

Contents

Introduction	4	Lesson 16	Chinese New Year	68
Lesson 1		Lesson 17	Horsing Around	72
Go, Animals!	9	Lesson 18	Making Crayons	76
Lesson 2		Lesson 19	A Chief in the Family	80
From Grapevine to Jelly Jar . . .	13	Lesson 20	Digging Bones	84
Lesson 3		Lesson 21	Care for Our Earth!	88
Creature Feature	17	Lesson 22	Blast-Off!	93
Lesson 4		Lesson 23	Sew Many Secrets	96
Bat at Night	21	Lesson 24	Dinner Time!	100
Lesson 5		Lesson 25	House With a Trunk	105
One Language, Many Nations	25	Lesson 26	Our Presidential Past	109
Lesson 6		Lesson 27	Critters Cry for Help	112
Seeds on the Go	29	Lesson 28	Could Your Body Go to Mars?	116
Lesson 7		Lesson 29	Spinning for a Good Cause . .	120
8 Reasons to Love an Octopus	33	Lesson 30	Celebrating 100 Years of the World Series	123
Lesson 8			Answer Key	127
Pilgrim Children	37			
Lesson 9				
How Spiders Use Silk	41			
Lesson 10				
Hot Spot	45			
Lesson 11				
Animal Survival	49			
Lesson 12				
Tooth Truth	53			
Lesson 13				
Penguins of the World	56			
Lesson 14				
Stamp of Excellence	61			
Lesson 15				
Zoos Help Out!	64			



Living the Pilgrim Life

The Pilgrims came to America in 1620. Read what life was like for Pilgrim children. As you read, compare your life to theirs.

Lesson

8

PILGRIM CHILDREN

These children today are dressed like Pilgrims to help you imagine what life was like back then.



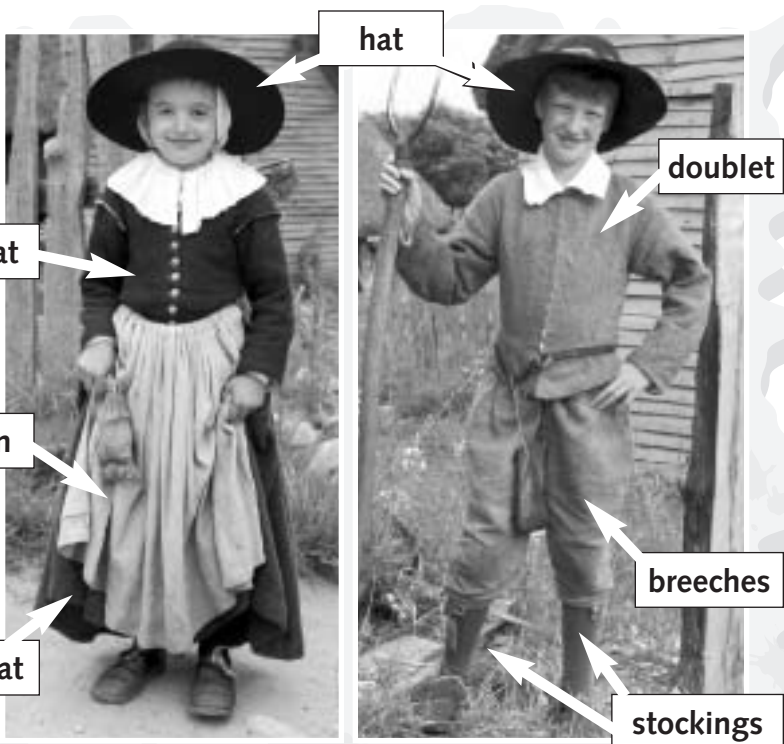
WORD WISE

- You may not know some of the words in the article. The photos will help you. For example, the **labels** show you what each piece of clothing is called.
- This **guide** will help you pronounce some of the words.
breeches (BRICH-uhs)
doublet (DUB-let)
kindling (KINNED-ling)
petticoat (PET-ee-coat)

Pilgrims did not have water in their homes. The children carried water from a stream with a yoke.

The children dressed like adults. The clothes are just like adult clothes. Children began to dress like this when they were 6 years old. They wore long sleeves, even in the summer!

The children did a lot of chores. All the Pilgrims had to work to live. Children did chores every day. The children cleaned the goat house and helped milk the goats. Children also gathered **kindling**, or firewood. They picked wild berries when they were ripe.



The children played Pilgrim games. The children had time for fun, too. They even played games. This one is called "Troll My Dame." It is played with marbles. It's like mini bowling.



