

# Phonetics

## English pronunciation

### Learning Objectives

1. Understanding the concept of ‘Acceptable English pronunciation’
2. Knowing ‘Phonetics Transcription’ and phonemic symbols of English.
3. Understanding sound and spelling mismatch in English.
4. Identifying speech sounds of English.
5. Knowing pronunciations guidelines related to consonants, diphthongs and vowels.
6. Understand the concept of mother tongue influence

### English pronunciation

In order to speak correct English, correct pronunciation should be used, by being careful one's speech habits simple mistakes in speaking can be avoided. Learning appropriate pronunciation techniques gives one confidence to avoid common lapses and errors in speaking.

Interestingly, there is no such thing as a ‘correct pronunciation’ because there is no one right way of speaking. The pronunciation of English varies from one country to another.

### Acceptable pronunciations

There are marked pronunciation features associated with English spoken in important English speaking countries like United Kingdom, United States of America, Canada and Australia. Even within the United States there are variations between England, Scotland, Wales and Northern England. One particular accent called Received Pronunciation (RP) has come to be accepted as the standard in the United Kingdom. Thus, it is better to consider pronunciation in terms of ‘acceptable pronunciation words’ and ‘unacceptable pronunciations’ rather than correct or incorrect pronunciations. Acceptable pronunciations are clearly intelligible to all the ordinary people.

It is difficult for us to learn correct English pronunciations without learning the basics of phonetics. **Phonetics is the branch of linguistic science that deals with pronunciations. However, here the word phonetics refers to the study of English speech sounds.**

## **Basics in Phonetics**

In order to speak correct English; one should have some idea of English phonetics. However, the language has 44 speech sounds and twenty-six alphabets. This means that there is no one-to-one correspondence between the letters and sounds in English as it is in many Indian languages. This is the reason why many Indians find it difficult to learn English pronunciations.

### **What is phonetics?**

Phonetics is the systematic study of speech and the sounds of language.

Articulatory Phonetics - describes how vowels and consonants are produced or “articulated” in various parts of the mouth and throat.

Acoustic Phonetics - a study of how speech sounds are transmitted: when sound travels through the air from the speaker's mouth to the hearer's ear it does so in the form of vibrations in the air.

Auditory Phonetics - a study of how speech sounds are perceived: looks at the way in which the hearer's brain decodes the sound waves back into the vowels and consonants originally intended by the speaker.

# Phonetic Symbols

Consonants			
1	/p/	as in	pen /pen/
2	/b/	as in	big /bɪg/
3	/t/	as in	tea /ti:/
4	/d/	as in	do /du:/
5	/k/	as in	cat /kæt/
6	/g/	as in	go /gəʊ/
7	/f/	as in	four /fɔ:/
8	/v/	as in	very /'veri/
9	/s/	as in	son /sʌn/
10	/z/	as in	zoo /zu:/
11	/l/	as in	live /lɪv/
12	/m/	as in	my /maɪ/
13	/n/	as in	near /nɪə/
14	/h/	as in	happy /'hæpi/
15	/r/	as in	red /red/
16	/j/	as in	yes /jes/
17	/w/	as in	want /wɒnt/
18	/θ/	as in	thanks /θæŋks/
19	/ð/	as in	the /ðə/
20	/ʃ/	as in	she /ʃi:/
21	/ʒ/	as in	television /'telɪvɪʒn/
22	/tʃ/	as in	child /tʃaɪld/
23	/dʒ/	as in	German /'dʒɜ:mən/
24	/ŋ/	as in	English /'ɪŋɡlɪʃ/

Vowels			
25	/i:/	as in	see /si:/
26	/ɪ/	as in	his /hɪz/
27	/i/	as in	twenty /'twenti/
28	/e/	as in	ten /ten/
29	/æ/	as in	stamp /stæmp/
30	/ɑ:/	as in	father /'fɑ:ðə/
31	/ɒ/	as in	hot /hɒt/
32	/ɔ:/	as in	morning /'mɔ:nɪŋ/
33	/ʊ/	as in	football /'fʊtbɔ:l/
34	/u:/	as in	you /ju:/
35	/ʌ/	as in	sun /sʌn/
36	/ɜ:/	as in	learn /lɜ:n/
37	/ə/	as in	letter /'letə/

