like to learn more about.

Help the student to find information with a book, encyclopedia, or the Internet on a topic mentioned in the chapter.

#### Practice with nouns and verbs.

Have the student list ten different nouns and ten different verbs found in the chapter.

#### Re-read what Iris Miller said about the birdcage.

Ask the student what he or she thinks will happen with the birdcage.

#### Help the student to write a simple summary of the chapter.

Be sure to include specific details found within the chapter.

#### **Character Training**

#### Choose a difficult project and work together as a team.

No one in Beaver Creek Meadow would have been able to build Jack Sprout's house all alone. Think of a big project such as cleaning up the yard or making a nice dinner that everyone can do together as a team.

#### Explain what it means to love your work.

Everyone had fun helping Jack Sprout build his house, and each character loves his or her work. Ask the student to explain what it means to love your work. Is there ever any work that he or she does not like to do?

### List Jack Sprout's responsibilities and your responsibilities within your home and community.

Fold a paper in half. On one side, help the student list Jack Sprout's responsibilities. On the other side, help the student list his or her responsibilities.

#### **Social Studies**

#### Color the new areas on the map of Beaver Creek Meadow which Jack Sprout visited.

As you are doing this, point out the directions north, south, east, and west. Also draw attention to the different land features.

#### Create a concept map of Beaver Creek Meadow's economy.

Add Cobley, Kenneth, and Won Lung to the concept map and add arrows connecting them with other characters.

### Make a list of each new location in Beaver Creek Meadow. Then list the characteristics of each location.

Discuss with the student how each location is best-suited for the characters found there and the activities they do.

#### Add to the Beaver Creek Meadow Timeline.

#### Practice using a map.

Find the Power Paddle, the West Woods, Dr. Ann Wheatfield's place, Redwood Forest, the East Woods, and the Northeast Forest. Which direction is High Mountain Harry's place?

#### Design a flag for Beaver Creek Meadow.

Explain to the students that throughout history, flags have designated groups of people from each other. For example, the American flag tells others that we are from the United States. Allow the student to make a flag for Beaver Creek Meadow by drawing, painting, or using a computer.

#### Science

#### List the nutritional value of sunflower seeds and what each nutrient does

#### Sunflower Seeds

Are processed into sunflower oil with leftovers made into cattle feed. Are sold salted as a healthy snack food. Are the most popular bird seed. Contain complete protein, linoleic acid, dietary fiber, vitamin A, B vitamins, vitamin C, vitamin E, potassium, magnesium, iron, phosphorus, selenium, calcium, zinc, chlorophyll, and enzymes.

#### **Protein**

*Is used to build cells within the body, make antibodies, and produce hormones.* 

#### Linoleic Acid

Keeps your heart and lungs healthy.

#### **Dietary Fiber**

Cleans your digestive tract and regulates blood sugar levels.

#### Vitamin A

Helps vision and keeps skin healthy.

#### **B** vitamins

Help your body turn food into energy.

#### Vitamin C

Keeps bones, teeth, and skin healthy and helps wounds heal.

#### Vitamin E

Helps your body make cells and keeps your immune system strong.

#### **Potassium**

Helps nerves to function and helps your body turn food into energy.

#### **Magnesium**

Helps bones form and muscles work.

#### Iron

Helps carry oxygen in the blood and helps your body turn food into energy.

#### **Phosphorus**

Helps bones and teeth form.

#### Selenium

*Helps the heart work.* 

#### Calcium

Helps build bones and teeth and helps muscles work.

#### Zinc

Helps wounds heal.

#### **Chlorophyll**

Keeps the blood healthy and helps wounds heal.

#### **Enzymes**

Helps your body to absorb nutrients and digest food.

#### Talk about nutrition and keep a food diary.

Visit <a href="http://www.nourishinteractive.com/nutrition-education-printables">http://www.nourishinteractive.com/nutrition-education-printables</a> for information about eating a balanced diet and free activity sheets.