Living the Pilgrim Life

Fill in the circle next to the correct answer.

- Which sentence is true?
 - Pilgrim children helped their families do work.
 - Pilgrim children had a lot of free time.
 - Pilgrim children lived just like children today.
 - Pilgrim children never played.
- The Pilgrims got their food _____ .
 - from a supermarket
 - from England
 - by growing it and finding it in the wild
 - from the ships they came on
- Pilgrim homes had no _____ .
 - walls
 - roofs
 - gardens
 - running water
- Why did the Pilgrims need firewood?
 - to cook their food
 - to warm their homes
 - to boil water
 - for all these things
- Write what we call some of the clothes Pilgrim children wore.

What do we call a **doublet**? _____

What do we call **breeches**? _____

What do we call a **petticoat**? _____

What do we call boys' **stockings**? _____



Then and Now

Compare your life with the life of Pilgrim children. Fill in the chart. Tell at least one thing about clothing, chores, and games.

	PILGRIM CHILDREN	YOU
Clothing	_____	_____
	_____	_____
	_____	_____
	_____	_____
Chores	_____	_____
	_____	_____
	_____	_____
	_____	_____
Games	_____	_____
	_____	_____
	_____	_____
	_____	_____

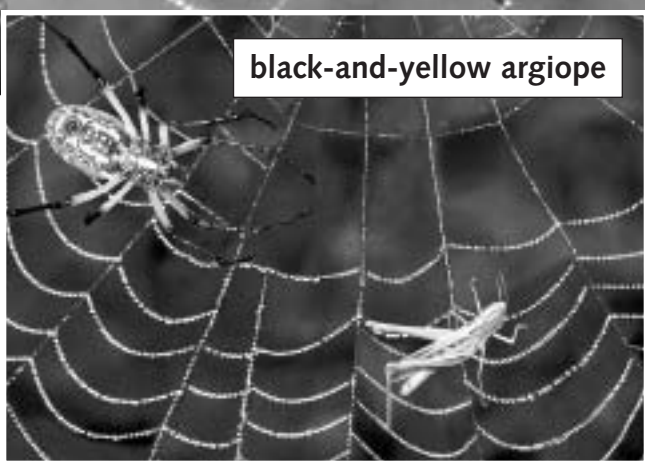
Write About It

Imagine that you are a Pilgrim child. Make two lists. In one list, write what you would like about living in those days. In the other list, write what you would miss from life today.

How Spiders Use Silk

This spiderweb sure is sticky. Maybe we shouldn't stick around.

Wait, Arnold. This wonderful web is made of spider silk. You should see all the things spiders can do with silk.



black-and-yellow argiope



trapdoor spider

silk wall

Spiders Trap Food With Silk

This spider weaves a web with silk. A grasshopper jumped into the web and got caught.

Spiders Build Burrows With Silk

This spider lines its burrow, an underground home, with silk. The silk makes the walls of the burrow strong.

jumping spider



Spiders Make Safety Lines With Silk

This spider spins a line of silk as it jumps. If the spider falls, it can hang from its line of silk.

black widow



Spiders Keep Babies Safe in Silk

This spider weaves an egg sac with silk. The egg sac keeps the eggs safe.

Spiderlings crawl out when they hatch.



Spiderlings Fly Away

by Keesha

Some spiderlings climb to a high place. Then they spin lines of silk. The wind blows the spiderlings, like balloons, to a new home. This is called **ballooning**.



Fact File

- All spiders make silk. They make silk inside their bodies.
- When a spider feels vibrations in its web, it runs to the trapped prey. Some spiders bite the prey to stop it from moving. Other spiders wrap the prey in silk right away.
- Spiders trap prey with silk in other ways. The bolas spider swings out a line of silk with a sticky drop on it. The prey sticks to the drop!

SILK POWER

Spider silk is super strong. It stretches, too. So scientists like Randy Lewis want to use it in new ways.

"Spider silk could be used to make ropes, seat belts, and clothes for firefighters," says Dr. Lewis.

Spiders don't make enough silk for people to use, though. Dr. Lewis is finding out how scientists can make silk like spiders do.



Dr. Lewis shows his golden silk spider to a class of second-graders and third-graders.

