

English consonants

A consonant is a letter of the alphabet that represents a basic speech sound produced by obstructing the breath in the vocal tract. There are 24 consonantal phonemes classified in the table below in terms of place and manner of articulation. Fortis (stronger, longer): /p, t, k, s, f, θ, s, h/. Lenis (weaker, shorter): /b, d, g, dʒ, v, ð, z, ʒ/. Voiced & voiceless.

		MANNER	VOICING	PLACE					
				Bilabial	Labiodental	Interdental	Alveolar	Palatal	Velar
Obstruent	Stop	Voiceless	p			t		k	ʔ
		Voiced	b			d		g	
	Fricative	Voiceless		f	θ	s	ʃ		h
		Voiced		v	ð	z	ʒ		
	Affricate	Voiceless					tʃ		
		Voiced					dʒ		
Sonorant	Nasal	Voiced	m			n		ŋ	
	Liquid	Lateral	Voiced				l		
		Rhotic	Voiced					r (ɹ)	
	Glide	Voiced	w				j	(w)	

2. Place of articulation

Place of articulation tells us where the sound is produced.

a) Bilabial (p, b, m, w)

For a bilabial sound, the active articulator is the bottom lip, and the passive articulator is the top lip.

b) Labio-dental (f, v)

For labio-dental sounds, the active articulator is again the bottom lip, but this time it moves up to the top front teeth.

c) Dental (θ, ð)

Dentals are articulated with the tongue against the upper teeth.

d) Alveolar (t, d, s, z, n, l)

Alveolar sounds are produced by the tip or blade of the tongue moving up towards the alveolar ridge, the bony protrusion you can feel if you curl your tongue back just behind your top front teeth.

e) Post-alveolar (r)

Postalveolar sounds are produced with the blade of the tongue as the active articulator, and the adjoining parts of the alveolar ridge and the hard palate as the passive one.

f) Palato-alveolar (ʃ, ʒ, tʃ, dʒ)

Postalveolar consonants are consonants articulated with the tongue near or touching the back of the alveolar ridge, farther back in the mouth than the alveolar consonants, which are at the ridge itself but not as far back as the hard palate.

g) Palatal (j)

Palatals are produced by the front of the tongue, which moves up towards the hard palate.

h) Velar (k, g, ŋ)

For velar sounds, the active articulator is the back of the tongue, and the passive articulator is the velum, or soft palate.

i) Glottal (h)

Glottal sounds are in the minority in articulatory terms, since they do not involve the tongue: instead, the articulators are the vocal folds, which constitute a place of articulation as well as having a crucial role in voicing.

3. Manner of articulation

Manner of articulation tells us how the sound is produced. All articulations involve a stricture, i.e. a narrowing of the vocal tract which affects the airstream.

a. Plosives/ stops (p, b, t, d, k, g)

Plosives, also called stops, are consonant sounds characterized by the momentary blocking (occlusion) of some part of the oral cavity which blocks the airstream, hence the term stop. The soft palate is raised so that there's no escape of air through the nose. The compressed air can then be released

b. Fricatives (f, v, θ, ð, s, z, ʃ, ʒ, h)

Fricatives are consonants with the characteristic that air escapes through a narrow passage and makes a hissing sound. Most languages have fricatives, the most commonly found being something like s.

c. Affricatives (tʃ, dʒ)

Affricates begin as plosives and end as fricatives. A familiar example is the affricate heard at the beginning and end of the word 'church'. It begins with an articulation practically the same as that for t, but instead of a rapid release with plosion and aspiration as we would find in the word 'tip', the tongue moves to the position for the fricative ʃ that we find at the beginning of the word 'ship'. So, the plosive is followed immediately by fricative noise.

d. Nasals (m, n, ŋ)

The basic characteristic of a nasal consonant is that the air escapes through the nose.

e. Lateral (l)

Lateral consonants are made with the center of the tongue forming a closure with the roof of the mouth but the sides lowered. Typically, the airstream escapes without friction and consequently this sound is termed a lateral approximant.

f. Approximants (w, r, j)

Approximants have a stricture of open approximation. The space between the articulators is wide enough to allow the airstream through with no audible friction, as in English /w j r/. English /j/ and /w/ are like very short vowels – similar to brief versions of /i:/ and /u:/ (an old term for these sounds was in fact 'semi-vowels').