#### List the materials used for Jack Sprout's house and what they were used for.

The materials mentioned in the chapter are silver oak lumber, lodgepole pine poles, windows, skylights, mountain rock, and river rock.

#### Talk about the layout of Jack Sprout's farm.

Ask the student to hypothesize why it mattered how Jack Sprout's farm was laid out.

#### Discuss water on Jack Sprout's farm.

Talk about how Jack Sprout has both a windmill and a trench leading to the creek. For what will Jack Sprout use each source of water? What will happen if there is not enough water available on the farm?

#### Talk about Jack Sprout's greenhouse.

How will Jack Sprout's greenhouse help the plants in it to grow? Check out a book from the library, use an encyclopedia, or use the Internet to research greenhouses.

#### **Mathematics**

#### Read about architects and blue prints

Check out a book from the library, use an encyclopedia, or use the Internet to learn about architects and blue prints.

Count how many characters that came to help Jack Sprout were mentioned by name.

#### Draw the outline of a house.

Use graph paper to draw the outline of a house. Have the student count how many squares are in each side of the house. Then use the numbers to find the perimeter and area of the house.

#### Learn about the tools used to build Jack Sprout's farm.

Check out a book from the library, use the encyclopedia, or use the Internet to research what tools carpenters use to build such as tape measures, squares, etc.

Build Jack Sprout's farm out of blocks or other building sets.

#### Art

Go online and search for William P. Chappel's oil on slate paper *House Raising* and read his biography. Or check out a book from the library about Chappel.

Paint a picture of Jack Sprout's farm

#### Music

#### Listen to "Simple Gifts" by Aaron Copland.

You can purchase a CD, check one out from the library, or search for "Simple Gifts" by Aaron Copland on the Internet.

#### Read about Aaron Copland.

Check out a book from the library, use an encyclopedia, or use the Internet to research Aaron Copland.

#### **Chapter 9: Jack Sprout Visits Uncle Dale and Aunt Gerry**

#### **Language Arts**

Read Chapter 9 together or independently.

#### Practice with rhyming words.

Set the timer for five minutes. Help the student to look through the chapter and find as many pairs of rhyming words as possible.

#### Choose words from the chapter to use as spelling and vocabulary words.

Vocabulary words to consider: community, chattering, fertilizing, couple, swarm, successful, pollen, and confidence. Have the student find them in the chapter, look them up in a dictionary, list synonyms or antonyms, or use them in sentences.

#### Act out the chapter.

Have the student act out his or her favorite part of the chapter.

#### Identify the main characters in the chapter.

Have the student draw pictures of Jack Sprout, Barley Miller, Uncle Dale, Aunt Gerry, and Grandma Elderberry.

#### **Character Training**

#### Discuss the importance of remembering.

Jack Sprout remembered to pound on the ground three times when he went to Early Worm's farm. What would have happened if he had not remembered to do that? Help the student think of some ways to remember important things.

#### Discuss the how Jack Sprout is a good listener.

Jack Sprout was a good listener because he had big ears. Encourage the student to listen as if he or she has big ears.

#### Talk about being afraid.

Jack Sprout was afraid of the honeybees he met on the road. Why do you think he was afraid? Ask the student to tell about a time when he or she was afraid.

#### Think of ways to encourage others.

Grandma Elderberry had some encouraging words to say to Jack Sprout when he felt overwhelmed. Help the student think of three ways to encourage someone.

#### **Social Studies**

#### Color the new areas on the map of Beaver Creek Meadow which Jack Sprout visited.

As you are doing this, point out the directions north, south, east, and west. Also draw attention to the different land features.

#### Create a concept map of Beaver Creek Meadow's economy.

Add Uncle Dale, Aunt Gerry, and Grandma Elderberry to the concept map and draw arrows connecting them to the other characters.

### Make a list of each new location in Beaver Creek Meadow. Then list the characteristics of each location.

Discuss with the student how each location is best-suited for the characters found there and the activities they do.