Diphthongs (two vowels together)			
38	/eɪ/	as in	name /neɪm/
39	/əʊ/	as in	no /nəʊ/
40	/aɪ/	as in	my /maɪ/
41	/aʊ/	as in	how /haʊ/
42	/ɔɪ/	as in	boy /bɔɪ/
43	/ɪə/	as in	hear /hɪə/
44	/eə/	as in	where /weə/
45	/ʊə/	as in	tour /tʊə/

heed, beat [i]	hut, butt [ʌ]	who'd, boot [u]
hid, bit [ɪ]	heard, Bert [ə]	hood, put [ʊ]
hayed, bait [e]	Hoyt, Boyd [ɔɪ]	Hode, boat [o]
head, bet [ɛ]	how'd, about [aʊ]	hawed, bought [ɔ]
had, bat [æ]	hide, bite [aɪ]	hot, bod [ɑ]
	hewed, butte [ju]	

**Speech organ.** **Speech organs**, or articulators, produce the sounds of language. **Organs** used for **speech** include the lips, teeth, alveolar ridge, hard palate, velum (soft palate), uvula, glottis and various parts of the tongue. They can be divided into two types: passive articulators and active articulators.

## Vowels and Consonants (en/bg)

### Classifying the Vowels Sounds of English

The classification of vowels is based on four major aspects:

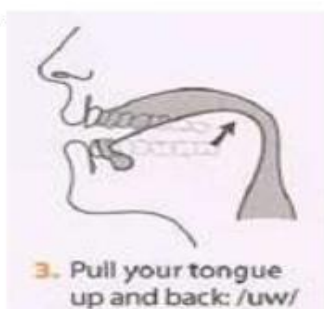
**Tongue height** - according to the vertical position of the tongue (high vowels, also referred to as close; low vowels, also referred to as open; intermediate - close-mid and open-mid)

**Frontless vs. backness of the tongue** - according to the horizontal position of the highest part of the tongue.

**Lip rounding** - whether the lips are rounded (O-shape) or spread (no rounding) when the sound is being made.

**Tenseness of the articulators** - refers to the amount of muscular tension around the mouth when creating vowel sounds. Tense and lax are used to describe muscular tension.

- Back vowels: The back of the tongue is raised in the direction of the soft palate.



- Central vowels: They are intermediate between front and back vowels.

### Classifying the Consonants Sounds of English According to the Manner and Place of Articulation

According to the manner of articulation (how the breath is used) the consonants are: stops, also known as plosives, fricatives, affricates, nasals, laterals, and approximants. Nasals, laterals and approximants are always voiced; stops, fricatives and affricates can be voiced or unvoiced.

**Bilabial:** where lips come together as in /p-b/. examples are: /bat/, /pat/

2. **Labio-dental:** where lower lip and the upper teeth come together as in /f-v/ examples are: /fan/, /van/

3. **Dental:** where tip of the tongue meets the upper teeth as in /š – ž/

4. **Alveolar:** where tip touches alveolar ridge as in /t-d,s-z,n,l,r/ examples are: /tap/, /dip/ and /zip/ etc.

5. **Palato-Alveolar:** requires two points of contact: tip close to the alveolar ridge which front of the tongue is concave to the roof of the mouth as in /š – ž, tʃ – dʒ/. Examples are: /ship/, /chip/ and /jug/

6. **Palatal:** front of the tongue approximates to the hard palate. It is possible to have palatal plosives, fricatives, laterals and nasals but in English only palatal sound is voiced, semi-vowel /j/. as in /yes/

7. **Velar:** where back of the tongue meets the soft palate. In English, we have four velars as /k,g,ŋ,w/. Examples are: /kick/, /whip/ etc.

