## The 44 Sounds (Phonemes) of English

A phoneme is a speech sound. It's the smallest unit of sound that distinguishes one word from another. Since sounds cannot be written, we use letters to represent or stand for the sounds. A grapheme is the written representation (a letter or cluster of letters) of one sound. It is generally agreed that there are approximately 44 sounds in English, with some variation dependent on accent and articulation. The 44 English phonemes are represented by the 26 letters of the alphabet individually and in combination.

Phonics instruction involves teaching the relationship between sounds and the letters used to represent them. There are hundreds of spelling alternatives that can be used to represent the 44 English phonemes. Only the most common sound / letter relationships need to be taught explicitly.

The 44 English sounds can be divided into two major categories - consonants and vowels. A consonant sound is one in which the air flow is cut off, either partially or completely, when the sound is produced. In contrast, a vowel sound is one in which the air flow is unobstructed when the sound is made. The vowel sounds are the music, or movement, of our language. The 44 phonemes represented below are in line with the International Phonetic Alphabet.

## Consonants

| Sound | Common | Spelling alternatives |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| /b/ | $\begin{gathered} \mathrm{b} \\ \text { ball } \end{gathered}$ |  | $\begin{gathered} \text { bb } \\ \text { ribbon } \end{gathered}$ |  |  |  |  |
| /d/ | $\begin{gathered} \mathrm{d} \\ \mathrm{dog} \end{gathered}$ |  | $\begin{aligned} & \text { dd } \\ & \text { add } \end{aligned}$ | ed filled |  |  |  |
| /f/ | $\begin{gathered} \mathrm{f} \\ \text { fan } \end{gathered}$ |  | $\begin{gathered} \mathrm{ff} \\ \text { cliff } \end{gathered}$ | ph phone | $\begin{gathered} \text { gh } \\ \text { laugh } \end{gathered}$ | $\begin{gathered} \text { If } \\ \text { calf } \end{gathered}$ | ft often |
| /g/ | $\begin{gathered} \text { g } \\ \text { grapes } \end{gathered}$ |  | $\begin{gathered} \mathrm{gg} \\ \mathrm{egg} \end{gathered}$ | gh ghost | $\begin{aligned} & \text { gu } \\ & \text { guest } \end{aligned}$ | gue catalogue |  |
| /h/ | $\begin{gathered} \mathrm{h} \\ \text { hat } \end{gathered}$ |  | wh who |  |  |  |  |
| /j/ | $\stackrel{\text { j }}{\text { jellyfish }}$ |  | $\begin{gathered} \text { ge } \\ \text { cage } \end{gathered}$ | g giraffe | $\begin{aligned} & \text { dge } \\ & \text { edge } \end{aligned}$ | di soldier | gg exaggerat e |
| /k/ | $\begin{gathered} \mathrm{k} \\ \text { kite } \end{gathered}$ |  | c cat | ch christmas | CC acclaim | Ik folk | qu bouquet |
|  |  |  | $\begin{gathered} q(u) \\ \text { queen } \end{gathered}$ | $\begin{gathered} \text { ck } \\ \text { back } \end{gathered}$ | $\begin{gathered} \mathrm{X} \\ \text { box } \end{gathered}$ |  |  |
| /I/ | $\underset{\text { leaf }}{\mathrm{I}}$ |  | $\begin{gathered} \text { II } \\ \text { spell } \end{gathered}$ |  |  |  |  |
| /m/ | monkey | diob | $\begin{gathered} \text { mm } \\ \text { summer } \end{gathered}$ | $\begin{gathered} \mathrm{mb} \\ \text { climb } \end{gathered}$ | mn autumn | $\mathrm{Im}$ |  |
| /n/ | $\begin{gathered} \mathrm{n} \\ \text { nest } \end{gathered}$ |  | $\begin{gathered} \text { nn } \\ \text { funny } \end{gathered}$ | $\begin{gathered} \mathrm{kn} \\ \text { knight } \end{gathered}$ | $\begin{gathered} \text { gn } \\ \text { gnat } \end{gathered}$ | pn pneumonia |  |
| /ng/ | $\begin{gathered} \text { ng } \\ \text { ring } \end{gathered}$ |  | $\begin{gathered} \mathrm{n} \\ \operatorname{sink} \end{gathered}$ | ngue tongue |  |  |  |