#### Add to the Beaver Creek Meadow Timeline.

#### Practice using a map.

Locate Early Worm's farm, Barley and Iris Miller's mill, and Grandma Elderberry's home. Find where Beaver Creek crosses Old Pal Road.

#### Discuss how needs are met.

Jack Sprout went to see Grandma Elderberry. Ask the student to name what he needed from her. Talk about how people have physical, social, and emotional needs.

#### **Science**

#### Read about bees, pollination, and honey.

Check out a book from the library, use the encyclopedia, or use the Internet to learn more about bees, pollination, and honey.

#### Make a snack using honey.

Visit <a href="http://totallytots.blogspot.com/2010/06/little-books-for-little-cooks-little.html">http://totallytots.blogspot.com/2010/06/little-books-for-little-cooks-little.html</a> to make a honey snack or search for your own honey recipe.

#### Identify the crops that Jack Sprout would be growing.

Have the student list all the seeds that Jack Sprout got from Barley Miller.

#### Watch bees swarm.

Do an Internet search for videos of swarming bees.

#### Talk about animal behavior.

Bees move in swarms. Help the student write down other animals and what their groups are called. For example, a herd of cattle, a flock of sheep, a pod of dolphins, etc.

#### Observe animal behavior.

Go outside and observe bees or other insects. Help the student to write down observations or draw pictures.

#### **Mathematics**

#### Measure Beaver Creek Bridge.

Take a piece of brown construction paper and cut it into a 2 in. x 11 in. strip to represent the bridge. Now take a piece of pink construction paper and cut it into a  $\frac{1}{2}$  in. x 1 in. strip to represent a worm. Have the student use both the length and the width of the worm to measure the length and width of the bridge.

#### Make a bee graph.

The average hive for managed bees contains 30,000 bees. Have the student make a pictograph of 30,000 bees using one bee to represent 10,000, 5,000, or 1,000 bees.

#### Art

#### Make thumbprint bees.

Take a black ink pad and ink the student's thumb. Press the thumb on a sheet of yellow paper. Now add wings, legs, and antennae to the thumbprint. If you choose, you may add cut-out pictures of flowers.

#### Music

#### Listen to "Flight of the Bumblebee" by Nicolai Rimsky-Korsakov.

You can purchase a CD, check one out from the library, or search for "Flight of the Bumblebee" by Nicolai Rimsky-Korsakov on the Internet.

#### Listen to "The Bee" by Franz Schubert.

You can purchase a CD, check one out from the library, or search for "The Bee" by Franz Schubert on the Internet.

#### Read about Schubert

Check out a book from the library, use the encyclopedia, or use the Internet to research Schubert.

#### **Chapter 10: The Story of Redtail McCallister**

#### **Language Arts**

Read Chapter 10 together or independently.

#### Write down what Jack Sprout learned.

Help the student to write down some things that Jack Sprout learned from Grandma Elderberry, Captain Berry, and High Mountain Harry.

#### Ask the student what he or she would like to learn more about.

Help the student to find information with a book, encyclopedia, or the Internet on a topic mentioned in the chapter.

#### Give instructions to the residents of Beaver Creek Meadow.

Have the student pretend that he or she is Redtail McCallister and give verbal directions on how to improve Beaver Creek Meadow.

#### Write a story.

Have the student write and illustrate his or her own story using the residents of Beaver Creek Meadow.

#### **Character Training**

#### Discuss ways to get information.

When Jack Sprout wanted to know about Redtail McCallister, he went to the oldest neighbor, Grandma Elderberry. Help the student to think of ways to gain information such as talking to people, reading books, watching videos, or searching on the Internet. Talk about how older people are often the best sources of information and how they should be respected.

#### Role-play being courteous to others.

When Jack Sprout realized that he had frightened Grandma Elderberry, he apologized. And when Jack Sprout went with Captain Berry to visit High Mountain Harry, he brought along food. Role-play different social situations with the student to help develop a courteous attitude.

