

General American English Phonemes and Spellings

Consonant* Continuous Sounds & Spellings Voiceless/Voiced Sounds are Paired**		Vowel Sounds & Spellings*** Green Box = Short Vowel Pink Box = Long Vowel Orange Box = Diphthong Purple Box = R-Controlled Vowel		Consonant* Stop Sounds & Spellings**** Voiceless/Voiced Sounds are Paired**	
Phonemes	Spellings & Graphemes with Examples	Phonemes	Spellings & Graphemes with Examples	Phonemes	Spellings & Graphemes with Examples
/m/	m, mb, mn (mat, jam, summer, thumb, Autumn)	/a/	a (ant, last)	/t/	t, ed, bt (tell, fit, kitten, hooked, doubt)
/n/	n, kn_, gn (no, fin, runner, knot, gnat, sign)	/i/	i, i_e, y (in, thick, give, cylinder)	/d/	d, dd, ed (dog, add, filled)
/s/	s, ci_, ce, cy, ss , se, ps (sat, cite, cent, cyber, loss, mouse, psych)	/o/	o, a (ox, shop, wander)	/h/	h_, wh_ (ham, handle, whole)
/z/	Z, _s, _es, zz , ss, se (zip, his, wives, fuzz, dessert, fuse)	/u/	u, o, ou, â, è, î, ô (tug, won, touch, bantam, helmet, victim, wonder)	/p/	p (pen, mop, happy)
/l/	l, _le, ll , el (lid, little, doll, novel)	/e/	e, ea (get, head)	/b/	b (bin, sob, bubble)
/f/	f, ph, ff , gh, (fan, phone, cliff, laugh)	/ā/	a, a_e, ai_, _ay, eigh, ea, ei (ache, game, nail, say, eight, great, vein)	/k/	c, k, ck , ch, que (can, kit, hook, mock, chord, unique)
/v/	v, _ve (van, love)	/ī/	i_e, i, _y, igh, ie, y_e, eigh (vine, isle, shy, sigh, pie, type, height)	/g/	g, gg, gue, gu, gh (give, egg, league, guard, ghost)
/y/	y_, i (yellow, backyard, onion)	/ō/	o, o_e, oa, ow, oe, ough (old, nose, boat, show, hoe, dough)	/ch/	ch, t, ch , ti (chip, starch, feature, match, question)
/r/	r, wr_, rh (run, wrap, ferry, rhyme)	/yōō/	u, u_e, _ew, _ue (unit, use, few, cue...two sounds)	/j/	ge, j, dge , d, gi, gy (gem, wage, jug, fudge, educate, giant, gym)
/w/	w_, wh_, u (will, what, suite)	/ē/	e, _y, ee, ea, e_e, _ie_, ey, i, ei, (she, baby, eel, seam, eye, thief, key, unique, deceit)	/hw/	wh_ (when...This sound is trending out of popularity.)
/sh/	_ti_, sh, _ci_, _si_ (nation, ship, wish, magician, mission)	/oo/	u, oo, o, oul, (push, foot, woman, could)	/ks/	x (wax...two sounds)
/zh/	si, s, z (division, treasure, azure)	/ōō/	u, u_e, oo, _ew, ou, _ue, (flu, rule, loom, crew, soup, blue)	/kw/	qu_ (quote...two sounds)
/ng/	ng , n (song, monkey)	/oi/	oi, _oy (oil, toy)		
/th/	th (thin, with)	/ou/	ou_, ow, ough (out, how, bough)		
/th/	th (this, bathe)	/aw/	a, au_, o, aw, ough, augh, (ball, auto, dog, hawk, bought, taught)		
	https://journals.sagepub.com/doi/pdf/10.1207/s15548430jr3601_5	/ar/	ar, are, ear (arm, far, are, heart)		http://wp.auburn.edu/rdqgenie/home/teaching-ideas/spcat/
*Consonants are color-coded black.		/er/	er, or, ur, ar, ir, ear, our (her, work, fur, dollar, sir, earn, journal)		◦ = schwa: vowel sound in an unstressed syllable of a multi-syllable word
Voiced sounds are bolded (/zh/).		/air/	ar, are, air, ere, ear (vary, hare, fair, where, pear)		*Vowels are color-coded red.
Underscores (_) show the position of the spelling within a word or syllable.		/or/	or, ore (orbit, store)		****The green box means the spelling occurs at the end of a word or syllable and after a short vowel.
Spellings are based upon dictionary pronunciations not morphology.		/ear/	er, ear, eer, ere, ier (experience, fear, deer, here, tier)		Spellings and graphemes are listed in order by frequency. All possibilities are not listed.