

## Introduction to Oral Health Careers

This curriculum introduces students to careers in oral health. Through engaging activities, students can explore opportunities in dentistry while gaining insight into the day-to-day experiences of oral health professionals. Middle schoolers may benefit the most from these activities.



### How to use this document

- Supply examples are linked in the document. If you plan to use these activities frequently, you may want to assemble a “kit” in advance.
- Read this document before the event and plan accordingly. Your audience, the amount of time you have and your location may dictate which activities are most appropriate.
- Some of these activities reference dental therapy as a profession, although dental therapists are not licensed in every state. To learn more, visit the Oral Health Workforce Research Center’s [“Authorization Status of Dental Therapists By State.”](#)
- These activities are just a starting point! Feel free to tailor them to your audiences or make them more interactive. The goal is to have fun and build interest in oral health careers.

*Disclaimer: Some activities in this curriculum may involve materials or supplies. To make planning easier, we have included links to examples of products or vendors; however, these links are for reference only and are not recommendations or endorsements by Delta Dental. Delta Dental is not affiliated with the companies, vendors, or websites associated with the links provided and does not receive any compensation, benefit, or profit from the purchase of materials through those links. Students are welcome to purchase the same or similar materials from any source they choose.*

# Oral Health Careers

## Overview

Students may be surprised to learn that there are many members of the dental team, all of whom make a positive impact on the lives of others. Each profession has its own benefits and unique characteristics.



## Supplies

- [Oral health career handouts](#)

## Steps

1. Before the lesson (or job fair), set up stations (or posters) for each profession: dental assistant, dental hygienist, dental therapist and dentist.
  - Currently, dental therapists are allowed to practice in a limited number of states. Check your state's regulations [here](#).
2. Engage with students about what they already know.
  - Ask students what they know about dental careers? What do they see when they go to the dentist? What dental roles can they name? What does each member of the team do?
3. Clearly explain the role of each member of the dental team:
  - [Dental assistants](#) may greet and check in patients, prepare exam rooms and sterilize instruments, take X-rays, assist the dentist or hygienist with procedures and provide patients with post-treatment care instructions.
  - [Dental hygienists](#) work with patients to provide preventive oral health care and may clean your teeth, apply sealants and fluoride treatments, screen for dental disease and take and view X-rays. Importantly, dental hygienists also educate patients on oral health, proper dental hygiene and nutrition.
  - [Dental therapists](#) bridge the gap between dental hygienists and dentists and are trained to work in dental shortage areas where it's hard for people to get dental care. They provide routine dental care and may also conduct exams and fill cavities.

- **Dentists** are doctors who provide oral health care through evaluation, diagnosis and treatment of disease. This may include filling cavities or removing damaged teeth, prescribing medications, measuring and fitting dental appliances and more. **Some dentists specialize** in oral surgery, orthodontics (like applying braces), periodontics (which focuses on treating diseases of the gums and supporting structures), endodontics (which focuses on the dental pulp and tissues surrounding a tooth's root) or pediatrics. Dentists screen for medical conditions and work with medical providers to treat diabetes, dermatologic diseases, immune diseases and more.

4. Discuss the education required to enter each profession.

- **Dental assistants:** Can receive training through dental-assisting programs at colleges or on-the-job apprenticeships. Depending on the type of training you receive, becoming certified may require meeting additional requirements.
- **Dental hygienists:** Must graduate from a two-year or four-year program at a college or university. After graduation, students must pass written exams and a clinical exam to receive a dental hygiene license.
- **Dental therapists:** Must attend an accredited dental therapy program at a college or university. The number of years of study varies by school and state. Because this is a new position on the dental team, sometimes the prerequisites vary. After graduation, dental therapists must pass exams to receive a license to practice.
- **Dentists:** Must graduate with a four-year degree and meet all prerequisites for dental school. This includes taking the Dental Admissions Test before your senior year of college. Dental programs are typically four years of study, and you will graduate with a doctorate of dental surgery or a doctorate of dental medicine. Graduates must pass written and clinical exams to receive a state license to practice. More education is required to become a specialist, such as an orthodontist, periodontist, endodontist or oral surgeon.

5. Offer students oral health career handouts so they can continue their exploration.

## Extensions

Encourage students to interview or shadow a local oral health professional.

