

Purple Passion

It was spring break in 1856. Eighteen-year-old William Henry Perkin had homework. His assignment was to find a way to produce quinine more cheaply. Quinine was a substance used to treat malaria. It had to be taken from tree bark, so it was very expensive.

William started mixing chemicals. He used coal tar, which was left over from gas lamps. Quinine is colorless. But the substance in the bottom of William's test tube was a thick, black goop.

William tried to wash off the goop. But it left behind a bright purple stain. William hadn't made quinine. He had invented the first chemical dye.

In the mid 1850s, the color purple was in style. But the color had to be made from a rare type of shellfish. The price of purple items was very high.

William called his color mauve. He set up a factory to produce the dye. He had to drop out of school and ask his dad for money. But it paid off. Everyone wanted purple fabrics, and William became rich.

According to one historian, "if a fairy godmother had given [William] the chance of choosing the precise moment for his discovery, he could not have selected a more appropriate or more auspicious time." He had created something new and desirable. And he had done it through chemistry.



At the time, chemistry was not a money making field. Science and business were not linked in the way that they are today. Some historians say that in addition to creating a new way to dye fabrics, William also “founded science-based industry.” Way to go William!



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NAME: _____ DATE: _____

1. What was William trying to do when he made his discovery?
 - a. Make chemical dye
 - b. Make quinine
 - c. Make money
 - d. Make coal tar

2. How did people make purple dye before William's discovery?
 - a. From shellfish
 - b. From berries
 - c. From chemicals
 - d. There was no purple

3. What did William call his color?
 - a. Purple
 - b. Eggplant
 - c. Lilac
 - d. Mauve

4. What does it mean that William "founded science-based industry"?
 - a. He discovered purple dye
 - b. He did not make any money from science
 - c. He was one of the first people to make money from science
 - d. He made more money from science than anyone else

Instructions for teachers:

These questions can be used to assess understanding of the reading passage.

The item in bold is the correct answer for each question.

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