

# THE INTERNATIONAL PHONETIC ALPHABET (revised to 2005)

## CONSONANTS (PULMONIC)

### NUMBER CHART

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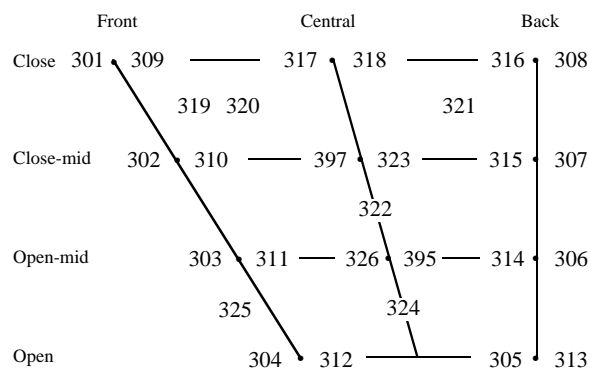
	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	101 102		103 104			105 106	107 108	109 110	111 112		113
Nasal	114	115	116			117	118	119	120		
Trill	121		122						123		
Tap or Flap		184	124			125					
Fricative	126 127	128 129	130 131	132 133	134 135	136 137	138 139	140 141	142 143	144 145	146 147
Lateral fricative			148 149								
Approximant		150	151			152	153	154			
Lateral approximant			155			156	157	158			

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

## CONSONANTS (NON-PULMONIC)

Clicks		Voiced implosives		Ejectives	
176	Bilabial	160	Bilabial	401	Examples:
177	Dental	162	Dental/alveolar	101	Bilabial
178	(Post)alveolar	164	Palatal	+ 401	Dental/alveolar
179	Palatoalveolar	166	Velar	103	Velar
180	Alveolar lateral	168	Uvular	+ 401	Alveolar fricative

## VOWELS



Where symbols appear in pairs, the one to the right represents a rounded vowel.

## OTHER SYMBOLS

169	Voiceless labial-velar fricative	182 183	Alveolo-palatal fricatives
170	Voiced labial-velar approximant	181	Alveolar lateral flap
171	Voiced labial-palatal approximant	175	Simultaneous $\int$ and $\chi$
172	Voiceless epiglottal fricative		
174	Voiced epiglottal fricative		Affricates and double articulations can be represented by two symbols joined by a tie bar if necessary.
173	Epiglottal plosive		

433 (509)

## SUPRASEGMENTALS

501	Primary stress	
502	Secondary stress	
503	Long	$eː$
504	Half-long	$eˑ$
505	Extra-short	$e̚$
507	Minor (foot) group	
508	Major (intonation) group	
506	Syllable break	$.i.ækt$
509	Linking (absence of a break)	

DIACRITICS Diacritics may be placed above a symbol with a descender, e.g. 119 + 402B

402A	Voiceless	$\underset{◌}{n} \underset{◌}{d}$	405	Breathy voiced	$\underset{◌}{b̤} \underset{◌}{a̤}$	408	Dental	$\underset{◌}{t̪} \underset{◌}{d̪}$
403	Voiced	$\underset{◌}{s̰} \underset{◌}{t̰}$	406	Creaky voiced	$\underset{◌}{b̰} \underset{◌}{a̰}$	409	Apical	$\underset{◌}{t̪} \underset{◌}{d̪}$
404	Aspirated	$\underset{◌}{t}^h \underset{◌}{d}^h$	407	Linguolabial	$\underset{◌}{t̟} \underset{◌}{d̟}$	410	Laminal	$\underset{◌}{t̟} \underset{◌}{d̟}$
411	More rounded	$\underset{◌}{ɔ̞}$	420	Labialized	$\underset{◌}{t}^w \underset{◌}{d}^w$	424	Nasalized	$\underset{◌}{ẽ}$
412	Less rounded	$\underset{◌}{ɔ̟}$	421	Palatalized	$\underset{◌}{t}^j \underset{◌}{d}^j$	425	Nasal release	$\underset{◌}{d}^n$
413	Advanced	$\underset{◌}{u̟}$	422	Velarized	$\underset{◌}{t}^v \underset{◌}{d}^v$	426	Lateral release	$\underset{◌}{d}^l$
414	Retracted	$\underset{◌}{e̠}$	423	Pharyngealized	$\underset{◌}{t}^s \underset{◌}{d}^s$	427	No audible release	$\underset{◌}{d}^r$
415	Centralized	$\underset{◌}{e̞}$	428	Velarized or pharyngealized	209			
416	Mid-centralized	$\underset{◌}{e̝}$	429	Raised	$\underset{◌}{e̝}$ ( $\underset{◌}{ɹ}$ = voiced alveolar fricative)			
431	Syllabic	$\underset{◌}{n̩}$	430	Lowered	$\underset{◌}{e̞}$ ( $\underset{◌}{β}$ = voiced bilabial approximant)			
432	Non-syllabic	$\underset{◌}{e̞}$	417	Advanced Tongue Root	$\underset{◌}{e̝}$			
419	Rhoticity	327 $\underset{◌}{a}^v$	418	Retracted Tongue Root	$\underset{◌}{e̠}$			

## TONES AND WORD ACCENTS

LEVEL		CONTOUR	
512	519	Extra high	524 529 Rising
513	520	High	525 530 Falling
514	521	Mid	526 531 High rising
515	522	Low	527 532 Low rising
516	523	Extra low	528 533 Rising-falling
517	Downstep		510 Global rise
518	Upstep		511 Global fall