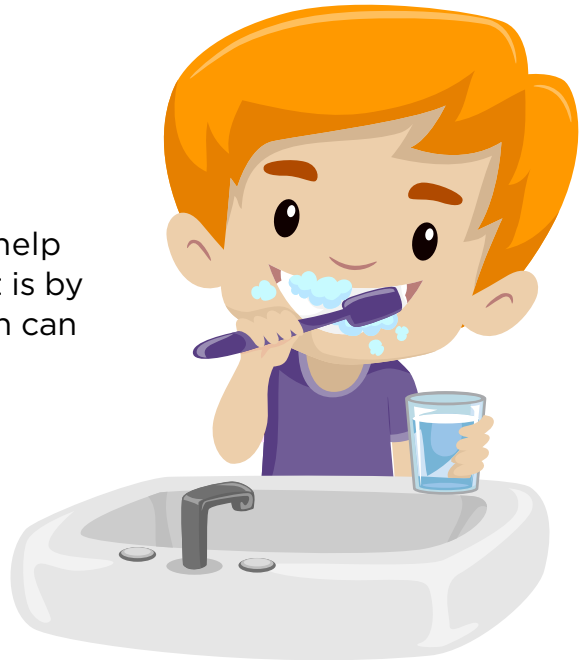
# Removing Plaque

## Overview

Students may not know that dental hygienists help prevent dental disease. One way they can do that is by “scaling” teeth to remove plaque and tartar, which can lead to gum disease or cavities.

## Supplies

- A [mouth model](#) or [typodont](#)
- Brown or yellow [nail polish](#)
- [Cornmeal](#)
- A [scaler](#)



## Steps

1. Before the lesson or event, use the yellow or brown nail polish to paint “calculus” on the mouth model along the gum line. It doesn’t need to be neat. Sprinkle cornmeal over the wet polish, then let dry.
2. During the event, display the mouth model or typodont and ask students to describe what they’re seeing. Does it look normal? What do they think the nail polish and cornmeal represents?
3. Explain that what they’re seeing is meant to represent tartar, which is formed when plaque (a sticky, colorless film of bacteria that constantly forms on teeth that can be removed by brushing and flossing) sits on teeth for too long and hardens. Tartar can only be removed by a dental professional, such as a dental hygienist.
4. Demonstrate the use of a scaler or curette on the mouth model and ask students whether they’ve had their teeth scaled. How did their teeth feel afterward? Smoother? Did their gums feel swollen? Why do they think that might be?
5. Allow students to use the scaler or curette to “clean” the mouth model’s teeth. How does it feel to remove the tartar?

## Extensions

Encourage students to interview or shadow a local oral health professional. For further exploration, MEL Science offers a [Dentistry: Caries kit](#), which can help students learn more about dental exams and filling cavities.

# Identifying Parts of the Tooth

## Overview

Students will learn basics about oral health anatomy, including the four types of teeth (incisors, canines, premolars and molars) and what a tooth is made of.

## Supplies

- A [mouth model](#) or [typodont](#)
- [Giant tooth cross-section](#) or [tooth cross-section poster](#)

## Steps

1. Ask students how much they know about what's in their mouths. How many teeth do most people have? And what are our teeth made of?
  - Answer: Adults generally have 32 teeth (eight incisors, four canines, eight premolars and 12 molars). Without wisdom teeth (four of the 12 molars), adults have 28 teeth.
  - Baby or primary teeth are the first set of 20 teeth a child develops. A full set is usually present by age 3. Primary teeth will typically begin to fall out around the age of 6 to make room for primary teeth. Most people are done losing teeth around the age of 12 or 13.
2. Highlight the four types of teeth and their purpose using the mouth model.
  - Incisors, which are the most visible teeth in the mouth, have a single narrow edge that helps cut into food when you bite. **These eight teeth are at the front of the mouth—four on top and four on bottom.**
  - Canines are the pointier teeth that help tear into foods like meat and vegetables. **These four teeth surround the incisors.**
  - Premolars, also called bicuspids, have features of both canines and molars, and they help tear, crush and grind food into smaller pieces. **People have eight premolars, which are between the incisors and molars.**
  - Molars are the teeth in the back of your mouth, and most chewing takes place here. The shape of these teeth is good for crushing and grinding food. **People have between eight and 12 molars. Wisdom teeth make up four of the molars. Some people are born without them, and some people have them removed.**

3. Using the tooth cross-section, invite students to explore the tooth and learn more about the different parts.
- A tooth is made up of two sections: the crown (above the gum) and the root (below the gum).
  - The outermost layer of a tooth is the enamel. The dentin is beneath the enamel and protects the pulp. The pulp contains blood vessels and nerves. Gums help to hold the teeth in place.
4. Are they surprised to learn that teeth are living structures with their own nerves and blood supply?

