

The Pronsci English Spelling chart

The organisation and use of the Spelling charts for
British and American English

This document is best read with an individual size set
of your Spelling chart to hand.

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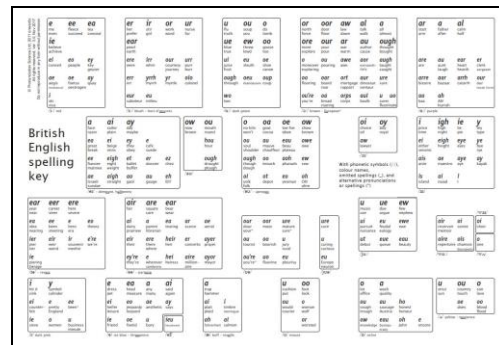
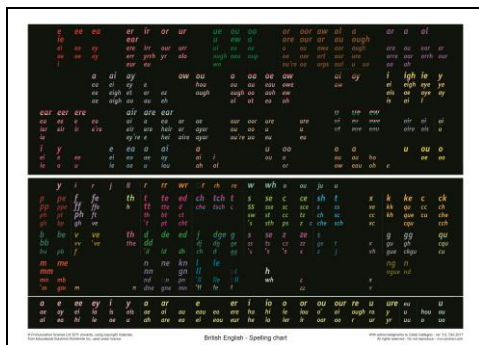
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Introduction

Pronunciation Science produces two sets of English language materials: Silent Way charts for use with beginners and PronSci charts designed for use with all other students. In this document, we describe some aspects of the American and British English Spelling charts, which are common across both sets.

Please have a chart to hand while reading. It may also be helpful to refer to the complementary information in the key to the chart ('British/American English spelling key'). When references are given to the position of words on the Word charts, the position on the Silent Way set is given before that on the PronSci set.



The organisation of the Spelling chart (Fidel)

The Spelling charts for British English and American English were called a ‘Fidel’ by Gattegno. (He first designed this tool in Ethiopia where the *fidel* means a syllabary.) Each presents a comprehensive view of the sound/spelling relationships of English. The spelling of proper names is not covered (e.g. you can’t point /lestə/ for the pronunciation of the city of *Leicester*.)

The spellings associated with each phoneme are grouped together and located in the same spatial arrangement as the sounds on each of the Rectangle charts. So the pattern of pointing for a word on one will be the same as on the other, and the two guides to *Using the Rectangle Chart* available on the [support page](#) at [www.pronsci.com](#) are equally applicable to the Spelling chart.

Sound/spelling relationships which are systemic are indicated by the use of a larger font and they are collected at the top of each block of spellings. Less common and unusual spellings are shown in a smaller font.

