## Speech Sounds

Speech Sounds are divided into two types:

1. Consonant Sounds: sounds produced with an obstruction to the air-flow.
2. Vowel Sounds: sounds produced with no obstruction to the air-flow.

Vowel Sounds are divided into two types:

1. Simple (Pure) Vowels: vowel sounds produced with one part of tongue moving, one position of tongue in the mouth, and one shape of lips.
2. Complex Vowels: vowel sounds produced with more than one part of tongue moving, more than one position of tongue in the mouth, and more than one shape of lips.

Simple (Pure) Vowels are divided into two types:

1. Short Vowels
2. Long Vowels

Short vowels differ from Long vowels in length and in quality. Quality means the features of vowels. Therefore, they differ in at least one of the features of vowels.

## Complex Vowels are divided into two types:

1. Diphthongs
2. Triphthongs

Diphthongs differ from Triphthongs in the number of vowel sounds combined together to make them and in the number of glides. In Diphthongs there are two vowel sounds and one glide. In Triphthongs, there are three vowel sounds and two glides.

Features of Describing and Classifying Vowel Sounds are:

1. The part of tongue moving: front, centre, back.
2. The position (height) of tongue in the mouth: close, mid, open.
3. The shape of lips: spread, neutral, rounded.

Features of Describing and Classifying
Consonant Sounds are:

1. The Manner of Articulation: the way consonant sounds are produced.
2. The Place of Articulation: the articulators (organs of speech) responsible for producing consonant sounds.
3. Voicing: whether or not there is voicing in the vocal cords.

The Manner of Articulation: according to this feature, consonant sounds are divided into:

1. Fricatives (Friction Consonants): /f, v, $\Theta, ~ ठ, ~ s, ~ z, ~ \int, ~ 3, ~$ h/
2. Plosives (Stop Consonants): /p, b, t, d, k, g/
3. Affricates: /tf, d3/
4. Nasals: /m, $n, \mathfrak{y} /$
5. Lateral: /l/
6. Approximants: which are divided into two types:
a- Retroflex: /r/
b- Semi-Vowels: /w, j/

The Place of Articulation: according to this feature, consonant sounds are divided into:

1. Bilabial: the two lips: /p, b, m, w/
2. Dental: the teeth + tongue: /, , б/
3. Labiodental: the teeth + lower lip: /f, v/
4. Alveolar: the alveolar ridge + tongue: $/ \mathrm{s}, \mathrm{z}, \mathrm{t}, \mathrm{d}$, n, l/
5. Palatal: the hard-palate + tongue: /j/
6. Post-Alveolar (Alveolar-Palatal / PalatoAlveolar): the area between the alveolar-ridge and tongue: / $\int$, $3, \mathrm{t}$, d3, r/
7. Velar: the velum (soft-palate) + tongue: /k, g, y/
8. Glottal: the glottis (vocal cords): /h/

## Places of articulation



Voicing: according to this feature, consonant sounds are divided into:

1. Voiced: /v, $\begin{gathered}\text {, } \\ \mathrm{z}, \mathrm{3}, \mathrm{b}, \mathrm{d}, \mathrm{g}, \mathrm{d} 3, \mathrm{~m}, \mathrm{n}, \mathrm{y}, \mathrm{l}, \mathrm{r}, \mathrm{w}, \mathrm{j} / \mathrm{l}\end{gathered}$
2. Voiceless: /f, $\Theta, s, \int, h, p, t, k, t f /$
