Unit 9: Cavity Features

1 INTRODUCTION
This unit further discusses the oral and nasal cavities. We must learn our organs of speech very well. These cavity features are derived from the specific organs of speech in the mouth and the nose namely, the tongue, palate, lips and nose.

2 OBJECTIVES
By the end of this unit, learners should be able to:
- define and discuss sonorant as a distinctive feature for the description of the English phonemes
- define and discuss obstruent as a distinctive feature for the description of the English phonemes
- identify and describe sonorant and obstruent as distinctive features of the English phonemes
- explain the phonetic features that border on the organs of speech such as: the tongue, lips and nasal
- identify and describe the English sounds produced by these organs of speech using the terms in the generative phonology theory

3.1 SONORANT SOUNDS
Sonorant is a term used to describe the activities that take place when the vocal folds are shut and there are continuous vibrations at the larynx. During this process, the sounds that are made are usually voiced and oral. These cover the vowel sounds and the voiced consonant sounds. So all the English vowels such as /i: e a: o .../ are sonorant sounds. Also all the English voiced consonants such as /b, d, g, v, θ, m, n, j/ are sonorants. The antonymic adjective in the generative theory used to describe the sounds that are not in this category is nonsonorant or obstruent or consonantal, which you call voiceless consonants.

3.2 CONSONANTAL (OBSRUDENT) SOUNDS
From 3.1, if you are careful, you will notice that the category of sounds here is divided into two; those sounds that are obstructed at the oral cavity but are accompanied by vibrations. These are the voiced consonants that we refer to in 3.1 as sonorants, e.g. /b, d, g, m, n, j/. The rest sounds with obstructions in the mouth which are not accompanied by vibrations are referred to as 122 obstruent sounds. Examples: /p t k s θ .../. You often call the sounds voiceless consonant sounds. Those sounds that are not in this category are called non-obstruent sounds.
From the above, it can be concluded that the human speech sounds may be referred to as sonorant e.g. i: e b, j/ or non-sonorants such as /k, t, s/, which are obstruent.

3.3 POSTERIOR
This is a palate feature, relating to the long, wide, slippery region at the upper part of inside of the mouth, the roof of the mouth, which begins at the root of the upper teeth and stretches through the velum. The beginning of the palate is the alveolar; the hill is the alveolar ridge; the hard part is the hard palate; the soft part is the soft palate or velum; and further stretches inwards the mouth is the uvula. The area between the soft
palate and uvula is called the posterior region. The first consonant of each of the words kind, guide and hide is the posterior sound. Any sound that does not fall into this category of sounds is described as non-posterior or anterior such as the bilabials, alveolars and dentals.

3.4 CORONAL SOUNDS
Coronal is the feature used to describe the sounds that are produced with the flat part of the tongue called the blade. This starts from the tip of the tongue to almost half of the tongue. The tongue is at the neutral position when it is not moving up nor down, thus, at the resting position such as the English sound of /e/ as in “bed”. Any other sound that involves the movement of part or the whole of the tongue is a coronal sound, which may be a sonorant or an obstruent. Many English sounds are coronal, but all bilabials and labio-dentals are non-coronal. Such sounds as: /θ sʃ l n r z t k/ are coronal.

3.5 TONGUE BODY FEATURE
This is another coronal feature that involves the movement of the whole of the tongue. It is a directional feature that describes the direction of the movement of the tongue. The moves from the neutral position towards the roof of the mouth in which case we say that sound produced is a high sound. If the tongue moves to the opposite direction, we say that it is a low sound, thirdly, when the body of the tongue is retracted or pushed towards the back of the oral cavity, we say that sound is back.

3.6 LATERAL FEATURE
This is another coronal sound, because it involves the use of the tongue. But the process of producing a lateral sound involves the tip of tongue gummed to the anterior region (palato-alveolar). While at this point, the air coming from the lungs is allowed to escape out of the mouth through the two sides of the tongue. One main example of lateral in English is /l/ as in ‘lie’.

3.7 ROUNDED FEATURE
The phonetic feature called rounding depends solely on the two lips, when they partially or wholly form the letter “O”. At this time, the lips may be partially closed or half-open. There are no many sounds in English that have the rounded feature, just a few sonorants such as /ʊ u ɒ ɔː/, a number of and glides such as /ɑɪ ɑʊ ɔɪ j w/.

3.8 NASAL FEATURE
Nasality is a feature that relates to the nose as this is the chamber or cavity to produce a nasal sound. In the articulation of the nasal sounds, the velum is lowered thereby shutting the path that goes into the mouth so that the air coming from the lungs can only escape through the nose. This is how such sounds are named nasal – because they pass through the nostril and not the mouth. There are only three known nasal sounds in English: /m/ with a supporting closure by the two lips (bilabial), /n/ with a supporting closure between the alveolar and the tip of the tongue, and /ŋ/ whose supporting closure at the post velar.

4 EXERCISES
a. List two major classes of the phonetic features
b. What are sonorant sounds?
c. Give five (5) examples in English words.
d. What are consonant sounds?
e. Give five (5) examples of English words.
f. List all the organs of speech mentioned in this unit.
g. With many examples in English, discuss the coronal sounds.
h. What do you understand by rounding?
i. When the velum is lowered, some specific sounds are about to be produced, with examples from English, what phonetic feature is called such sounds?