## THE BASES OF ENGLISH PHONETICS

## THE PRODUCTION OF SPEECH SOUNDS



- Copy the pictures and translate the words


Sounds and Symbols:

| i: | I | U | $\mathbf{u}$ : | $1 \boldsymbol{}$ | eI |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| e | ə | ə: | 3: | ひə | OI | əひ |  |
| æ | $\boldsymbol{\Lambda}$ | a: | D | еә | aI | aU |  |
| p | b | t | d | t $\int$ | d3 | k | g |
| f | V | $\theta$ | ठ | S | Z | J | 3 |
| m | n | J | h | 1 | r | W | j |

## VOWEL SOUNDS

| Monophthongs | [1], [e], [æ], [^], [D], [0], [ə], [a.], [J.], [ə.] |
| :---: | :---: |
| there is no change in the position of the organs of speech | fit, pet, lad, cup, hot, put, letter, card, lord, firm |
| Diphthongs <br> there is a change in the position of the organs of speech - a glide from one vowel to another |  plate, kite, voice, rose, mouse, near, fair, lure |
| Diphthongoids there is a slight change in the positions of the organs of speech | [i:], [u:] feed, food |

When the schwa sound is added to the diphthongs，a triphthong is formed： ［eェə］（player），［aェə］（fire），［əェə］（royal），［əชə］（lower），［aひə］（power）．

There is a glide from one vowel to another and then to a third one without interruption．

Vowels can be also classified according to the following characteristics: vowel height the highest point of the tongue in relation to the roof of the mouth (high [i:], mid [e], and low [æ])
vowel location - the section of the tongue that is raised during the production of the vowel (front [i:], central [ə], and back [ p$]$ ), and lip position - rounded or unrounded (rounded [ u ] and unrounded [ $\boxminus \mathrm{e}]$ ).

Vowel length is also a phonemic feature in English (e.g. fit and feat).
English vowels are traditionally divided into long ([i:], [u:], [ə:], [a:], [ə:]) and short ([r], [u], [^], [æ], [ə], [e], [d]).

The length of a vowel also depends on the phonetic context: if a vowel is followed by a voiced consonant, it is slightly longer than when it is followed by a voiceless consonant: the [i:] sound in feed is a bit longer compared to the [i:] sound in feat. Moreover, vowels are normally longer before sonorants and at the end of words than in other positions: firm, fee.

## CONSONANT SOUNDS

Depending on the manner of articulation, consonant sounds can be classified in the following way:

Plosives
there is a complete blockage of the airstream followed by its subsequent sudden release
Fricatives
there is a small space through which the airstream is able to escape
[p], [b], [t], [d], [k], [g]
pet, bet, to, do, cot, got
[f], [v], [s], [z], [ $\theta$ ], [ð], [f], [3], [h]
fan, van, soon, zoom, thin, this, ship, treasure, hot

## CONSONANT SOUNDS

Depending on the manner of articulation, consonant sounds can be classified in the following way:

| Affricatives <br> there is a blockage of the airstream <br> at the start, but then it is released <br> slowly | $[\mathrm{t}]],[\mathrm{d} 3]$ <br> chin, gin |
| :--- | :--- |
| Nasal sonorants <br> the sound passes through the nasal <br> cavity | $[\mathrm{m}],[\mathrm{n}],[\mathrm{y}]$ <br> might, night, song |
| Medial sonorants <br> the airstream passes by the central <br> part of the tongue | $[\mathrm{w}],[\mathrm{r}],[\mathrm{j}]$ <br> will, red, yet |
| Lateral sonorant <br> the airstream passes by the sides <br> of the tongue | $[\mathrm{ll}]$ |
| love, hill |  |

## The Consonants of English

The following diagram gives an overview of the consonants of English for both Received Pronunciation (standard British English) and General American (standard American English).

|  | ¢ <br> $\frac{0}{0}$ <br> ¢ <br> $\bar{\omega}$ |  | \# | \% <br> 0 <br> \% <br> \% |  | ¢ | $\frac{\stackrel{2}{0}}{>}$ | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Unvoiced (-V) <br> Voiced (+V) | $-V+V$ | $-V+V$ | $-V+V$ | $-V+V$ | $-V+V$ | $-V+V$ | $-V+V$ | $-V+V$ |
| Stops (Plosives) | p b |  |  | $t \mathrm{~d}$ |  |  | k g |  |
| Fricatives |  | f $v$ | $\theta$ ठ | s z | $\int 3$ |  |  | h |
| Affricates |  |  |  |  | ts ds |  |  |  |
| Nasals | m |  |  | n |  |  | $\eta$ |  |
| Lateral (approximant) |  |  |  | 1 |  |  |  |  |
| Approximant | w |  |  | r |  | j | w |  |