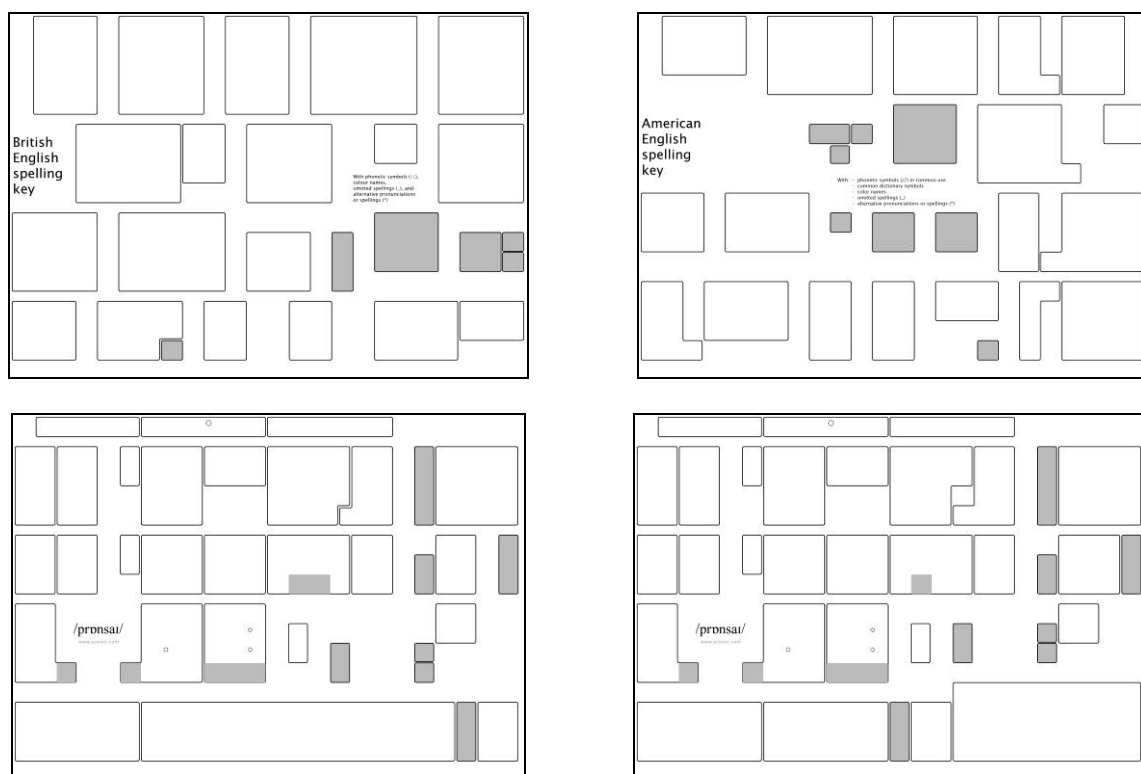
The Spelling charts contain some groups of spellings which do not correspond to a rectangle on the Rectangle chart. These are needed when a sequence of two or more sounds does not map in a 1:1 fashion onto a sequence of letters. For example:

- the initial /wΛ/ of *one* is spelled with a single letter <o> which is coloured aqua and yellow and found just above the yellow /Λ/ section; and the initial /ju:/ of *usual* is spelled with a

single <u> coloured pink and green in a separate block of spellings pronounced this way.

- the /ks/ at the end of *axe* has two letters representing it (<x> and <e>) but they do not represent /k/ and /s/ individually.
- the final <m> of *rhythm* is 'syllabic', represented with the colours for schwa + /m/.

In these situations, the letters are coloured, from top to bottom, for the two or more sounds they represent. The areas where these appear are shown in grey below (overlaid on the layout of the Keys for British English, left, and American English, right).



Vowel section above, consonant and reduced sound section below

The dashed circles that can be seen in the /r/, /t/, /n/ and /l/ boxes are for pointing the spelling of words which show syncope, described below.

The treatment of particular spellings

To explain the spelling of English words, the system is sometimes described as having 'silent' letters. However, these are often a signal about the pronunciation of the neighbouring letters, and for this reason the Spelling chart assigns to them the pronunciation of either their left or right hand neighbour. The choice of neighbour usually follows the historical development of the language and native speaker intuition about the spelling system.

For example:

- The <u> in *guard*, *build*, *biscuit* and *quay* is grouped with the preceding consonant.

- The consonants preceding the <t> in *debt*, *indict* and *receipt* are grouped with the <t>.
- The <l> of *yolk*, *walk*, *calm* and *baulk* is grouped with the preceding vowel because it appears to be a signal which transforms a 'short' vowel into a 'long' one.

In many cases, the English spelling respects the spelling of the language that the word came from: *diaphragm*, *colonel* and *salmon* come from the French, for example. On the same basis, the first letter of *knife*, *gnome*, *pneumatic* and *mnemonic* are all assigned to the following <n>.

In other cases, like *raspberry*, *cupboard* and *handkerchief*, a consonant sound has dropped out or changed because it is difficult to say. We have kept the silent consonant letter with its consonant neighbour.

Some silent letters are due to syncope, discussed separately below.

On the American English spelling chart, the flapped-t pronunciations of *water* and *butter* are shown with <t> and <tt> appearing in the green /d/ section of the chart, with a grey subscript wedge to signal that the flap is not quite identical to the consonant.