Spiders

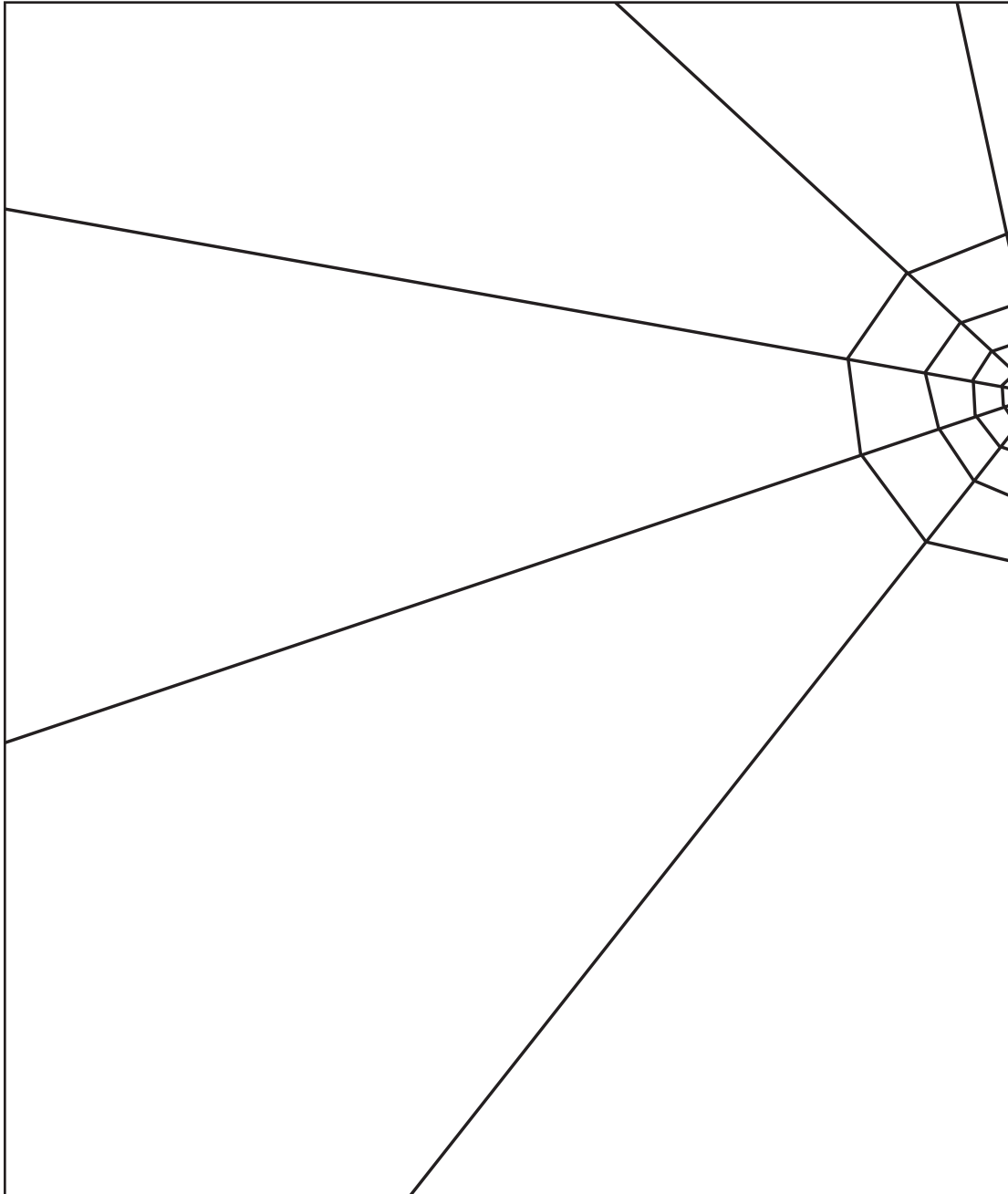
Fill in the circle next to the correct answer.

- Spiderlings are _____ .
 - mother spiders
 - grasshoppers
 - baby spiders
 - spider webs
- How does the black widow spider's egg sac keep the eggs safe?
 - Enemies cannot see the eggs to eat them.
 - The baby spiders cannot get out.
 - It's big.
 - It's small.
- Why do you think a spider's web is sticky?
 - To keep trapped insects from falling off
 - To help the web stay up
 - Because it's made of silk
 - Because it's made of gum
- Which sentence is true?
 - All spiders live above the ground.
 - Some spiders live underground.
 - Spiders cannot jump from one place to another.
 - Spider silk is not strong.
- Circle the names of four spiders in the article.

How Spiders Use Silk

In each part of the web, write one way that spiders use silk. Then add details about each way that spiders use silk.

SILK



Write About It!

If you could make silk like a spider, what would you make? Why?