

**Table 1: Phonemes to graphemes (consonants)**

	Correspondences found in many different words		High-frequency words containing rare or unique correspondences (graphemes are underlined)
Phoneme	Grapheme(s)	Sample words	
/b/	b, bb	bat, rabbit	
/k/	c, k, ck	cat, kit, duck	<i>school, mosquito</i>
/d/	d, dd, -ed	dog, muddy, pulled	
/f/	f, ff, ph	fan, puff, photo	<i>rough</i>
/g/	g, gg	go, bigger	
/h/	h	hen	<i>who</i>
/j/	j, g, dg	jet, giant, badge	
/l/	l, ll	leg, bell	
/m/	m, mm	map, hammer	<i>lamb, autumn</i>
/n/	n, nn	net, funny	<i>gnat, knock</i>
/p/	p, pp	pen, happy	
/r/	r, rr	rat, carrot	<i>write, rhyme</i>
/s/	s, ss, c	sun, miss, cell	<i>scent, listen</i>
/t/	t, tt, -ed	tap, butter, jumped	<i>Thomas, doubt</i>
/v/	v	van	<i>of</i>
/w/	w	wig	<i>penguin, one</i>
/y/	y	yes	<i>onion</i>
/z/	z, zz s, se, ze	zip, buzz, is, please, breeze	<i>scissors, xylophone</i>
/sh/	sh, s, ss, t (before -ion and -ial)	shop, sure, mission, mention, partial	<i>special, chef, ocean</i>
/ch/	ch, tch	chip, catch	
/th/	th	thin	
/th/	th	then	<i>breathe</i>
/ng/	ng, n (before k)	ring, pink	<i>tongue</i>
/zh/	s (before -ion and -ure)	vision, measure	<i>usual, beige</i>

In the last column words printed in *italic* are from the list of 100 words occurring most frequently in children's books.

Table 2: Phonemes to graphemes (vowels)

	Correspondences found in many different words		High-frequency words containing rare or unique correspondences (graphemes are underlined)
Phoneme	Grapheme(s)	Sample words	
/a/	a	ant	
/e/	e, ea	egg, head	<i>said, says, friend, leopard, any</i>
/i/	i, y	in, gym	women, busy, build, pretty, engine
/o/	o, a	on, was	
/u/ <sup>1</sup>	u, o, o-e	up, son, come	young, does, blood
/ai/	ai, ay, a-e	rain, day, make	they, veil, weigh, straight
/ee/	ee, ea, e, ie	feet, sea, he, chief	these <sup>2</sup> , people
/igh/	igh, ie, y, i-e, i	night, tie, my, like, find	height, eye, l, goodbye, type
/oa/	oa, ow, o, oe, o-e	boat, grow, toe, go, home	oh, though, folk
/oo/	oo, ew, ue, u-e	boot, grew, blue, rule	to, soup, through, two, lose
/oo/	oo, u	look, put	could
/ar/	ar, a	farm, father	calm, are, aunt, heart
/or/	or, aw, au, ore, al	for, saw, Paul, more, talk	caught, thought, four, door, broad
/ur/	ur, er, ir, or (after 'w')	hurt, her, girl, work	learn, journey, were
/ow/	ow, ou	cow, out	drought
/oi/	oi, oy	coin, boy	
/air/	air, are, ear	fair, care, bear	there
/ear/	ear, eer, ere	dear, deer, here	pier
/ure/ <sup>3</sup>			sure, poor, tour
/ə/	many different graphemes	corner, pillar, motor, famous, favour, murmur, about, cotton, mountain, possible, happen, centre, thorough, picture, cupboard... and others	

In the last column words printed in *italic* are from the list of 100 words occurring most frequently in children's books.

<sup>1</sup> See 'Frequently asked questions: How do local accents affect the teaching of phonics?' on page 17.

<sup>2</sup> The 'e-e' spelling is rare in words of one syllable but is quite common in longer words, (e.g. *grapheme*, *phoneme*, *complete*, *recede*, *concrete*, *centipede*).

<sup>3</sup> The pronunciation of the vowel sound in *sure*, *poor* and *tour* as a diphthong (a short /oo/ sound followed by a schwa) occurs in relatively few words and does not occur in everyone's speech.