The Consonants of RP (Received Pronunciation) \& GA (General American)

## CONSONANT SOUNDS

English consonant sounds can be also voiced [b], [d], [g], [v], [z], [ð], [z], [d3], [m], [n], [n], [w], [r], [j], [l] and voiceless [p], [t], [k], [f], [s], [ $\theta$ ], [ []], [t]], [h].
For voiced consonants, the vocal cords vibrate, and there is no vibration when voiceless consonants are pronounced.
There are voiceless and voiced pairs of some consonants, for example: [t] - [d], [k] - [g], [p] - [b], [f] — [v], [s] — [z], [ $\mathrm{\theta}]$ — [ $\mathrm{\delta}],[5]-[3],[\mathrm{t}]$ — [d3]. Such sounds are produced in the same way and by the same organs of speech (ten - den, pet - bet, fan - van, chin - gin). The only difference in their pronunciation is that we need to add or remove the voicing in the larynx.
Sounds $w$ and $y$ are sometimes called semi-vowels, because they are produced like vowels but function as consonants. They are similar to short vowel sounds, for example in yes and well.

## TYPES OF SYLLABLES

|  | 1st Open (alphabet) |  | 2nd Closed | $\begin{aligned} & \text { 3rd (vowel + 'r' } \\ & \text { (+consonant)) } \end{aligned}$ | $\begin{gathered} \text { 4th (vowel + 'r' } \\ + \text { vowel) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | [ei ] <br> Mate, fate, name, frame. | [æ] <br> Mat, back, sack, snap. | [a:] <br> Car, star, bar, nar | [モə] <br> Hare, mare, fare, care. |
|  | E | $\begin{gathered} {[i:]} \\ \text { he, me } \end{gathered}$ | $[\mathrm{e}]$ Wet, hen, zest. | [ว:] <br> Boner, meter | [iz] <br> Here, mere, |
|  | I | [ai ] <br> File, vine, size, mice. | [i] <br> Pit, hint, flip, did. | [ $2:]$ <br> Stir, skirt. | [aiz] <br> Wire, fire, |
|  | O | [ou] <br> Hoe, vote, go, tone. | [3] <br> Mop, slop, top. | [3:] <br> Nor, for, form. | [3:] <br> Store, more, snore. |
|  | U | [ju:] <br> Blue, glue, clue, duke. | [ $\wedge$ ] <br> Dull, skull, null, up. | [ə:] <br> Slur, blur, fur, turn. | [juə] <br> Cure, manure. |
|  | Y | [ai] <br> Byte, sky, | [i] <br> Myth, mystic, | $\begin{gathered} {[\partial:]} \\ \text { Myrtle, } \end{gathered}$ | [aia] <br> Byre, tyre. |

## READING AND SPELLING RULES

## A

$A \rightarrow[\mathbf{a}:]$ before Im, If, Ive (I is silent): palm, half, calves
before ff, ft, sk, sc, sp, st, ph: staff, raft, ask, rascal, grasp, fast, photograph before nt, nd, nch, nce: slant, command, branch, stance, chance before th: path, father, rather
[er] before ste, the, nge: paste, bathe, angel
[d] after w, wh, qu: was, what, quality
[ $\mathfrak{\imath}$ :] before I + consonant (in Ik | is silent): tall, walk, salt after $w$, wh, qu before $r$ : warm, wharf, quarter

## READING AND SPELLING RULES

## O

$\mathrm{O} \rightarrow$ [əv]
at the end of words: zero, solo, photo
before II, Id, It, st, Ik (in Ik I is silent): poll, cold, bolt, most, yolk (exceptions cost, frost, lost, doll) and in comb
[u:] move, improve, whose, whom, who, two, do, to
[ə:] after w and before r: word, work, world
[ $\boldsymbol{\Lambda}$ ] before $m, n$, ve, th: come, some, stomach, money, honey, son, onion, love, glove, dove, above, mother, brother, in colour, dozen, thorough, worry

## READING AND SPELLING RULES

## I, u, ei

$\mathrm{I} \rightarrow$ [ar] before Id, nd, gh (gh is silent), mb: mild, grind, night, climb (exceptions: children, wind) in Christ, ninth, pint
$\mathrm{U} \rightarrow[\mathrm{u}]$ in bull, bush, full, pull, push, buffet, bullet, butcher, cushion, cuckoo, sugar, pudding
[^] cup, pulse, bulb
$\mathrm{ei} \rightarrow$ [eI] veil, vein, rein
[i:] ceiling, seize, receive [ar] either, neither, height