		MANNER	VOICING	PLACE						
				Bilabial	Labiodental	Interdental	Alveolar	Palatal	Velar	Glottal
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)	

The actual sound produced, such as a simple vowel or consonant sound is called phone.

Examples of words having Different letters representing same sound

sound	Examples
/S/	<u>S</u> ee, <u>c</u> ensor, <u>miss</u>
/SH/	<u>Sh</u> oe, <u>ch</u> ef, <u>men</u> tion, <u>prec</u> ious, <u>ten</u> sion, <u>pass</u> ion
/Z/	<u>Z</u> oo, <u>Se</u> ason
/K/	<u>K</u> ill, <u>ch</u> emistry, <u>call</u> , <u>sick</u>
/EE/	<u>Me</u> et, <u>key</u> , <u>deal</u> , <u>se</u> ize, <u>re</u> cast
/OO/	<u>Zoo</u> , <u>mov</u> ie, <u>sou</u> p, <u>true</u>
/AH/	<u>Mar</u> ket, <u>fast</u> , <u>clerk</u> , <u>aunt</u>

Example -02

Examples of words having same letters Representing Different sounds.

Letters	Examples	
/S/	<u>S</u> ell, <u>bus</u> y, <u>pleas</u> ure, <u>pens</u> ion	
/T/	<u>T</u> ell, <u>men</u> tion, <u>cult</u> ure	
/CH/	<u>Ch</u> ef, <u>ch</u> emical, <u>rich</u>	
/E/	<u>P</u> et, <u>de</u> cent, <u>de</u> cay	

## Phonetic Transcription

Phonemic symbols of English are a reliable guide to the English pronunciation. It is, thus, the writing of language by means of separate symbol for every sound. A phonemic symbols or pronunciations symbol represents each English sound. As the letters of English Alphabet can be poor guide to pronunciation, it is advisable to learn the phonetic symbols of English because these symbols are reliable guide English pronunciation. Knowledge of these symbols is useful in referring to a dictionary to find out a pronunciation of any key word. Every good dictionary contains a list of these pronunciation symbols. Phonetic transcription can be defined as a kind as a kind of alphabetical writing in which each letters represent at least one sound.

## Consonant sounds

A consonant sounds may be defined as a speech sounds that is produced with stoppage of air. For example to say word 'paper' our lips try to stop air from passing through while producing the sound 'p' . the voice or breath is consonants is partially hindered by the tongue, teeth , lips or other organs of articulation. There are 24 consonants in English. These consonant sounds are classified according to the nature of constriction as plosives, affricates, nasal consonants, lateral consonants and fricatives.

## Consonants symbols

Phonemic symbols		Examples
1	p	Paper, pipe plastic, upper, accept, couple cup ,cap
2	B	Bulb, base, absorb , carbon, cable, mob, cab
3	t	table, start, top, pot, take, cat
4	d	Design, data, develop, crude, tend, blend, doll
5	k	Kick, cast, chemist, accurate, act, block,
6	g	Give, graphite, ago, against, diagram, organic
7	tʃ	Chance, rich, beach, discharge, feature, launch
8	dʒ	Judge, adjust, bridge, magic, charge
9	f	Fast, feature, filter, flash, draft
10	V	Very, variant, velocity, vertical, give
11	θ	Theory, thermal, thrust, faith, both, earth,
12	σ	Brother, gather, feather, further, mother
13	s	Simple, sea, mass, ask, assembly
14	ʃ	Shift, pressure, ash, nation, crush, emission
15	z	Zero, design, physical, positive, result, busy
16	3	Vision, pleasure, treasure, leisure, measure
17	m	Machine, emission, automatic,
18	n	New, number, anode,
19	ŋ	Evening, bearing, distinguish, building
20	h	Handle, hardware, heavy, height
21	l	Level, call,
22	r	Role, red, correct
23	w	Water, weaver, wonder
24	j	Yes , you, year, your