Contractions

The Spelling chart does not have an 're in the (pale yellow) schwa section, because the effect of contracting the word *are* is to create a single syllable from the two words involved. The fusion becomes a diphthong, changing the pronunciation of the preceding pronoun. So *we're* is not pronounced /wi: ə/ but /wɪə/ (homophonic with *weir*). The *they* of *they're* loses its schwa and the pronunciation becomes /ðeə/ (homophonic with *their*). The sound-spelling correspondences for these words are found in the vowel section of the chart.

A similar change happens with *you're* and *your*, but in addition to the traditional /juə/ pronunciation, we have also shown the more modern one, /jɔ:/, on the Spelling chart.

Using the Spelling chart

The Spelling chart is a complex graphic (portraying a complex reality) and, like a dictionary, it is a tool that is referred to rather than something to be explicitly taught.

Even if one is only weakly invested in each individual contact, repeated contacts with something complex is a surprisingly powerful learning paradigm. No one sets out to 'learn' their local supermarket, yet we all know how to find the products we use in all the supermarkets we go to extraordinarily well.

Students learn a great deal with very little effort just by becoming acquainted with the Spelling chart. That happens naturally if it's hung on the wall of the classroom and referred to from time

to time as sound-spelling questions arise in class. Only the teacher can point a word that is being introduced for the first time. However, thereafter, you will discover much about your students' difficulties by asking them to point rather than doing so yourself.

First use

When the Spelling chart is first presented to students, they don't always notice that it is laid out similarly to the Rectangle chart. To force this awareness, it is worth taking a minute or two to have a student pointing to colours on the Rectangle chart one by one and a student at the Spelling chart finding the set of spellings written in the same colour in response.

Then take a word, and get the two students to point it on each type of chart. For *happy* /'hæpi/ one student would point to the pale blue, buff, and dark chestnut rectangles and then the pale pink dot at the bottom of the Rectangle chart, while the other would point <h> in the pale blue area of the Spelling chart, <a> in the buff area, <pp> in the dark chestnut area and <y> in the pale pink area at the bottom of the chart.

If you are using the Spelling chart without having introduced your class to the Rectangle chart, then be sure to read the two guides to *Using the Rectangle Chart* available on the [support page](https://www.pronsci.com) at www.pronsci.com for additional information on how the sounds are organised.

Working with vocabulary on the Spelling chart

Both teachers and students can build up words on the Spelling chart.

When the teacher points, this is usually to show the pronunciation and spelling of a new vocabulary item. (Note that often it is better to introduce a word on the Rectangle chart first before building it on the Spelling chart.)

When the teacher invites students to point, it may be to help them with a word that they know how to spell already. They need to discover how the letters used generate its pronunciation—for example, that the <ie> of *variety* represents two sounds and two syllables.

When students ask to point, it is very often for this same reason.

Sometimes students need a vocabulary word that they have encountered previously, but they can't find it in the moment. The teacher can 'reveal' it by pointing to the first grapheme, waiting a few seconds, pointing to the next grapheme, waiting again, and so on until someone recognises the word that is needed. This makes a far greater impression on students' minds than simply giving them the word.

Pointing words with a variable number of syllables: syncope

Some words, spelled as if they had a strong-weak-weak or strong-weak-weak-weak stress pattern within them, have either lost one of the weak syllables completely or lose it in colloquial speech.

Examples of complete loss include *history* /hɪstri/, *camera* /kæmrə/ and *secondary* /sekəndri/; and examples of loss at speed include *library*, *boundary*, and *January*. The phenomenon usually involves a syllable preceding an /r/ sound, but not always: for example, the vowel that is lost can precede,

- a /t/ in *vegetable* /vedʒtəbəl/ and *comfortable* /kʌmftəbəl/
- an /n/ in *business* /bɪznɪs/, *prisoner* /prɪznə/ and *personal* /pɜːsnəl/
- an /l/ in *chocolate* /tʃɒklət/ and *basically* /beɪsɪkli/.

This is called ‘syncope’ /sɪŋkəpi/, one of a number of processes that Wells (1991/2008) describes as ‘compression’ of syllables. Generally speaking, speakers of British English use syncope more extensively than American English speakers.

