Vocabulary Workshop® Tools for Excellence

Differentiated Passages

Grade 7

UNIT 10

Read the following passage, taking note of the **boldface** words and their contexts. These words are among those you will be studying in Unit 10. As you complete the exercises in this unit, it may help to refer to the way the words are used below.

The Straight History of Orthodontics

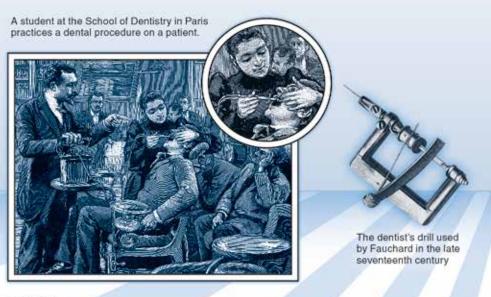
< Historical Nonfiction>

Some people look forward to getting braces on their teeth, thinking they look cool. Other people grow morbid at the idea. These unwilling patients avoid visiting the orthodontist until resistance becomes futile. But anyone who benefits from the orthodontist's trade today should be thankful for the progress this science has made over the centuries. In bygone days, many a butcher botched an attempt to remedy a problem that's now easily cured. The pain that once made dental work notorious has been minimized by anesthesia. But it took some time for orthodontics to reach its present state.

Fossil remains of crooked human teeth and cluttered mouths date back tens of thousands of years. Greek and Roman texts describing the treatment of irregular teeth by the application of pressure date back as far as the fifth century BCE (Before

Common Era). Archaeological evidence indicates even earlier use of orthodontic appliances, including artifacts found in rich, lavish burial sites in ancient Italy. Another early attempt at braces may have been discovered on Egyptian mummies with dilapidated but recognizable metal bands around their teeth. The metal bands may have anchored elastic strings made of catgut. Thus, from at least 1000 BCE, it was known that teeth move in response to pressure.

Techniques for correcting dental irregularities did not advance much until the eighteenth century. French dentists led the way to building orthodontic practice on scientific foundations from which it has not been **dismantled**. The greatest contribution came from Pierre Fauchard. In 1728, Fauchard published the first general study of dentistry. In it, he described the



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bandeau. It was used to expand the arch and correct crowded and crooked teeth. Fauchard described another process of straightening. He filed down a crooked tooth

to create **surplus**space around it. Then
he repositioned the
tooth using a device
called a "pelican," a
kind of pliers. With
the tooth in its proper
position, he bound
it to its neighbors
and let it set. French
and English dentists
improved on Fauchard's

work through the eighteenth century. Beneficiaries of Fauchard's treatment may have been grateful when the work was complete. But no doubt many of them faced the prospect of treatment with fearful timidity and bellowed during the procedures. Indeed, these treatments must have been grueling without anesthesia. But evidently there were many Frenchmen who knew that you can't make an omelet without breaking some eggs. Hundreds of patients flocked to Fauchard to pamper themselves and improve their looks with dental work.

Pioneering European orthodontists introduced new techniques and instruments in the nineteenth century. Among them were

the wire crib, the lever and screw, the chin strap, the use of rubber bands, and plaster models of patients' teeth. By midcentury, the American economy was quite hospitable to innovation.

American dentists

began to take the lead in research and invention.

Electricity revolutionized the operating room, and anesthesia

made surgery less painful. Norman Kingsley pioneered treatments for crossbites and cleft palates. John Farrar developed guidelines for using screws to move teeth by applying force in short doses at regular intervals.

The twentieth century saw refinement in the materials and methods of orthodontics. But the fundamental principles of the science were developed during the days of Fauchard. The research performed between then and now has established orthodontics as a profession and opened the way for everyone to benefit from straighter teeth.



Dental procedures improved a great deal over the twentieth century.

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Read the following passage, taking note of the **boldface** words and their contexts. These words are among those you will be studying in Unit 10. As you complete the exercises in this unit, it may help to refer to the way the words are used below.

The Straight History of Orthodontics

<Historical Nonfiction>

Some people look forward to getting braces on their teeth, thinking they look cool. Other people grow morbid at the idea. These unwilling patients avoid visiting the orthodontist until resistance becomes futile. But everyone should be thankful for the progress this science has made over the centuries. In bygone days, many a butcher botched an attempt to remedy a problem that's now easily cured. The pain that once made dental work notorious has been minimized by anesthesia. But it took some time for orthodontics to reach its present state.

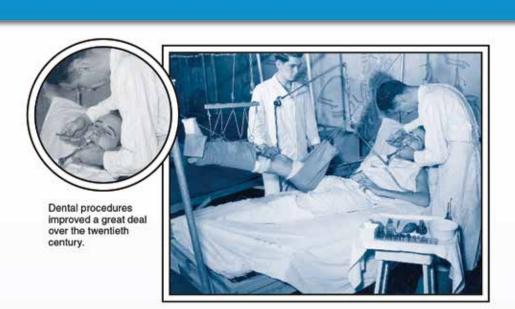
Fossil remains of crooked teeth and cluttered mouths date back tens of thousands of years. Some ancient Greek and Roman texts, dating back more than two thousand years, describe the treatment of these conditions. Artifacts found in rich, lavish burial sites in ancient

Italy indicate an even earlier use of orthodontic devices. And going back still further, an attempt at braces may have been discovered on some Egyptian mummies. These human remains had **dilapidated** but recognizable metal bands around their teeth.

Techniques for correcting dental irregularities did not advance much until the eighteenth century. French dentists led the way, and the scientific foundations they laid have not been **dismantled**. The greatest contribution came from Pierre Fauchard. In 1728, Fauchard published the first general study of dentistry. In it, he described different processes of straightening teeth. In one, he filed down a crooked tooth to create **surplus** space around it. Then he repositioned the tooth using special pliers, bound it to its neighbors, and let it set.



Unit 10



Beneficiaries of Fauchard's treatment must have been grateful when the work was finished. After all, these treatments were surely grueling without anesthesia. Could anyone blame the patients if they reacted with fearful timidity and bellowed during the procedures? But evidently there were many Frenchmen who knew that you can't make an omelet without breaking some eggs. Hundreds of patients flocked to Fauchard to pamper themselves and improve their looks with dental work.

Pioneering European orthodontists introduced new techniques and instruments in the nineteenth century. By midcentury, the American economy was quite hospitable to innovation. American dentists began to take the lead in research and invention. Electricity revolutionized the operating room, and anesthesia made surgery less painful.

The twentieth century saw further refinement in the materials and methods of orthodontics. But the fundamental principles of the science were developed during the days of Fauchard. The research performed between then and now has established orthodontics as a profession. And it has opened the way for everyone to benefit from straighter teeth.



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