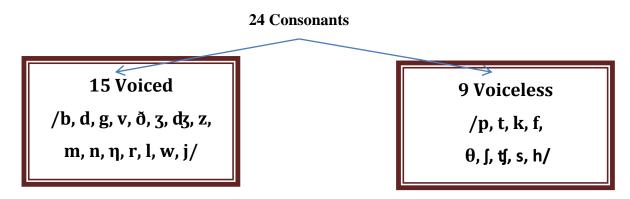
CONSONANTS

Consonants are the sounds in the production of which there is an obstruction to the stream of air as it passes through the vocal tract. There are 24 consonant sounds in RP and in most other accents of English.

For the purpose of describing and classifying consonants, we use three criteria:

A- Voicing

This criterion refers to the state of the glottis whether there is vibration in the vocal folds or not



B- Place of articulation

This criterion refer to the exact place where the obstruction involved in the production of a sound take place. This criterion classifies all consonants into the following kinds:

- 1- Bilabials: these sounds are made with the two lips /p, b, m, w/
- 2- Labiodentals: these sounds are made with the lower lip and the upper front teeth /f, v/
- 3- Dentals: these sounds are made with the tip of the tongue or the blade of the tongue being placed between the upper and lower front teeth. $/\theta$, $\delta/$
- 4- Alveolar sounds: these sounds are made with the tip of the tongue or the blade of the tongue with the alveolar ridge. /t, d, s, z, n and l/
- 5- Post-alveolar sounds: this sound is made with the tip of the tongue and the back part of the alveolar ridge. /r/
- 6- Palatoalveolar sounds: these sound are made with the blade of the tongue and the area between the alveolar ridge and the hard palate.

 /ʃ, ʒ, tʃ and dʒ/
- 7- Palatal: this sound is made with the front of the tongue and the hard palate. /j/
- 8- Velars: these sounds are made with the back of the tongue and the soft palate. /k, g and $\eta/$

9- Glottal: this sound is made with the glottis. /h/

C- Manner of articulation

This criterion refers to the degree of the closure of the speech organs while the stream of air passes through them.

According to this criterion, all consonants are divided into the following categories:

1- Stops (plosives)

They are the sounds in the production of which two speech organs come into contact with each other preventing air for a while from going out. The air pressure increases behind the two organs of speech while the closure is held. Then when the two organs are apart from each other suddenly, the air is released with explosion. Stops include /p, b, t, d, k and g/.

2- Fricatives

They are the sounds in the production of which two organs of speech come near each other, so air forces its way through a very narrow gap between them producing audible friction. Fricatives in English include /s, z, f, v, $\int_{0.5}^{\infty} 3$, $\int_{0.5}^{\infty} 3$ and h/.

3- Affricates

They are the sounds which begin as stops and end as fricatives. This means that affricates (like stops) require a complete closure in between two organs of speech, but the air is released slowly enough to produce friction. Affricates in English include: /t// and /tk/.

4- Nasals

They are the sounds in the production of which the soft palate is lowered to block the oral cavity and to allow air to pass only through the nasal cavity. Nasals include /m, n and $\eta/$.

5- Laterals

They are the sounds in the production of which the air escapes around the sides of the tongue. English has only one lateral sound which is /l/.

6- Gliding, approximates or semi-vowels

They are the sounds in the production of which there is a wider gap between the speech organs than is the case in the production of fricatives. The speech organs approach each other, but they do not touch each other. English gliding consonants are /w, j, and r/.