## READING AND SPELLING RULES

## eigh,ey,ee

eigh $\rightarrow$ [ex] neighbor, weigh, eight
[ar] in height (gh is silent)
ey $\rightarrow$ [er] they, grey, fey
[r] at the end of words: kidney, Sidney, Wembley [i:] in key
ee $\rightarrow$ [i:] bee, fleet, meet

## READING AND SPELLING RULES

## Ea

ea $\rightarrow$ [i:] tea, read, please
[e] before th, l(th) and sometimes before t , d : health, leather, bread, sweat, in dealt, jealous, deaf, heavy, heaven, measure, pleasure, pleasant, meant, leant, breakfast, breast [eI] before $k$ and sometimes $t$ : steak, great
[İ] real, theatre

## READING AND SPELLING RULES

ai $\rightarrow$ [er] paid, raid, claim (exceptions: plait [plæt], said [sed])
ay $\rightarrow$ [er] May, lay, play
oi $\rightarrow$ [0I] voice, noise, choice
oy $\rightarrow$ [эI] boy, envoy, employ
०० $\rightarrow$ [ $\mathbf{u}]$ before k: book, look, took, good, foot, stood, wool, wood [u:] moon, school, food
ia $\rightarrow$ [arə] dial, giant, liable
io $\rightarrow$ [aiə] lion, riot, ion
ie $\rightarrow$ [i:] believe, thief, chief
[arə] quiet, science, piety

## READING AND SPELLING RULES

au $\rightarrow$ [0:] August, naughty, launch
[a:] aunt, laugh
[d] because, cauliflower, sausage
eu $\rightarrow$ [juə] Europe
[ju:] feud, deuce, eulogy
aw $\rightarrow[\boldsymbol{0}:]$ law, paw, awe
ew $\rightarrow$ [u:] after r, l, j, ch: crew, blew, jewel, chew
[ju:] in all other positions: knew, few, dew
ui $\rightarrow$ [u:] after $r, l, j$ : fruit, sluice, juice
[ju:] in all other positions: nuisance, Buick

## READING AND SPELLING RULES

oa $\rightarrow$ [əv] boat, coat, goat
[a:] broad
air $\rightarrow$ [eə] air, hair, fair
ou $\rightarrow$ [əv] soul, shoulder, though
[av] sound, house, mouse
[u:] soup, youth, through, rouble, group, rouge
[ $\boldsymbol{\Lambda}$ ] rough, double, enough, country, southern, couple, trouble, courage, touch
[ 0 :] ought, bought, brought, fought, thought
[ $\mathbf{U}$ ] could, should, would
oor $\rightarrow$ [Ј:] door, floor
[uә] moor

## READING AND SPELLING RULES

oar $\rightarrow$ [ $\mathbf{0}:]$ board, hoarse, roar
eer $\rightarrow$ [Іә] beer, cheer, queer
eir $\rightarrow$ [eə] their, heir
ier $\rightarrow$ [İ] fierce, pierce, pier
iew $\rightarrow$ [ju:] view, review, interview
ear $\rightarrow$ [eə] bear, wear, pear
[Іә] hear, ear, near
[ə:] before d, n, l, th, ch: heard, learn, pearl, earth, search
ower $\rightarrow$ [avə] tower, flower, power

## READING AND SPELLING RULES

$c \rightarrow$ [s] before e, i, y: cent, city, cycle
[k] in other cases: cat, cold, cross
$g \rightarrow[\mathrm{~d} 3]$ before e, i, y: gentle, gist, gym, page (exceptions: give, get)
[g] in other cases: bag, great, language
$x \rightarrow[g z]$ before a stressed vowel: exam, example, exist
[ks] in all other positions: box, oxen, fixed
$s \rightarrow[s]$ at the beginning of words, before and after voiceless consonants, and after $u$ :
space, coast, glimpse, must, us, bus
[z] in the intervocalic position: visit, nose, rose

