

**Spanish**

Sounds also found in English:

[p, b, k, g, f, θ, ð, s, z, h, tʃ, m, n, ŋ, l, r, w, j, i, e, u, o]

Spanish also uses [t, d], but unlike English, these sounds are dental (made with the tongue tip touching the teeth), not alveolar. Some dialects of Spanish also use [ɟ] or [dʒ] in place of [j].

Sounds not found in English:

[β]: voiced bilabial fricative

[x]: voiceless velar fricative

[ɣ]: voiced velar fricative

[ɲ]: voiced palatal nasal

[ʎ]: voiced palatal lateral liquid

[r]: voiced alveolar trill

[a]: low central lax unrounded vowel

Example in a word (depends on dialect):

divino

jota

legal

niño

lluvia

perro

casa

**French**

Sounds also found in English:

[p, b, k, g, f, v, ʃ, ʒ, m, ŋ, w, j, l, e, ε, ə, u, o, ɔ]

French also uses [t, d, s, z, n, l], but unlike English, these sounds are dental (made with the tongue tip touching the teeth), not alveolar. Some Canadian dialects of French also use [ɥ] in place of [u] in syllables ending with a consonant.

Sounds not found in English:

[ɲ]: voiced palatal nasal

[ʁ]: voiced uvular fricative

[r]: voiced dental trill

[ɥ]: voiced labiopalatal glide

[y]: high front tense rounded vowel

[ɥ]: high front lax rounded vowel

[ø]: mid front tense rounded vowel

[œ]: mid front lax rounded vowel

[a]: low front lax unrounded vowel

Example in a word (depends on dialect):

oignon

rouge (standard pronunciation)

rouge (some Canadian/African dialects)

lui ([lɥi])

tu

littérature (some Canadian dialects)

jeu

soeur

la

French also has nasal forms of [ɛ, œ, ɔ, ɑ] (as in the words “vin, un, bon, blanc,” respectively) that are marked by putting a ~ over the IPA symbols.

## German

Sounds also found in English:

[p, b, t, d, k, g, ʔ, f, v, s, z, ʃ, h, tʃ, m, n, ŋ, l, j, i:, ɪ, e:, ε, ə, u:, ʊ, o:, ɔ, ɑ:]

Sounds not found in English:

[ç]: voiceless palatal fricative

[x]: voiceless velar fricative

[pf]: voiceless labial affricate

[ts]: voiceless alveolar affricate

[ʀ]: voiced uvular trill

[y]: high front tense rounded vowel

[ø]: mid front tense rounded vowel

[œ]: mid front lax rounded vowel

[a]: low central lax unrounded vowel

[ɐ]: low central lax unrounded vowel

Example in a word (depends on dialect):

**ich**

**nach**

**Pfennig**

**Zimmer**

**rot**

**Kühlschrank**

**schön**

**zwölf**

**alle**

**leider** (used for “reduced-r” only)

## Japanese

Sounds also found in English:

[p, b, k, g, ʔ, ʃ, ʒ, h, tʃ, dʒ, m, n, r, j, i, e, o]

Japanese also uses [t, d, s, z, n], but unlike English, these sounds are dental (made with the tongue tip touching the teeth), not alveolar.

Sounds not found in English:

[ɸ]: voiceless bilabial fricative

[ç]: voiceless palatal fricative

[ts]: voiceless dental affricate

[dz]: voiced dental affricate

[ɰ]: voiced velar glide

[a]: low central lax unrounded vowel

[u]: high back tense unrounded vowel

Example in a word (depends on dialect):

**futari**

**hito**

**tsunami**

**zurai**

**watashi**

**anata**

**tonkatsu**

## Russian

Sounds also found in English:

[p, b, k, g, f, v, ʃ, ʒ, m, i, e, ə, u, o]

Russian also uses [t, d, s, z, n, l], but unlike English, these sounds are dental (made with the tongue tip touching the teeth), not alveolar.

Sounds not found in English:

Example in a word (depends on dialect):

[ x ]: voiceless velar fricative	xoroshij
[ ɣ ]: voiced velar fricative	ix dom (occurs at word boundaries)
[ ts ]: voiceless dental affricate	tsar
[ dz ]: voiced dental affricate	otets doma (occurs at word boundaries)
[ r ]: voiced dental trill	ruka
[ i ]: high central tense unrounded vowel	ty
[ a ]: low central lax unrounded vowel	boroda

Russian also has palatalised forms of [p, b, t, d, k, g, f, v, s, z, x, tʃ, dʒ, m, n, l, r, j] that are marked by putting a superscript [ j ] after the IPA symbols.

Slavic linguists frequently use their own notation system rather than IPA. The equivalents are as follows:

IPA Notation:	Common Slavic notation:
[ ʃ ]	[ š ]
[ ʒ ]	[ ž ]
[ ts ]	[ c ]
[ dz ]	[ ʒ ]
[ tʃ ]	[ č ]
[ dʒ ]	[ ǰ ]

Palatalised sounds are written with what looks like a small cedilla under the letter (for example, [ ʃ̣ ] ) rather than the superscript [ j ] (for example, [ s<sup>j</sup> ] ).

### Sign Languages

Signs in sign languages can be distinguished on the basis of four different articulatory parameters: Handshape, Orientation, Location, and Movement.

Examples of signs from ASL differing according to each of the parameters:

Handshape:	FAMILY	GROUP
Orientation:	NAME	SIT
Location:	FATHER	MOTHER
Movement:	I	YOU