### Extensions

- Encourage students to use a small mirror (or a [disposable dental examination mirror](#)) to look at their own teeth. How many teeth of each type do they have? What else can they see? Explore how different dental procedures help different parts of the tooth. What do they repair?



# Filling Out a Dental Card

## Overview

Students will learn how to fill out a basic dental card by examining their own mouths.

## Supplies

- A [mouth model](#) or [typodont](#)
- [Giant tooth cross-section](#) or [tooth cross-section poster](#)
- [Disposable dental mirror](#)
- [Dental card](#)

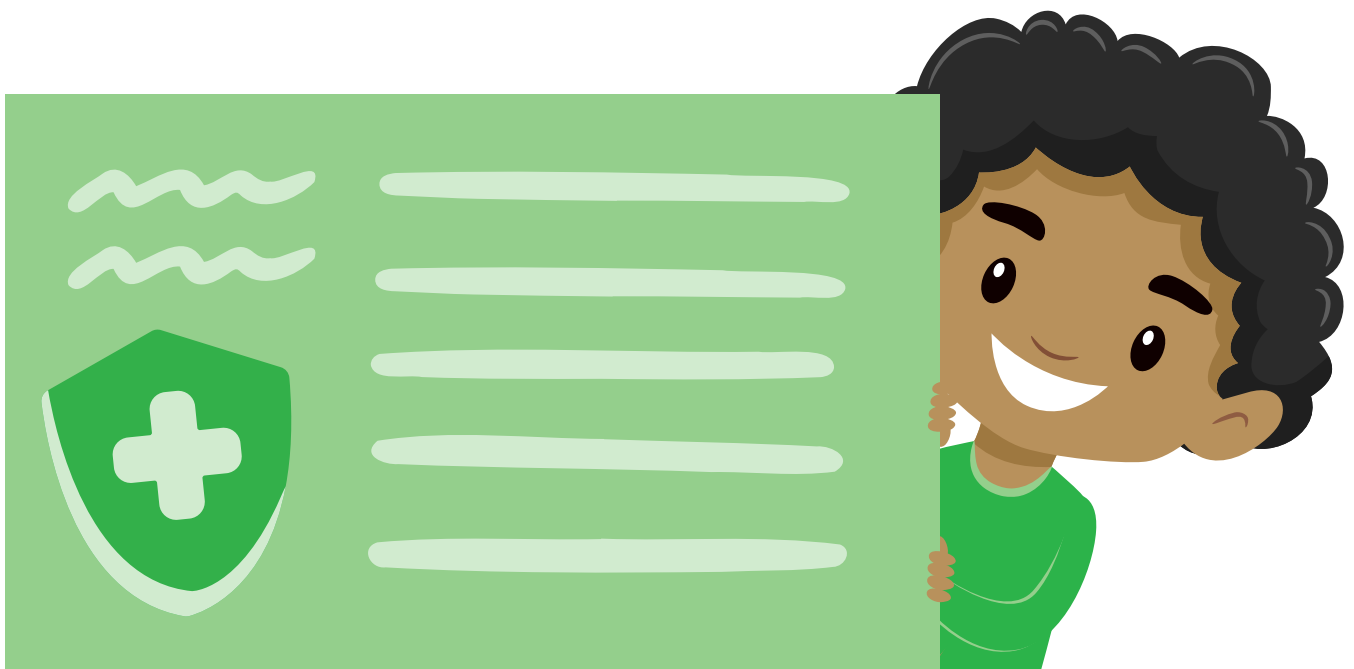
## Steps

1. Review the dental card. Encourage students to fill out as much of it as they can (e.g., the date they last went to the dentist or had a full-mouth X-ray). Explain that this type of information is crucial to providing appropriate health care. Oral health professionals ask about a patient's last dental visit because regular dental visits can prevent tooth problems and catch issues early.
2. Dentists may also ask patients about allergies, medical conditions and medications as they can impact dental health and treatment.
3. Move on to the dental chart. Explain that the oral health team marks their findings from the oral examination in the patient's dental chart. This can be done by the dental hygienist, dentist or a dental assistant. Often, this information is recorded electronically. This visual chart helps dentists note problems in certain teeth and mark their locations. Discuss the fact that each tooth has its own number.
4. Encourage students to use a disposable dental mirror to look at their own teeth and fill out the dental chart. If they find any teeth with areas of darkened enamel, mark them in the dental card by circling the tooth. If a tooth is missing, cross it out and put the number "0" next to it.
5. They can also use the "Oral Examination" section to note the number of any tooth that has a cavity (filled or otherwise), is sensitive or is cracked or broken, etc.

