

# Consonants

# Consonants

Articulators are used to **interrupt**, **restrict** or **divert** the airflow in a variety of ways

**Voiced** and **voiceless**

# Place of Articulation



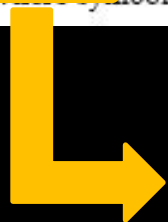
## THE INTERNATIONAL PHONETIC ALPHABET (revised to 2005)

CONSONANTS (PULMONIC)

© 2005 IPA

	Bilabial		Labiodental		Dental		Alveolar		Postalveolar		Retroflex		Palatal		Velar		Uvular		Pharyngeal		Glottal	
Plosive	p	b					t	d			ʈ	ɖ	c	ɟ	k	g	q	ɢ			ʔ	
Nasal		m		ɱ				n			ɳ		ɲ		ŋ		ɴ					
Trill		ʙ						r									ʀ					
Tap or Flap				ⱱ				ɾ			ɽ											
Fricative	ɸ	β	f	v	θ	ð	s	z	ʃ	ʒ	ʂ	ʐ	ç	ʝ	x	ɣ	χ	ʁ	ħ	ʕ	h	ɦ
Lateral fricative								ɬ	ɮ													
Approximant				ʋ				ɹ			ɻ		j		ɰ							
Lateral approximant								l			ɭ		ʎ		ʟ							

When symbols appear in pairs, the one to the right represents a voiced consonant. Shaded areas denote articulations judged impossible.



## Manner of Articulation

# MANNER OF ARTICULATION

# PLOSIVES / STOPS

*complete closure in the vocal tract*

[p] [t] [k]

[b] [d] [g]

# PLOSIVES / STOPS

[p] 'pin' 'happen' 'cap'

[b] 'bin' 'cabbage' 'cab'

[t] 'to' 'hotter' 'hat'

[d] 'do' 'harder' 'had'

[k] 'cot' 'packet' 'pick'

[g] 'got' 'forget' 'pig'

# PLOSIVES / STOPS

Initial [p] [t] [k]

# PLOSIVES / STOPS

‘pay’ [p<sup>h</sup>ej]

‘tie’ [t<sup>h</sup>aj]

‘cap’ [k<sup>h</sup>æp]

‘close’ [k<sup>h</sup>l<sub>o</sub>wz]

‘ice cream’ [aɪsk<sup>h</sup>r̩ɪ:m]

‘I scream’ [aɪskr̩ɪ:m]



# FRICATIVES

*Two organs close enough with  
constant flow of air*

[f] [θ] [s] [ʃ] [h]  
[v] [ð] [z] [ʒ]

# FRICATIVES

[f] 'fan' 'cafe' 'belief'

[v] 'van' 'cover' 'above'

[θ] 'think' 'mathematics' 'bath'

[ð] 'the' 'father' 'bathe'

[s] 'sue' 'icy' 'this'

[z] 'zoo' 'lazy' 'these'

# FRICATIVES

[ʃ] ‘**s**he’ ‘na**t**ion’ ‘fi**s**h’

[ʒ] ‘**g**enre’\* ‘mea**s**ure’ ‘beig**e**’

[h] ‘**h**ello’ ‘be**h**ind’ *‘no final position’*

*\* Borrowed words only*

# AFRICATES

*plosive + neighboring (homorganic)  
fricative*

[tʃ]

[dʒ]

but not [ks] or [ps]

# AFFRICATES

[tʃ] ‘church’ ‘nature’ ‘church’

[dʒ] ‘judge’ ‘larger’ ‘judge’

# NASALS

*soft palate is lowered and air escapes  
through nasal cavity*

[m] [n] [ŋ]

# NASALS

[m] 'more' 'camera' 'room'

[n] 'no' 'infant' 'on'

[ŋ] 'no initial position' 'singing' 'sing'

# LATERAL

*airflow around the sides of the tongue*

[l] [ɫ] (allophones) of /l/

[l] - pre-vocalic

[ɫ] - post-vocalic



# LATERAL

[1] ‘live’ ‘pulling’ ‘no final position’

[ɫ] ‘no initial position’ ‘multi’ ‘pool’

# APROXIMANTS

*one articulator moves close to another, but not so close as to cause friction or to stop airflow*

/r/\* - [ɹ] [ɻ] (allophones)  
[j] [w]

\* In the IPA, /r/ refers to a trill, which does not exist in GA (General American) English

# APROXIMANTS

/r/ 'red' 'around' 'car'

[j] 'yes' 'few' 'day'\*

[w] 'wood' 'hallway' 'bow'\*

\* *diphthongs*

# TAP / FLAP

*one articulator rapidly touches  
another*

[ɾ]

# TAP / FLAP

[ɾ] ‘to’\* ‘water’ ‘got’\*

\* Only in connected speech

# PLACE OF ARTICULATION

# BILABIAL

[p] [b]

[m]

[w]

# LABIODENTAL

[f] [v]



# DENTAL

[θ] [ð]

# ALVEOLAR

[t] [d]

[n]

[ɾ]

[s] [z]

[l] [ɭ]\*

\* In [ɭ], the back of the tongue is also raised towards the soft palate (velum)

# RETROFLEX

*/r/*

# PALATAL

[j]

[ʃ] [ʒ]

(IPA - *postalveolar*)

[tʃ] [dʒ]

(palatal-alveolar)

# VELAR

[k] [g]

[ŋ]

# GLOTAL

[h]

# NAMING CONSONANTS:

(Voicing)

+

Place of Articulation

+

Manner of Articulation

# NAMING CONSONANTS:

Voiceless bilabial plosive:

[p]

Voiced dental fricative:

[ð]

Palatal approximant:

[j]



# NAMING CONSONANTS:

Voiced alveolar plosive:

[d]

Velar nasal:

[ŋ]

Retroflex approximant:

/ɻ/

NAME THESE:

[p]

Voiceless bilabial plosive

[g]

Voiced velar plosive

[tʃ]

Voiceless alveolar-palatal affricate

NAME THESE:

[n]

Alveolar nasal

[w]

Bilabial aproximant

[h]

Glotal fricative