| /p/ | $\begin{gathered} \mathrm{p} \\ \mathrm{pig} \end{gathered}$ | $(\circlearrowleft)$ | pp happy |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| /r/ | $\stackrel{r}{\text { robot }}$ |  | $\begin{gathered} \text { rr } \\ \text { carrot } \end{gathered}$ | $\begin{aligned} & \text { wr } \\ & \text { wrong } \end{aligned}$ | rh rhyme |  |  |
| /s/ | $\begin{gathered} \text { s } \\ \text { sun } \end{gathered}$ |  | ss mess ce rice | C circus se horse | SC science | ps psychology | $\begin{gathered} \mathrm{st} \\ \text { listen } \end{gathered}$ |
| /t/ | $\begin{gathered} \mathrm{t} \\ \mathrm{tap} \end{gathered}$ | En | tt batter | th thomas | ed tapped |  |  |
| /v/ | $\begin{gathered} \text { v } \\ \text { van } \end{gathered}$ |  | $\begin{gathered} \mathrm{f} \\ \text { of } \end{gathered}$ | ph stephen | ve five |  |  |
| /w/ | $\begin{gathered} \text { w } \\ \text { web } \end{gathered}$ |  | wh <br> why | quick | $\begin{gathered} 0 \\ \text { choir } \end{gathered}$ |  |  |
| /y/ | $\begin{gathered} \text { y } \\ \text { yo-yo } \end{gathered}$ |  | opinion | j hallelujah |  |  |  |
| /z/ | $\begin{gathered} \text { z } \\ \text { zebra } \end{gathered}$ |  | zz buzz se cheese | $\begin{gathered} \mathrm{s} \\ \text { has } \end{gathered}$ | $\begin{gathered} \text { SS } \\ \text { scissors } \end{gathered}$ | x xylophone | $\begin{gathered} \text { ze } \\ \text { maze } \end{gathered}$ |

Digraphs

| Sound | Common | Spelling alternatives |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| /zh/ | S treasure |  | $\begin{gathered} \text { si } \\ \text { division } \end{gathered}$ | Z azure |  |  |  |
| /ch/ | ch cheese |  | tch watch | tu future | ti question | te righteous |  |
| /sh/ | sh shark |  | ce ocean | S sure | ci special | $\begin{gathered} \text { si } \\ \text { tension } \end{gathered}$ | ch machine |
|  |  |  | sci conscience | $\begin{gathered} \mathrm{ti} \\ \text { station } \end{gathered}$ |  |  |  |
| /th/ <br> (unvoiced) | th thongs |  |  |  |  |  |  |
| /th/ (voiced) | th feather |  |  |  |  |  |  |

Short vowels

| Sound | Common spelling | Spelling alternatives |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| /a/ | a <br> cat |  | ai plaid |  |  |  |  |
| /e/ | $\begin{aligned} & \text { e } \\ & \text { egg } \end{aligned}$ |  | ea bread | u bury | ie friend | ai said | many |
|  |  |  | eo leopard | ei heifer | ae aesthetic | ay <br> say |  |
| /i/ | $\begin{aligned} & \text { i } \\ & \text { igloo } \end{aligned}$ |  | e england | women | $\begin{aligned} & \mathrm{u} \\ & \text { busy } \end{aligned}$ | ui build | $\begin{aligned} & \text { y } \\ & \text { hymn } \end{aligned}$ |
|  |  |  | ie sieve |  |  |  |  |
| /o/ |  |  | a swan | ho honest |  |  |  |
| /u/ | $\begin{aligned} & \mathrm{u} \\ & \mathrm{mug} \end{aligned}$ |  | 0 monkey | $\begin{aligned} & \hline \text { oo } \\ & \text { flood } \end{aligned}$ | ou trouble |  |  |
| /00/ | 00 book |  | $\begin{aligned} & \mathrm{u} \\ & \text { bush } \end{aligned}$ | OU could | wolf |  |  |