Table of 30 speech sounds in English and their phonetic symbols

Symbol	Sound Example	Symbol	Sound Example
p	<u>b</u> ump	m	<u>m</u> ore
b	<u>b</u> oy	ŋ	<u>sing</u>
t	<u>s</u> top	r	<u>r</u> ake
d	<u>d</u> oor	l	<u>l</u> emon
k	<u>s</u> ky	f	<u>f</u> ever
g	<u>g</u> o	v	<u>v</u> ery
s	<u>s</u> ign	w	<u>w</u> hite
z	<u>z</u> oo	j	<u>y</u> es
ʃ	<u>sh</u> ine	h	<u>h</u> ow
ʒ	<u>meas</u> ure	i	<u>s</u> ee
ə	<u>th</u> anks	æ	<u>a</u> nd
ð	<u>th</u> ey	ɪ	<u>s</u> in
tʃ	<u>ch</u> ain	ə	<u>a</u> live
dʒ	<u>j</u> ewel	ʌ	<u>u</u> p
n	<u>n</u> o	ʊ	<u>c</u> ould

There are 20 vowel sounds. Vowel sounds are classified as pure vowels and diphthongs. There are 12 pure vowels and eight diphthongs. Pure vowels are further classified as long vowels and short vowels.

#### Long vowels symbols

	Phonemic symbols	examples
1	i:	Easy, feel, free, seize, ceiling
2	u:	Shoe, fool, true, coup, truth
3	ɜ:	Firm, birth, hurt, curt, curl, burn
	a:	Art, farm, part, fast, aunt
	ɔ:	Fought, port, sport, form, sought

#### Short vowels symbols


	Phonemic symbols	examples
1	e	Pet, said, led, men
2	ɒ	Hot, shot, pot
3	ʌ	Hut, shut, cut, blood
4	æ	Hat, cat, bat



5	ə	Ago, about, announce
	u	Wood, food, book

## American English short vowel sounds

SOUND	IPA	KEY WORD
short a:	/æ/	cat: /kæt/
short e:	/ɛ/	bed: /bɛd/
short i:	/ɪ/	sit: /sɪt/
short o:	/ɑ/	top: /tɑp/
short u:	/ʌ/	sun: /sʌn/



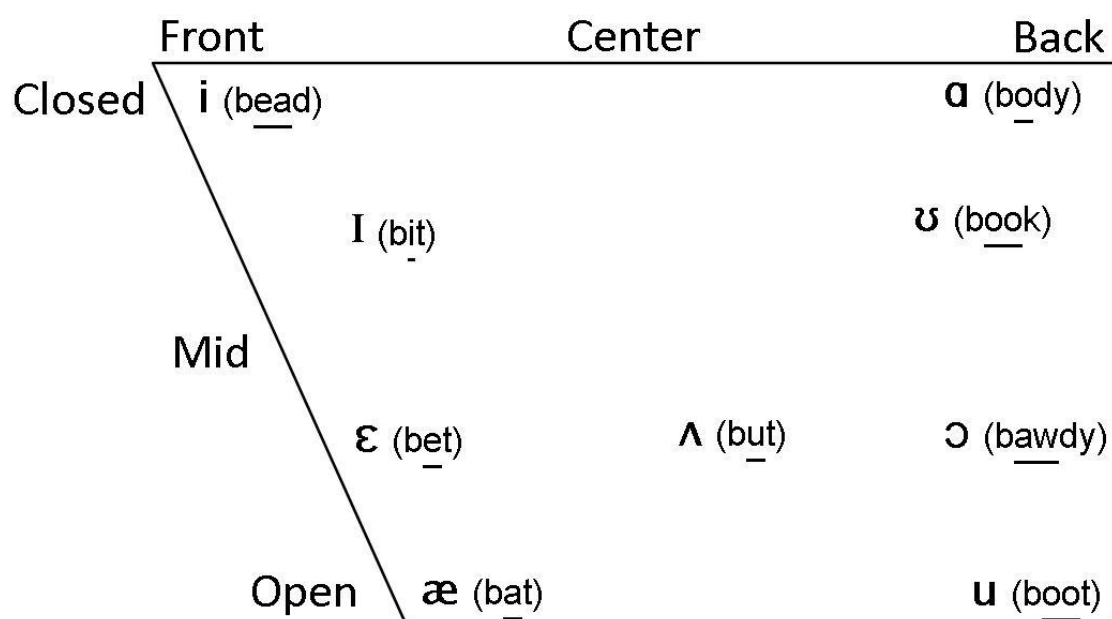
i: sheep	ɪ sh <u>i</u> p	ʊ g <u>oo</u> d	u: sh <u>oo</u> t
e b <u>e</u> d	ə teach <u>e</u> r	ɜ: b <u>ir</u> d	ɔ: d <u>oo</u> r
æ c <u>a</u> t	ʌ u <u>p</u>	ɑ: f <u>a</u> r	ɒ o <u>n</u>