## READING AND SPELLING RULES

$j \rightarrow[d 3]$ jam, jazz, jet
sh $\rightarrow[J]$ ship, leash, marshmallow
$\mathrm{wh} \rightarrow[\mathrm{w}]$ (unless followed by o) what, where, when
wh $+0 \rightarrow[\mathrm{~h}]$ whole, who, whose
ch $\rightarrow[t 5]$ church, chair, children
[J] machine, moustache, parachute (in French borrowings)
[k] chemistry, scheme, character, school, stomach (in some words of Greek origin)
tch $\rightarrow[\mathrm{t}]$ ] match, catch, fetch
$c k \rightarrow[k]$ lock, clock, jacket
$\mathrm{ng} \rightarrow[\boldsymbol{n}]$ in the final position: ring, song, sing
[ $\boldsymbol{\eta} \boldsymbol{g}$ ] English, finger, single (in the middle of words) +longer, longest, stronger, strongest

## READING AND SPELLING RULES

nk $\rightarrow$ [ $\boldsymbol{\eta k} \mathrm{k}]$ rink, bank, think
$n c \rightarrow[\eta k]$ uncle
$w r \rightarrow[r]$ write, wren, writhe
$r h \rightarrow[r]$ rhyme, rhythm, rhapsody
$\mathrm{mb} \rightarrow[\mathrm{m}]$ climb, lamb, plumber
$m n \rightarrow[m]$ autumn, hymn, column
gh $\rightarrow[-]$ at the end of words: sigh, high, thigh
[g] at the beginning of words: ghastly, ghost, ghee
ght $\rightarrow$ [ t$]$ night, light, height
th $\rightarrow[\boldsymbol{\theta}]$ at the beginning and at the end of meaningful words: think, bath [ð] in the middle of meaningful words and in function words: with, this, bathe

## READING AND SPELLING RULES

$\mathrm{gn} \rightarrow[\mathrm{n}]$ sign, foreign, gnome
sl $\rightarrow$ [I] island, aisle, isle
ps $\rightarrow[s]$ in words of Greek origin: psalm, psychology, pseud
bt $\rightarrow$ [t] debt, doubt
qu $\rightarrow[k w]$ quest, quince, quick
que $\rightarrow[k]$ at the end of words: unique, antique
kn $\rightarrow$ [ n$]$ knee, know, knight
$\mathrm{ph} \rightarrow$ [f] phrase, geography, metaphor
sten $\rightarrow$ [sn] listen, fasten, chasten
$g u(e) \rightarrow[g]$ at the beginning and at the end of words:guest, guard, dialogue
[gw] in the middle of words: language, linguistics, distinguish
$y \rightarrow[j]$ before a vowel: yes, yet, year
[r], [ə:], [aI] hymn, myrtle, rhyme

English spelling is irregular and is characterized by various exceptions to the rules. Because of the influence of the French language, a lot of French orthographic conventions were adopted.

There are also borrowings from other languages, such as Greek, Latin, Italian, etc. Also, while pronunciation has changed a great deal over the past few centuries, the spelling system has remained approximately the same.

## According to the reading and spelling rules, in the following commonly used words, the letters in brackets are usually not pronounced:

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clim(b), com(b), dum(b);
mus(c)le;
han(d)kerchief, san(d)wich, We(d)nesday;
champa(g)ne, forei(g)n, si(g)n;
bou(gh)t, cau(gh)t,ou(gh)t, thou(gh)t; tau(gh)t
dau(gh)ter, hei(gh)t, hi(gh), li(gh)t, mi(gh)t, nei(gh)bour,
ni(gh)t, ri(gh)t, strai(gh)t, throu(gh), ti(gh)t, wei(gh)t;
w(h)at, w(h)en,w(h)ere, w(h)ether, w(h)ich,w(h)ip,w(h)y;
(h)onest, (h)onour, (h)our;
(k)nee, (k)nife, (k)nob, (k)nock, (k)now;
ca(l)m, cou(l)d, ha(l)f, sa(l)mon, shou(l)d, ta(l)k, wa(l)k,
wou(l)d;
autum(n), hym(n);
(p)neumatic, (p)sychiatrist, (p)sychology, (p)sychotherapy,
(p)terodactyl;
cu(p)board;
i(r)on (British pronunciation);
i(s)land, i(s)le;
cas(t)le, Chris(t)mas, fas(t)en, lis(t)en, whis(t)le;
(w)rap, (w)rite, (w)rong;
(w)ho, (w)hose, (w)hole
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Other unusual spellings:
area ['eərıə]; bicycle ['barsskal];
biscuit ['brskrt]; blood [b|^d];
brooch [brout]];
business ['biznəs];
Europe ['jvərəp];
foreign ['formn];
friend [frend];
fruit [fru:t]; heard [he:d]; heart [ha:t]; juice [d3u:s];
minute ['minət]; moustache [mə'sta: $]$ ];
once [w^ns];
one [wan];
two [tu:];
woman ['wumən];
women ['wImIn]