6. Use the notes section to note anything else that might be relevant. Are you having any pain? Are there any teeth coming in or missing? Any allergies or medical conditions that might be helpful for the dentist's office to know?
7. What did they discover?

### Extensions

Encourage students to take their dental card with them to the dentist the next time they visit and discuss their findings. If students need help finding a dentist, please refer them to [SmileHelpNow.com](https://www.smilehelpnow.com). Explore the connection between oral and overall health.



# Reviewing X-rays

## Overview

Students will learn about how X-rays can be used to identify issues in the mouth and determine the condition of their teeth and jaws.

## Supplies

- [Portable light box](#) (optional)
- [Example X-ray films](#) (sample radiographs are included following this activity)

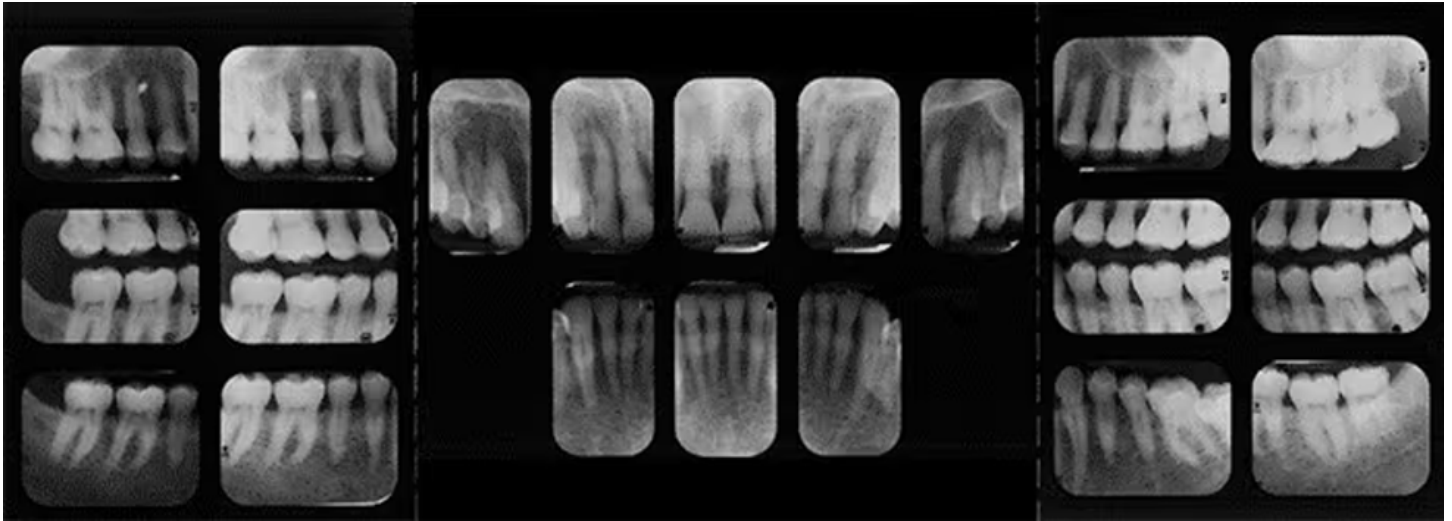
## Steps

1. For the purposes of this activity, you will assume that an X-ray has already been taken, either by a dental assistant or dental hygienist.
2. Students should be able to see that some areas on an X-ray image are darker, while others are lighter, almost white. Dense objects, such as teeth and bones, appear as light-colored areas on X-rays.
3. On an X-ray of healthy teeth, the enamel is lightest, because it is very hard and can effectively block X-rays. The dentin is less dense, so it blocks X-rays less and is somewhat darker. The pulp is darkest because it is mostly composed of soft tissue, such as vessels and nerves. As a result, more X-rays can pass through the pulp and expose the film, making it darkest.
4. Discuss some of the dental problems that can be seen on X-rays: tooth decay, bone loss, tooth implants, braces or dentures and abscesses.
5. Plug in the portable light box and turn it on. Adjust the brightness if necessary. Lay the first film on the light box.
6. What do they see in the films? What dental procedures do they think have been performed?