#### List ways to be a responsible steward of natural resources.

It is important to be a good steward of natural resources, and at first, the residents of Beaver Creek Meadow did not understand this importance. Help the student list ways in which he or she can help to conserve natural resources.

#### **Social Studies**

#### Color the new areas on the map of Beaver Creek Meadow which Jack Sprout visited.

As you are doing this, point out the directions north, south, east, and west. Also draw attention to the different land features.

#### Create a concept map of Beaver Creek Meadow's economy.

Add High Mountain Harry and Redtail McCallister to the concept map and draw arrows connecting them to other characters.

### Make a list of each new location in Beaver Creek Meadow. Then list the characteristics of each location.

Discuss with the student how each location is best-suited for the characters found there and the activities they do.

#### Add to the Beaver Creek Meadow timeline.

#### Identify sources of information.

Explain to the student that Grandma Elderberry, Captain Berry, and High Mountain Harry would be considered primary sources of historical information. Then explain that if Jack Sprout were to retell the story of Redtail McCallister, he would be considered a secondary source of information. Discuss how we use primary and secondary sources to construct history.

#### Discuss what would have happened if Redtail McCallister had not gotten involved.

Talk about which resources would have become scarce and then ask the student what would happen if those resources were no longer available.

#### Science

#### Read about conservation, red-tailed hawks, and mountain goats.

Check out a book from the library, use an encyclopedia, or use the Internet to learn more about conservation, red-tailed hawks, and mountain goats.

#### Eat some of the foods from Jack Sprout's basket.

Jack Sprout brought along fresh peas, carrots, and tomatoes on his visit to High Mountain Harry. Have these as a nutritious snack.

#### Go on a hike.

Visit a local nature center or state/national park and take a hike. Take along field guides and a notebook to record plants and animals that are spotted.

#### Name the changes that the residents of Beaver Creek Meadow made.

Help the student to list the changes in Beaver Creek Meadow such as wind power, solar power, and water power. Not cutting down too many trees and composting garbage are also some positive changes.

#### Compare Beaver Creek Meadow before and after the residents made changes.

Have the student draw or paint a picture of Beaver Creek Meadow before and after the incident with Redtail McCallister.

#### **Mathematics**

#### Learn how fast tornadoes and straight winds blow.

Winds in tornadoes usually range from 65 mph, about as fast as a car driving down a highway, to 200 mph, as fast as a race car. If a thunderstorm has straight-line winds faster than 57 mph, it is considered to be severe. Some straight-line winds blow as fast as 100 mph.

#### Discover how fast a red-tailed hawk can fly.

When a red-tailed hawk dives straight down, it can go as fast as 120 miles per hour. Race cars can go 200 mph, the average speed limit on highways is 70-75 mph, cheetahs run up to 70 mph, and airplanes fly at 500-600 mph. Have the student create a bar graph depicting the speeds of different things so that he or she can have a visual comparison.

#### Art

Go online and search for Eugene Fromentin's painting

The Arab Falconer and read his biography. Or check out a book from the library about
Fromentin.

#### Make High Mountain Harry's mountain.

Visit <a href="http://www.ehow.com/how\_6467308\_make-mountain-crafts.html">http://www.ehow.com/how\_6467308\_make-mountain-crafts.html</a> for instructions on making a papier-mâché mountain.

#### Music

#### Listen to "The Ride of the Valkyries" by Richard Wagner.

You can purchase a CD, check one out from the library, or search for "The Ride of the Valkyries" by Richard Wagner on the Internet.

#### Read about Wagner.

Check out a book from the library, use the encyclopedia, or use the Internet to research Wagner.

#### **Chapter 11: Jack Sprout Meets Rapidfire Rabbit**

#### **Language Arts**

Read Chapter 11 together or independently.

#### Choose words from the chapter to use as spelling and vocabulary words.

Vocabulary words to consider: fateful, relaxed, rustling, and prairie. Have the student find them in the chapter, look them up in a dictionary, list synonyms or antonyms, or use them in sentences.