**Table 3: Graphemes to phonemes (consonants)**

	Correspondences found in many different words		Correspondences found in some high-frequency words but not in many/any other words
Grapheme	Phoneme(s)	Sample words	
b, bb	/b/	bat, rabbit	lamb, debt
c	/k/, /s/	cat, cell	special
cc	/k/, /ks/	account, success	
ch	/ch/	chip	school, chef
ck	/k/	duck	
d, dd	/d/	dog, muddy	
dg	/j/	badge	
f, ff	/f/	fan, puff	<i>of</i>
g	/g/, /j/	go, gem	
gg	/g/, /j/	bigger, suggest	
gh	/g/, /-/	ghost, high	rough
gn	/n/	gnat, sign	
gu	/g/		guard
h	/h/	hen	honest
j	/j/	jet	
k	/k/	kit	
kn	/n/	knot	
l	/l/	leg	half
ll	/l/	bell	
le	/l/ or /əl/	paddle	
m, mm	/m/	map, hammer	
mb	/m/		lamb
mn	/m/		autumn
n	/n/, /ng/	net, pink	
nn	/n/	funny	
ng	/ng/, /ng+g/, /n+j/	ring, finger, danger	
p, pp	/p/	pen, happy	
ph	/f/	photo	
qu	/kw/	quiz	mosquito
r, rr	/r/	rat, carrot	
rh	/r/		rhyme
s	/s/, /z/	sun, is	sure, measure

ss	/s/, /sh/	miss, mission	
sc	/s/	scent	
se	/s/, /z/	mouse, please	
sh	/sh/	shop	
t, tt	/t/	tap, butter	listen
tch	/ch/	catch	
th	/th/, /th/	thin, then	Thomas
v	/v/	van	
w	/w/	wig	answer
wh	/w/ or /hw/	when	who
wr	/r/	write	
x	/ks/ /gz/	box, exam	xylophone
y	/y/, /i/ (/ee/), /igh/	yes, gym, very, fly	
ye, y-e			goodbye, type
z, zz	/z/	zip, buzz	

In the last column words printed in *italics* are from the list of 100 words occurring most frequently in children's books.

**Table 4: Graphemes to phonemes (vowels)**

	Correspondences found in many different words		Correspondences found in some high-frequency words but not in many/any other words
Grapheme	Phoneme(s)	Sample words	
a	/a/, /o/, /ar/	ant, was, father	water, any
a-e	/ai/	make	
ai	/ai/	rain	<i>said</i>
air	/air/	hair	
al, all	/al/, /orl/, /or/	Val, shall, always, all, talk	half
ar	/ar/	farm	war
are	/air/	care	<i>are</i>
au	/or/	Paul	aunt
augh			caught, laugh
aw	/or/	saw	
ay	/ai/	say	says
e	/e/, /ee/	egg, he	
ea	/ee/, /e/	bead, head	great
ear	/ear/	hear	learn, heart

ed	/d/, /t/, /əd/	turned, jumped, landed	
ee	/ee/	bee	
e-e	/ee/	these	
eer	/ear/	deer	
ei	/ee/	receive	veil, leisure
eigh	/ai/	eight	height
er	/ur/	her	
ere	/ear/	here	<i>were, there</i>
eu	/yoo/	Euston	
ew	/yoo/, /oo/	few, flew	sew
ey	/i/ (/ee/)	donkey	<i>they</i>
i	/i/, /igh/	in, mind	
ie	/igh/, /ee/, /i/	tie, chief, babies	friend
i-e	/igh/, /i/, /ee/	like, engine, machine	
igh	/igh/	night	
ir	/ur/	girl	
o	/o/, /oa/, /u/	on, go, won	<i>do, wolf</i>
oa	/oa/	boat	broad
oe	/oa/	toe	shoe
o-e	/oa/, /u/	home, come	
oi	/oi/	coin	
oo	/oo/, /oo/	boot, look	blood
or	/or/, /ur/	for	work
ou	/ow/, /oo/	out, you	<i>could, young, shoulder</i>
our	/owə/, /or/	our, your	journey, tour (see table 2, footnote 3)
ow	/ow/, /oa/	cow, slow	
oy	/oi/	boy	
u	/u/, /oo/	up, put	
ue	/oo/, /yoo/	clue, cue	
u-e	/oo/, /yoo/	rude, cute	
ui			build, fruit
ur	/ur/	fur	
uy			buy

In the last column words printed in italic are from the list of 100 words occurring most frequently in children's books.

To avoid lengthening this table considerably, graphemes for the schwa are not included, but see table 2.