# CONSONANTS (PULMONIC)

	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b		t d			ʈ ɖ	c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ	n			ɳ	ɲ	ŋ	ɴ		
Trill	ʙ		r						ʀ		
Tap or Flap			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			

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

## Simple Vowel Phonetic Chart



## Voiced

IPA	IBM Dalsh	Example	Phonetic representation
b	B	book	bʊk
d	D	day	dɛɪ
g	G	give	gɪv
v	V	very	vɛrɪ
ð	The	them	ðm
z	Z	zoo	z u:
ʒ	Zh	vision	vɪʒʌn
dʒ	J	just	dʒʌst
l	L	look	l u: k
r	R	run	rʌn
j	Y	yes	jes
h	H	hold	həʊld
w	W	one	wʌn
m	M	male	mæɪ
n	N	name	Neɪm
ŋ	Ng	sing	sɪŋ

I: READ	I SIT	ʊ BOOK	u: TOO
e MEN	ə AMERICA	ɜ: WORD	ɔ: SORT
æ CAT	ʌ BUT	ɑ: PART	ɒ NOT

Problem sounds and differences in English

### 1. Sound and Spelling Mismatch

Look at the words below

Chef, chemistry, movie, soup, true, character, busy, nature, sign

Notice some discrepancies I their spelling and sounds?

There are many words in the English language where the spellings may not match with their pronunciation. The reason for this is galore.

### **Pronunciations guidelines**

Following spelling too closely may result in mistakes while pronouncing consonant sounds. Remember the following simple guidelines.

1. The spelling may confuse you because it has three different sounds. **ʃ**, **k** and **S**.

#### **CH pronounced as ʃ**

Examples..chain, chair, chairman, chalk, chamber, cherish, champion, preach

#### **2. CH pronounced as 'k'**

Character, cholera, chord, chorus, chromatic, chronic,

#### **2. Ch pronounced as a 's'**

Chaffer, chef, charin, chiffon, chauvinist, chivalry,

#### **4.G pronounced as g gadget, gallant, galaxy,**

#### **5. G pronounced dʒ -cage, gelatin, gem, gender, gene, general.**

#### **6. G pronounced as a ʒ -Firm, birth, hurt, curt, curl, burn**

#### **7. 'T' pronounced as a ʃ -nature, future, culture,**

#### **8. 'S' pronounced as a z- busy, these, rays, lease, cause, because**

Minimal pair- A minimal pair is a group of words that differ from each other only in one sound. Like the words 'fill' and 'till' differ only in one consonant sound but they mean different things. **Ship-sip, said-shed, so-show, sank-shank, seal-zeal**

### **Exercise**

1. Explain what 'acceptable English pronunciation' is.
2. Describe 'phonemic transcription and phonetic symbol of English.
3. Discuss English speech sounds.
4. Describe pronunciation guidelines related to consonants, diphthongs and vowels.
5. Write short note on the following.

1. Phonetic transcription, 2. English Consonants 3. Vowel sounds 4. Diphthongs.