#### Write about a problem.

Help the student to write about a problem that he or she has had or about a problem that is present within the community.

#### List parts of the chapter that appeal to the five senses.

Help the student to list examples of the five senses being used within the chapter.

#### **Character Training**

#### Role-play conflict resolution.

Jack Sprout and Rapidfire Rabbit had a big disagreement because Rapidfire was stealing lettuce. Roleplay conflict resolution with the student using this situation or another one.

#### Work on a problem together.

Redtail McCallister helped Jack Sprout to solve his problem. Sometimes solving problems is much easier when someone helps you look at it from different angles. Help the student work on a problem or put together a puzzle as a team.

#### **Social Studies**

#### Color the new areas on the map of Beaver Creek Meadow which Jack Sprout visited.

As you are doing this, point out the directions north, south, east, and west. Also draw attention to the different land features.

#### Create a concept map of Beaver Creek Meadow's economy.

Add Rapidfire Rabbit to the concept map and draw arrows connecting him to other characters.

### Make a list of each new location in Beaver Creek Meadow. Then list the characteristics of each location.

Discuss with the student how each location is best-suited for the characters found there and the activities they do.

#### Read about bartering/economics

You can check out a book from the library, use an encyclopedia, or use the Internet to research bartering/economics.

#### Add to the Beaver Creek Meadow Timeline.

#### Discuss individual rights.

Jack Sprout had a right to raise his lettuce without having to worry about its being stolen. Read through the Bill of Rights with the student and discuss them.

#### Science

#### Read about rabbits.

Check out a book from the library, use an encyclopedia, or use the Internet to learn more about rabbits.

#### **Identify the plants Jack Sprout has growing on his farm.**

Use a field guide or gardener's manual to find pictures of the plants on Jack Sprout's farm. They include broccoli, sunflower oil seeds, tomatoes, beets, carrots, string beans, strawberries, white millet, tulips, daffodils, clover, asparagus, sunflower, buckwheat, basil, cilantro, thyme, roses, orchids, and lettuce.

#### List the things that have made Jack Sprout's crops successful.

Help the student to write a list of the things helping Jack Sprout's success as a farmer.

#### Draw a diagram of where each plant was grown.

Each plant on Jack Sprout's farm grows best in a certain area. Draw a diagram of his farm and label where each plant is grown.

#### **Mathematics**

#### Compare the price of lettuce.

Find out the price of different types of lettuce at different stores or markets. Have the student graph the prices. Which price is lowest? Which is highest? What is the average price?

#### Learn about commissions.

Jack Sprout and Rapidfire Rabbit agreed that if Rapid would deliver produce for Jack Sprout, he could have all the lettuce he needed for his family. Explain to the student that some salespeople work on a commission. That is, they receive a portion of how much money is made when they sell something. Pretend that Rapid is on a commission of 10%. How many heads of lettuce can Rapid take home if he delivers 20? Help the student to formulate and solve problems with different rates of commission and numbers of deliveries.

#### Art

#### Color Jack Sprout's Garden

Plants include broccoli, black oil sunflower seeds, tomatoes, beets, carrots, string beans, strawberries, white millet, tulips, daffodils, clover, asparagus, sunflower, buckwheat, basil, cilantro, thyme, roses, orchids, and lettuce.

Go online and search for Auguste Renoir's painting *Nini in the Garden* and read his biography. Or check out a book from the library about Renoir.

#### Music

#### Sing "Our Jack Sprout!"

Find the lyrics and music at <a href="http://www.jacksprout.com/DownloadsPage.html">http://www.jacksprout.com/DownloadsPage.html</a>.

#### Write down the pairs of rhyming words in "Our Jack Sprout!"

Help the student to write down all the pairs of rhyming words in the song.

#### **Chapter 12: Jack Sprout Finds Honey B**

#### **Language Arts**

Read Chapter 12 together or independently.

#### See if the predictions about the birdcage were correct.

Ask the student to recall what he or she thought would happen when Iris Miller gave Jack Sprout the birdcage. Were the predictions correct?

