

Name _____

Date _____

Before Band-Aids

When little children get hurt, the first thing they usually ask for is a Band-Aid to make their wounds feel better. But have you ever wondered what people used to cover wounds before Band-Aids were invented? Band-Aids have only been around since the 1920's, but people have been getting hurt for much longer than that. How people treated their wounds in the past may surprise you. In addition to cloth bandages, people often covered and cured their wounds with cobwebs.

Cobwebs are made by members of the spider family called *Theridiidae*. These spiders do not spin typical webs that look like concentric polygons. Unlike the mathematically magical webs of their cousins, these spiders spin a haphazard, sticky, crisscrossed net in which they trap their prey.



Most people associate cobwebs with an unkempt house, primarily because of the dust that accumulates on the adhesive strands of cobwebs. But though it might appear untidy, the presence of cobwebs does not suggest an unhealthy space. In fact, quite the opposite is true. Many types of cobwebs are laced with penicillin, fungi that contain antibiotic properties. Alexander Fleming, the discoverer of penicillin, came across the fungi when working with a colleague's cobweb collection.

When the cobwebs containing penicillin came into contact with some bacteria samples, the growth of the bacteria was halted, and the bacteria samples died. The discovery of penicillin for use as an antibiotic changed the face of modern medicine, as it helped treat many serious diseases. All along, that incredible cure was lurking in the rafters! It is no wonder that cobweb bandages were known for generations as a medical cure. Not only did the webbing help to coagulate the liquid oozing from the wound, but it also contained penicillin, a powerful fungal antibiotic that aided in the healing process. By using cobwebs to cover wounds, people with injuries were using antibiotics without even realizing it.

Cobwebs appear in the folktales of many cultures: cobwebs made of gold, cobwebs spun into gorgeous gowns, cobweb swings, Christmas trees draped in silver cobweb dresses. These days, cobwebs are used as eerie decorations in creepy Halloween scenes, or else they induce cranky frustration during spring-cleaning. Instead of being frustrated the next time you reach up to clean a dusty crevice, try to remember the medical treasure trove tangled in your broom.

1) Based on information in the passage, which of the following best describes the form of a web spun by a Theridiidae spider?

- A. a concentric polygon
- B. an oblong sphere
- C. an imprecise mesh
- D. an equilateral triangle

2) In paragraph 2 the author writes, "Unlike the mathematically magical webs of their cousins, these Spiders spin a haphazard, sticky, crisscrossed net in which they trap their prey." Which of the following literary devices is used in this quotation?

A. Anthropomorphism in which a human quality, emotion or ambition is attributed to a non-human object or being. This is often used in order to relate the object to the reader on a familiar level and also to increase the level of relativity between the humans and objects while lending character to the subject.

B. Anastrophe, in which the order of the noun and the adjective in the sentence is exchanged. In standard parlance and writing the adjective comes before the noun but when one is employing an anastrophe the noun is followed by the adjective. This reversed order creates a dramatic impact and lends weight to the description offered by the adjective.

C. Alliteration, characterized by the use of adjacent words that begin with the same sound or letter, creating a repetition of similar sounds in the sentence. This is used to add character to the writing and often adds an element of playfulness.

D. Asyndeton, characterized by the intentional omission of conjunctions in the sentence while maintaining the grammatical accuracy of the phrase. This helps in shortening the implied meaning of the entire phrase and presenting it in a succinct form. This compact version works to create an immediate impact whereby the reader is instantly attuned to what the writer is trying to convey.

3) As used in paragraph 3, which is the best synonym for **unkempt**?

- A. messy
- B. old
- C. creepy
- D. filthy

4) Which of the following phrases, if placed at the beginning of the final paragraph, would provide the best transition from paragraph 3 to the final paragraph?

- A. Finally, as many people know,
- B. Despite being associated with Halloween,
- C. In addition to serving a medicinal function,
- D. No matter how you feel about them,

5) According to the passage, Alexander Fleming

- A. collected cobwebs for a living
- B. was a famous doctor
- C. created Band-Aids
- D. discovered penicillin

6) According to the author, cobwebs appear in folktales as all of the following EXCEPT

- A. bandages
- B. gorgeous gowns
- C. Christmas tree decorations
- D. swing

7) The main purpose of this passage is to

- A. recount famous folktales about cobwebs and their many uses
- B. persuade the reader to use cobwebs instead of Band-Aids
- C. inform the reader about cobwebs and their former medicinal use
- D. relate an entertaining anecdote involving the history of cobwebs

8) Explain in your own words how cobwebs are actually a “medical treasure trove.”
