**DENT 111: ORAL ANATOMY**

**STUDY GUIDE FOR THE TRIGEMINAL NERVE**

**Let’s begin**

The nervous innervation of the teeth, oral cavity and structures associated with it comes from the trigeminal nerve or the 5th cranial nerve. It is the largest of the twelve cranial nerves. A good knowledge of the trigeminal nerve is important in dentistry because some dental procedures require administering local anesthesia to patients. For the anesthesia to be profound and take effect immediately, you have to know the nerve that innervates the structure to be anesthetized so that you can deposit the anesthesia as near the nerve as possible.

At the end of this lesson, you are expected to be able to:

1. Enumerate and trace/locate the branches of the trigeminal nerve.
2. Identify the branch of the trigeminal nerve that innervates a specific structure in the oral cavity and those associated with it.

**Read/Watch**

**Read** the following:

Chapter 14 “Dento-Osseous Structures, Blood Vessels and Nerves” of your textbook “Wheeler’s Dental Anatomy Physiology and Occlusion” 10th edition by Stanley J. Nelson pp. 231-241.

Alternatively, or in addition, you can read Chapter 14 “Structures that Form the Foundation for Tooth Function, Section IV. Nerves of the Oral Cavity” Woelfel’s Dental Anatomy 8th ed by Scheid & Weiss pp. 427-439.

**Watch**

Pre-recorded lectures of Dr. M. Segarra

Maxillary Nerve: <https://www.youtube.com/watch?v=-btAOcpFryM&feature=youtu.be>

Mandibular Nerve: <https://www.youtube.com/watch?v=4lV0gMpSwGg&feature=youtu.be>

**Attend** the online synchronous discussion with Dr. M. Segarra.

**Think**

Guide questions:

We will discuss the answers during the online synchronous discussion.

1. What are the 3 divisions of the trigeminal nerve?
2. Give the branches of the maxillary nerve at the pterygopalatine fossa.
3. Give the branches of the maxillary nerve at the infraorbital canal and the structures they innervate.
4. What are the 3 terminal branches of the maxillary nerve? Which structures do they innervate?
5. Describe the origin and the branching of the palatine nerves.
6. Give the branches of the undivided portion of the mandibular nerve.
7. Give the branches of the anterior branch of the mandibular nerve and the structures they innervate.
8. What are the branches of the posterior branch of the mandibular nerve and the structures they innervate?

**Dig Deeper**

Answer the short quiz on Trigeminal Nerve on the course site.

Do the learning activities in the Activity Guide on Trigeminal Nerve.