#### Ask the student what he or she would like to learn more about.

Help the student to find information with a book, encyclopedia, or the Internet on a topic mentioned in the chapter.

#### Recount how Jack Sprout found Honey B.

Ask the student to verbally recount the steps Jack Sprout took to find Honey B.

#### Write a description of Honey B.

Help the student to write a description of Honey B including what she looks like, what she sounds like, and what her personality is like.

#### Summarize the story.

Help the student write a brief summary of the story. Ask the student to name his or her favorite parts of the story. Ask about his or her least favorite parts. If the student could change something about the story, what would it be?

#### **Character Training**

#### List three things that you like about each member of your family.

People love each other because of who they are and not necessarily because of what they do. Help the student to think of things about each family member that he or she likes.

#### Think of three things that you can do for each member of your family.

Part of being a family is doing things for each other. Help the student to think of three things that he or she can do to serve each member of the family.

#### Explain how you would handle Jack Sprout's situations.

Think back on all the challenges and adventures that Jack Sprout has experienced. Ask the student to say what he or she would have done in some of those situations.

#### Social Studies

#### Color the new areas on the map of Beaver Creek Meadow which Jack Sprout visited.

As you are doing this, point out the directions north, south, east, and west. Also draw attention to the different land features.

#### Create a concept map of Beaver Creek Meadow's economy.

Add Honey B to the concept map and draw arrows connecting her to the rest of the characters.

### Make a list of each new location in Beaver Creek Meadow. Then list the characteristics of each location.

Discuss with the student how each location is best-suited for the characters found there and the activities they do.

#### Add to the Beaver Creek Meadow Timeline.

### Discuss how the residents of Beaver Creek Meadow work together to meet each other's needs.

Have the student name some things that the residents of Beaver Creek Meadow need that Jack Sprout can provide. Name some things that Jack Sprout needs that he can get from others in Beaver Creek Meadow. Mention that Jack Sprout wanted to be with Honey B because he needed someone to talk to.

#### Science

#### Read about bird habitats.

Check out a book from the library, use an encyclopedia, or use the Internet to learn more about bird habitats.

#### Look for bird nests.

#### **Explore the Audubon Society.**

Visit <a href="http://www.audubon.org/">http://www.audubon.org/</a> to learn more about this national society for birds.

#### **Mathematics**

#### **Bake Millet Fruit Scones.**

Visit <a href="http://www.yummly.com/recipe/Gluten-Free-dairy-Free-Millet-Fruit-Scones-Recipezaar?columns=4&position=12/36">http://www.yummly.com/recipe/Gluten-Free-dairy-Free-Millet-Fruit-Scones-Recipezaar?columns=4&position=12/36</a> for a recipe for Millet Fruit Scones. As you are baking, place emphasis on measuring the ingredients, baking temperature, time to bake, etc.

#### Bake blueberry muffins.

Jack Sprout got some blueberry muffins from Iris Miller. Help the student bake some muffins or another treat of his or her choice. As you are baking, place emphasis on measuring the ingredients, baking temperature, time to bake, etc.

#### Art

Paint or draw a picture of your family.

Go online and search for Johann Joachim Kandler's figurine *Lovers with a Birdcage* and read his biography. Or check out a book from the library about Kandler or the Meissen Manufactory.

#### Music

#### Listen to "The Hot Canary" by Paul Nero.

You can purchase a CD, check one out from the library, or search for "The Hot Canary" by Paul Nero on the Internet.

#### Read about Paul Nero.

Check out a book from the library, use the encyclopedia, or use the Internet to research Paul Nero.

#### Meet the real Honey B.

Visit <u>www.betsycurtis.com</u> to meet the person that sang the song "Our Jack Sprout" and inspired the character Honey B. Also search for her videos on YouTube.

Thank you for experiencing Adventures of Jack Sprout in Beaver Creek Meadow. I hope this has been an enjoyable and valuable lesson for you and your students.

Keep Growing, Jack Sprout