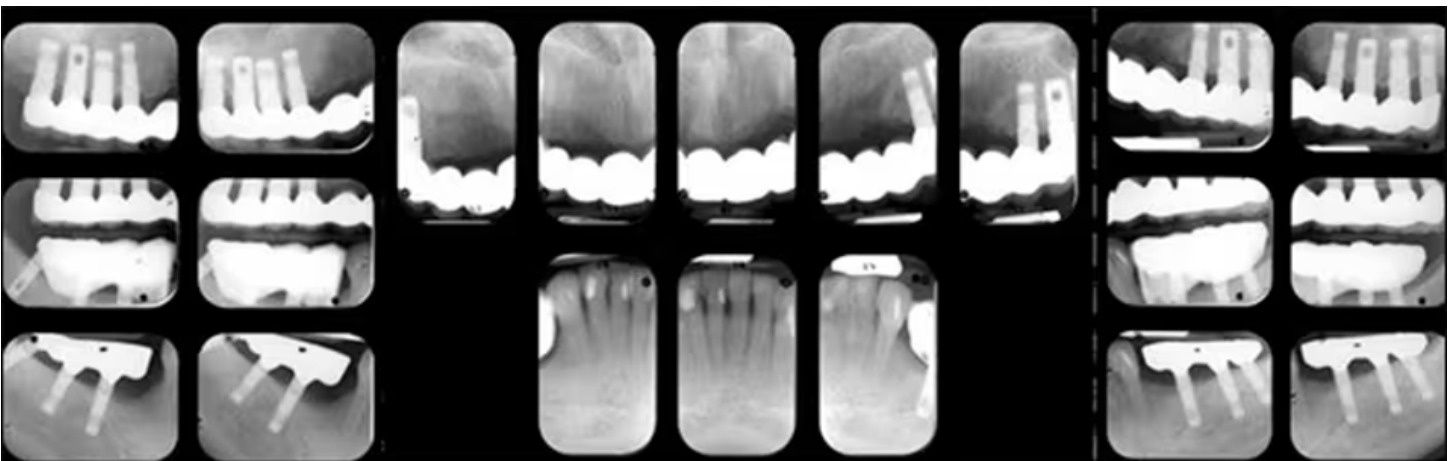
## Extensions

Encourage students to review their own dental X-rays carefully with the dental hygienist or dentist at their next appointment. What can they see? Who took their X-rays? What type of equipment did they use?

## Full healthy mouth

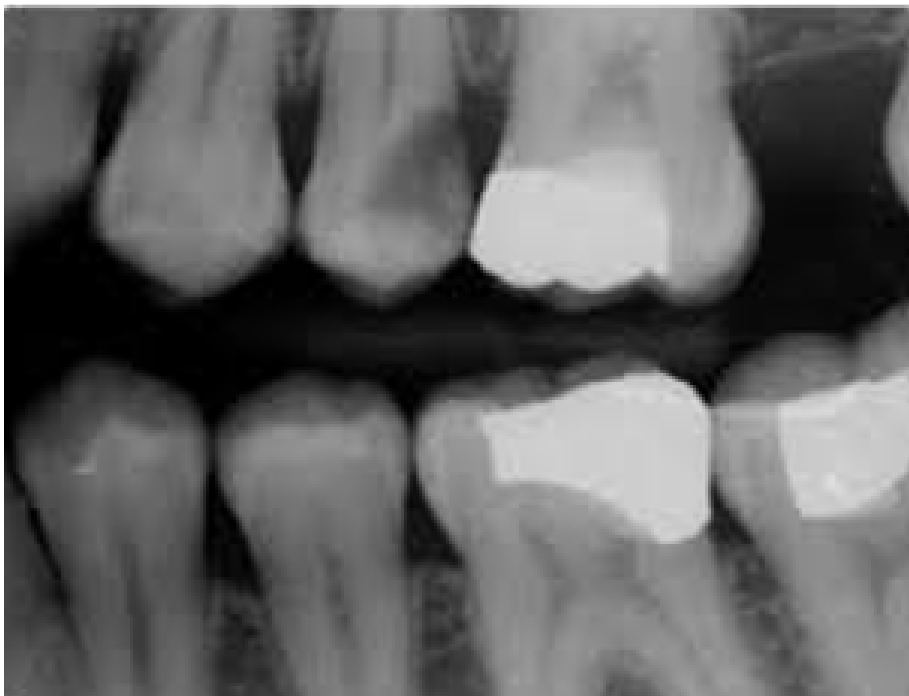


## Full-mouth radiographic implant case





**Normal  
bitewing**



**Bitewing  
with a cavity**

## Normal panoramic X-ray



## Panoramic X-ray with implants