Long vowels

| /ā/ | ai snail | (O) | a baby | eigh weigh | aigh straight | ay <br> hay | et croquet |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | ei vein | au gauge | a-e cake | ea break | ey they |
| /ē/ | ee bee |  | $\begin{array}{\|l} \mathrm{e} \\ \mathrm{me} \\ \hline \end{array}$ | ea <br> seat | $\begin{aligned} & \text { Y } \\ & \text { lady } \end{aligned}$ | $\begin{aligned} & \text { ey } \\ & \text { key } \end{aligned}$ | oe phoenix |
|  |  |  | ie brief | $\begin{aligned} & \hline \text { i } \\ & \text { ski } \end{aligned}$ | ei receive | eo people | ay quay |
| /1/1 | spider |  | $\begin{aligned} & \text { y } \\ & \text { fly } \end{aligned}$ | igh night | ie pie | $\begin{aligned} & \text { uy } \\ & \text { buy } \end{aligned}$ | ye rye |
|  |  |  | ai aisle | is island | eigh height | i-e kite |  |
| /ō/ | $\begin{aligned} & \text { oa } \\ & \text { boat } \end{aligned}$ | $\xrightarrow{\frac{\cot }{c-c}}$ | o-e bone | 0 open | $\begin{aligned} & \text { oe } \\ & \text { toe } \end{aligned}$ | $\begin{aligned} & \text { ow } \\ & \text { low } \end{aligned}$ | ough though |
|  |  |  | eau beau | OO brooch | $\begin{aligned} & \text { ew } \\ & \text { sew } \end{aligned}$ |  |  |
| /ü/ | 00 moon |  | ew screw | ue blue | u-e flute | oe shoe | ough through |
|  |  |  | ui fruit | who | oeu manoeuvre | ou croup |  |
| $\begin{aligned} & \text { /y//ü/ } \\ & \text { (2 sounds) } \end{aligned}$ | u uniform |  | $\begin{aligned} & \text { you } \\ & \text { you } \end{aligned}$ | $\begin{aligned} & \text { ew } \\ & \text { few } \end{aligned}$ | iew <br> view | yu yule | eue queue |
|  |  |  | eau beauty | ieu adieu | eu feud |  |  |


| /oi/ | oi <br> coin |  | oy <br> boy | uoy <br> buoy |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| /ow/ | ow <br> cow |  | ou <br> shout | ough <br> bough |  |  |  |
| /ə/er <br> (Schwa <br> sound) | ladder |  | ar | ar <br> dollar | our <br> honour | or <br> doctor | i <br> dolphin <br> cactus |

$R^{\prime}$ controlled vowels

| /ã/ | air chair |  | are square | ear pear | ere where | eir their | ayer prayer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| /ä/ | ar <br> car |  | bath | au laugh | er sergeant | ear heart |  |
| /û/ | $\begin{aligned} & \text { ir } \\ & \text { bird } \end{aligned}$ | $c_{1}^{5}$ | er <br> term <br> yr <br> myrtle | ur burn | ear pearl | or word | our journey |
| /ô/ | aw paw |  | a | or fork | $\begin{aligned} & \text { oor } \\ & \text { door } \end{aligned}$ | ore more | oar board |
|  |  | $0$ | our four | augh taught | ar war | ough bought | au sauce |
| /ēə/ | ear <br> ear |  | eer steer | ere here | ier pier |  |  |
| /üə/ | ure cure |  | our tourist |  |  |  |  |



There are some letters that are used to write down sounds already represented by other graphemes. For example we use the letter c to represent the $/ \mathrm{k} /$ sound (already represented by the grapheme ' $k$ ') and the $/ s /$ sound (already represented by the grapheme 's').

| Letter |  |  |  |
| :---: | :--- | :--- | :--- |
| c | $/ \mathrm{k} /$ as in cat, cot, cup | $/ \mathrm{s} /$ as in city, cycle, cents |  |
| x | /k//s/ as in box, fox, fix | $/ \mathrm{g} / / \mathrm{z} /$ as in example, exam | /z/ as in xylophone |
| $\mathrm{q}(\mathrm{u})^{*}$ | $/ \mathrm{k} / / \mathrm{w} /$ as in queen | $/ \mathrm{k} /$ as in bouquet, marquis, cheque |  |

* the q is always paired with the letter u .

For More Information on Phonemes Visit the Dyslexia Reading Well. www.dyslexia-reading-well.com

