Silk scarves, silk dresses, silk ties all sell like hot cakes around the world. Silk has been a highly desired commodity since ancient times, traced back to 3500 B.C. in China. Due to its popularity in luxury clothing items, silk soon spread to all parts of Asia, and eventually, the world. You wouldn’t think such a valued material originally comes from small, white worms.

The *Bombyx mori*, or mulberry silkworm, is famous for producing the treasured textile. Northern Thailand is known for its numerous silkworm farms where locals collect the silk from thousands of worms to weave into beautiful fabrics to sell all over the world. The entire process can be very tedious, but the selling price of silk can be very high, so the processing of silk is deemed worth the time.

As soon as silkworms hatch from their tiny eggs, they begin to rapidly feed on mulberry leaves to gain weight. Silkworms must multiply their size by 10,000 times in order to become silk-producing larvae. That means that if they were human, they would weigh 70,000 pounds each by the time they were a month old. After 40 full days and nights of eating these fresh, hand-picked leaves, they are ready to begin weaving a cocoon around themselves to mature into moths. In fact, each silk cocoon is made out of one long string of worm spit, spanning the length of almost half a mile, or nearly a kilometer. The worms need three to four days to fully finish forming the cocoon. Once this process is complete, the cocoons are collected and boiled for about five minutes in water—and yes, the worm is still inside the cocoon, which several animal activists disapprove of since the boiling kills the insect. After soaking, manufacturers
find strands with a small needle and spin several together to produce one thread of silk. Clearly, it’s a very lengthy and tedious process.

Researchers have made attempts to extract silk strands from living silk worms in order to quell activists’ complaints, but the worms resist and grip the strands even harder, causing them to break. Researchers have found that when a silkworm is injured, it enters a state of self-imposed paralysis, since the act of moving would make the injury worsen. At Oxford University in England, they have found the exact chemical that induces this paralysis in order to inject it into the worms to temporarily restrict the worms’ movement. However, the paralysis does not mean that the insects are unconscious—scientists believe the worms are semi-conscious in this state, meaning they may be aware of their involuntary paralysis. Therefore, the two options for silk production are to boil the worms alive or temporarily paralyze them while producers extract the strands of their cocoon.

Despite the slight controversy over silk extraction, the silk industry continues to thrive. China produces 58,000 tons of silk each year. Yet one of the most popular silk companies in the world is Jim Thompson, a brand based in Thailand. Thompson, a Delaware native, trained to be an architect in the mid-1920s, but joined the United States army in the early 1940s in response to the rise of World War II. He was soon appointed to the Office of Strategic Services (which eventually became the CIA) and traveled around the world, including Thailand, where he fell in love with the people and their country. There were few hotels that accommodated international travelers in the capital of Bangkok, and Thompson thought that with the rise of leisure travel, the Far East would make an appealing destination for Westerners. Upon his discharge from the military in 1946, he returned to Thailand to start his own silk business.

At the time, silk was mainly being produced in the northeast of Thailand, but due to the tediousness of the collection process, silk production was on the decline. Thompson was determined to revive the business, so in 1947, he took a variety of silk threads back to New York City to see if the product would be marketable to foreign consumers. He received a positive response, so the Jim Thompson Silk Company was founded in 1948.

Jim Thompson is credited for reviving the silk industry. After the establishment of his company, silk costumes soon appeared in Broadway plays and popular films such as Ben Hur, and Thai royalty, such as Her Majesty Queen Sirikit, began wearing silk often. Many also attribute his work to greatly improving the Thai economy, since the silk industry continues to employ thousands of Thai citizens even today.

Jim Thompson’s success is no mystery. However, his disappearance on March 26, 1967 certainly is one. Thompson made a trip to Malaysia to visit friends and one day, ventured into the jungle on an afternoon stroll. He was never seen again despite search parties sent out by the Royal Army Air Corps and British troops. Many have their own theories on his disappearance, but none have been completely confirmed.
1. What material does the mulberry silkworm produce?

   A  cotton
   B  satin
   C  silk
   D  velvet

2. In the process of silk production, what happens after the silkworm finishes its cocoon?

   A  The cocoon is collected and boiled.
   B  The silkworm multiplies its size by 10,000.
   C  The silkworm becomes a silk-producing larva.
   D  The silkworm eats leaves for 40 days.

3. The process of extracting silk from silkworm cocoons has caused controversy. What evidence from the passage best supports this conclusion?

   A  Researchers have attempted to extract silk from living silkworms, but this has been less successful.
   B  Researchers have found that when a silkworm is injured, it enters a state of self-imposed paralysis.
   C  The two options for silk extraction are to boil the worms alive or temporarily paralyze them.
   D  Animal activists disapprove of the boiling method of extraction, because it kills the silkworm.

4. What conclusion can you make about silk since the Jim Thompson Silk Company’s establishment?

   A  Silk has only been worn by royalty.
   B  Silk has become harder to get.
   C  Silk has become a more popular fabric.
   D  Silk has become more expensive.

5. What is this passage mostly about?

   A  silk production and the revival of the silk industry
   B  how the silk industry improved the Thai economy
   C  the mysterious disappearance of Jim Thompson
   D  the argument of animal activists against silk production
6. Read the following sentences: “After soaking, manufacturers find strands with a small needle and weave several together to produce one thread of silk. Clearly, it’s a very lengthy and tedious process. Researchers have made attempts to extract silk strands from living silk worms in order to quell activists’ complaints, but the worms resist and grip the strands even harder, causing them to break.”

As used in this sentence, what does the word “extract” most nearly mean?

A. put something into a container
B. break or destroy something
C. pull out or remove something
D. soak something in water

7. Choose the answer that best completes the sentence below.

_________ a silkworm can begin to produce silk, it must eat leaves for 40 days to increase its body weight.

A. Otherwise
B. Before
C. Namely
D. Thus

8. Why was silk production in Thailand on the decline after World War II?

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9. Explain how a thread of silk is made from silkworm spit.

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10. Based on the passage, why might silk be considered such a desirable and valuable commodity? Support your answer using information from the passage.

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Teacher Guide & Answers

Passage Reading Level: Lexile 1310

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8. Why was silk production in Thailand on the decline after World War II?

**Suggested answer:** Silk production in Thailand was on the decline after World War II because of the tediousness of the collection process.

9. Explain how a thread of silk is made from silkworm spit.

**Suggested answer:** The silkworm spins a cocoon around itself using one long string of spit. When the cocoon is complete, silk farmers gather the cocoon and boil it for five minutes. Then they find strands with a small needle and spin several together to produce a thread of silk.

10. Based on the passage, why might silk be considered such a desirable and valuable commodity? Support your answer using information from the passage.

**Suggested answer:** Answers may vary and should be supported by the passage. Students can indicate that silk is a desirable commodity because it can be woven into beautiful fabrics and is popular in luxury clothing items. Students can indicate that silk is a valuable commodity because the selling price of silk can be very high. Silk is also valuable because it takes time and effort to make. Farmers have to wait 40 days for silkworms to begin producing their silk cocoons, and the process of extracting silk strands from silkworm cocoons is long and tedious.