

Overview

This lesson aims to explore one of the responsibilities Orthodontists perform during a day in their job, applying braces onto patients' teeth. It takes great care and attention to detail in order to complete such process. Throughout the activity, students will see what it takes to be an Orthodontist. The aim of this activity is to inform teens of Orthodontics, and to spark interest in the career field.

Materials Needed

- Printer
- Paper
- Scissors
- Rubber bands
- Flashlight
- Tissues
- Glue stick
- Teeth - Template
- Bracket Cutout - Template

Steps

1. Explain to the students that they will become an Orthodontist for the day. Print out 1 Teeth Template and 1 Bracket Cutout per student.
2. Have the students cut out the Bracket Template. Assembly instructions are on the worksheet itself.
3. From there, explain to the students the process of how braces are put on. Students should be able to follow & read along the process with their own "to-do" list that's on their Teeth Template.
4. Once the braces application process is outlined, the application process is ready to begin. Have students "dry" their patient's teeth with tissues, and ensure that the teeth are "clean" by inspecting them. Explain that Orthodontists in real life use fancy drying tools and not tissues, but for the sake of this lesson, tissues are used to emulate that.
5. Next, students will apply the bonding material (glue stick) on each tooth, then carefully apply the bracket on top. After, hover the Flashlight over the tooth for 5 seconds in order to emulate the curing lights Orthodontists use. To more accurately emulate the practice, have students glue and place brackets one tooth at a time.
6. Lastly, use a cut rubber band (straight like string) in order to represent the archwire, and have students weave it through all brackets. Before doing so, punch a small hole through the four circles, and tie the rubber band on the back of the paper. When finished weaving, tie it on the other end of the row on the back of the paper. Explain the elasticity of it represents how wires can close the teeth together.
7. Their patient now has braces, and the students have completed the Braces Application process!

Terminology Associated with Lesson

Brackets - Metal or ceramic modules that are glued to each tooth, in order to help align teeth. They hold the archwire and act as a guide to line the teeth.

Archwire - A thin, metal wire that is weaved through each bracket, creating pressure in order to shift and line teeth properly.

Bonding material - A resin glue that attaches the bracket to the tooth.

Curing light - A special pen-shaped equipment that emits blue light which cures and hardens the bonding material and braces into place.

Notes To Instructor

This activity is meant to show the gist of what Orthodontists do, which include applying braces onto patients' teeth. It is not in detail nor fully representative of how the braces application is in reality. However, this simplified and modified process used in the activity, should capture the spirit of how it's all done. Lastly, it would be a good idea to read up on the braces process before explaining and teaching this lesson. Here are some good sites to take a peek into:

- [How Braces Work in Five Simple Steps](#)
- [Parts of Braces](#)
- [3 Things You Didn't Know About Dental Bonding](#)