There is no problem pointing these words on the Rectangle chart: you simply point the sounds that are actually made.

On the Word charts, there are three words in which syncope is found: **every** (5-5, 1-8), **evening** (10-3, 9-2), and **different** (2-6, 11-2). The collapse of the middle, syncopated syllable is shown by colouring its vowel letter in the same colour as the preceding consonant.

Four other words on the charts are shown in their full forms but are often compressed in normal speech: **family** (F-4), **January** (D-5), **February** (D-6), **suppose** (8-4).

On the Spelling chart, the spellings for words where the letter <e> is syncopated always exist as part of the spellings of other words. For example, the <ve> needed for *several* /sevrəl/ is present on the chart because it is needed for *give*, and the <ge> of *vegetable* /vedʒtəbəl/ because it is needed for *age*.

However adding all the possible spellings of other syncopated syllables, for example the <pa> of *separate* (adjective) or the <to> of *history*, would disproportionately increase the size of the Spelling chart. So we have instead indicated the contexts where syncope can occur by using four grey, dashed circles in the /r/, /t/, /n/ and /l/ sections. Each circle allows the teacher to indicate that any vowel letter can appear in this slot, or sometimes more than one letter, as needed for the <ou> of *favourite* /feɪvrət/ in British English.

One way to indicate the spelling is to ‘pick up’ the appropriate letter(s) from the schwa section at the bottom of the chart and to put them onto the grey, dashed circle. After doing this a few times with a class, a more economical gesture becomes possible: touch the grey circle with the pointer and at the same time simply use a finger on your other hand to show which letters are needed, always from the schwa section. The vowel letter(s) are not pronounced. (Figuratively, they lose their colour when they enter the grey circle.)

(Note that this means that there are two different ways of pointing words like *several*: using <ve> on the chart in the relevant /v/ section, or using the dashed grey circles before <r>.)

Some of the common words where you may need to use the grey circles are *separate*, *factory*, *history*, *favourite*, *chocolate*, *Catholic*, *business* and *personal*. You also need them for some of the adverbs which have the suffixes <~ly>, <~ally> and <~ully>, for example *easily* /i:zli/, *basically* /beɪsɪkli/ and *wonderfully* /wʌndəfli/.

Two words are problematic. *vegetable* can only be pointed using the <ge> in the /dʒ/ section. *comfortable* cannot be pointed with syncope; it has to be pointed in four syllables (as is one of its variant pronunciations in Wells 1991), and then the teacher can indicate that the <or> is usually not a schwa but elided completely

On the Spelling chart, we suggest that where both full and compressed pronunciations of a word are possible, you point the full version, and invite students to work on which syllable can most naturally be lost in the word. This will help them to develop a feel for how syncope functions. Working this way will make it clear that there is a system behind the way that English drops syllables.

The Key

On the Key for the Spelling chart, one or two words which exemplify each sound/spelling relationship are shown.

Some further information is noted below each box of spellings:

- the phonetic symbol that is in common use for the sound concerned, shown between forward slashes (/ /).
- common dictionary symbols for the sound, found when dictionaries don't use the International Phonetic Alphabet (IPA) but instead use ordinary letters of the alphabet to show the pronunciation of words (e.g. using the letters <ee> for the sound /i/).
- the name of the colour used on the charts for the sound.
- spellings for the sound which have not been shown on the Spelling chart, with the relevant letters of the word concerned underlined (_). These are typically obscure words or spellings (e.g. the initial <cn> of *cnidaria* pronounced /n/), or archaic pronunciations (e.g. /heɪpni/ for *half-penny*).
- alternative pronunciations or spellings for a word or sound that are not shown on the Spelling chart, marked with an asterisk (*) and with the letters of the word concerned

underlined (_). For example, *forehead* can be pronounced /fɒrɪd/, but we consider this unlikely to be needed in class.

References

Wells, J. C. (1991/2008) *Longman Pronunciation Dictionary*

If you have any questions or suggestions for improving this guide, please write to us at info@pronsci.com. We would be happy to hear from you.