The English Alphabetic Code

The English language has a *fascinating history* – but this has resulted in a complex **alphabetic code** for the writing system whereby the 26 letters of the alphabet represent the 44 or so smallest sounds identifiable in English speech in three complicated ways:

1. one sound (**phoneme**) can be represented by *one, two, three or four letters*: e.g. **/a/ a**, **/f/ ph**, **/igh/ igh**, **/oa/ ough**
2. one sound can be represented by *multiple spelling alternatives* (**graphemes**): e.g. **/oa/**: **o**, **oa**, **ow**, **oe**, **o-e**, **eau**, **ough**
3. one grapheme (letter or letter group) can represent *multiple sounds*: e.g. **'ough'**: **/oa/** th**ough**, **/or/** th**ough**t, long **/oo/** thr**ough**, **/ou/** pl**ough**, **/u/** thor**ough**

On this **Alphabetic Code Chart**, the units of sound (phonemes or combined phonemes) are shown in slash marks. Vowel sounds are shown in red and consonant sounds are shown in blue. The vowel sounds provide the main volume and depth in spoken words whereas the consonant sounds are generally much quieter and sometimes very high-pitched such as /s/ and /t/. Teachers need to teach the separate units of sounds carefully, avoiding the added 'schwa' or "**uh**" sound: e.g. "**sss**" not "**suh**"; "**t**" not "**tuh**".

units of sound	simple code key words	complex code + key words		graphemes or spelling alternatives which are code for the sounds			information
/a/	a **apple**						**The Synthetic Phonics Teaching Principles** Teach the **KNOWLEDGE** of the *alphabetic code*; that is, the **letter/s-sound correspondences.** Teach the **THREE CORE SKILLS**: **1. DECODING**: Sound out and **blend** all-through-the-printed-word for reading unknown words. **2. ENCODING**: Orally **segment** (identify) the sounds all-through-the-spoken-word for spelling; then select the correct graphemes AS CODE FOR the identified sounds in that particular word. **3. HANDWRITING**: Hold the pencil with the *tripod grip* and form correctly the 26 upper case and 26 lower case letters on **writing lines**.
/e/	e **egg**	-ea **head**	-ai **said again**				
/i/	i **insect**	-y **cymbals**					
/o/	o **octopus**	wa **watch**	qua **qualify**		alt **salt**		
/u/	u **umbrella**	o **son**	-ou **touch**	-ough **no thoroughfare**			
/ai/	ai **first aid**	-ay **tray**	a **table**	-ae **sundae**	a-e **cake**		
		-ey **prey**	-ea **break**	eigh **eight**		-aigh **straight**	

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/ee/	ee eel	ea eat	e emu	e-e concrete		
		-ey key	-ie chief	-ine sardines		
between /i and ee/	-y sunny	-ey monkey	-ie movie			
/igh/	-igh night	-ie tie	i behind	-y fly	i-e bike	ei eider
/oa/	oa oak	ow bow	o yo-yo	-oe oboe	o-e rope	
		-ough dough		-eau plateau		
/y+oo/	-ue barbecue	u unicorn	u-e tube	ew new shoes	eu pneumatic drill	
short /oo/	-oo book	-oul should		-u push		
long /oo/	oo moon	-ue blue	u-e flute	-ew crew		-ui fruit
		-ou soup	-o move	-ough through		
/oi/	oi ointment	oy toy				

Teach a **simple code** (*basic or transparent*) first; that is, mainly one spelling for each sound at a rate of two to five letter/s-sound correspondences per week. The simple code is *part of* the complex code – a **first step** towards teaching the alphabetic code.

Keep the simple code revised and begin to introduce **spelling and pronunciation alternatives** of the **complex code** (*extended, advanced or opaque code*) at a rate appropriate to the age, stage and ability of the learners.

APPLICATION

Provide a *cumulative* bank of words, sentences and texts at code level:

1. to model blending, segmenting for spelling, and handwriting

2. for each learner to practise his or her growing skills of blending, segmenting and handwriting increasingly independently.

Provide **cumulative**, **decodable reading books** at code level.

'Two-pronged' teaching approach

Teach a **systematic**, planned synthetic phonics programme alongside **incidental** teaching of any letter/s-sound correspondences as required for differentiation, wider reading and spelling and for the wider curriculum - for individuals, groups and whole classes.

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/ou/	ou ouch !	ow owl	-ough plough			
/ar/	ar artist	a father	alm palm	-alf half	-alves calves	
/or/	or fork	oar oars	-oor door	ore snore	-our four	
	aw dawn	au sauce	-al chalk	war wardrobe	quar quarter	
or /aw/ dependent upon regional or national accents		augh caught		ough thought		
/ur/ or can be /er/	er mermaid	ir birthday	ur nurse	ear earth		wor world
schwa /u/ or 'schwa /er/ '	-er mixer	-our humour		-re theatre	-ar collar	-or sailor
/air/	air hair	-are hare	-ear bear	-ere where		
/eer/	eer deer	ear ears	-ere adhere	-ier cashier		
/oor/	-oor poor	-ure sure				
/y+oor/	-ure pure water					

Accents

Teaching the English alphabetic code is not an 'exact science' and accents need to be taken into account at all times along with the notion of 'tweaking' (modifying) pronunciation when decoding to reach the correct target word or preferred pronunciation.

Schwa effect for reading

Modifying pronunciation also helps to raise awareness of the *schwa* effect (unstressed syllables) whereby, in reality, a sound close to /u/ is the spoken translation of the written code in words such as 'sof**a**' (sofu), 'fast**er**' (fastu), 'litt**le**' (littul), '**a**round' (uround). This is common.

Schwa effect for spelling

Be aware of the schwa effect when segmenting spoken words for spelling.

The ability to spell accurately relies on a growing awareness of **spelling alternatives** and **knowledge of spelling word banks** (words with the same spelling and sound). This knowledge takes much longer to acquire. Emphasise the process for spelling of SOUND-TO-PRINT **rather than** relying on visual memory and recall of letter order and letter names.

Decoding is the reverse process: PRINT-TO-SOUND.

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units of sound	simple code key words	complex code + key words	graphemes or spelling alternatives which are code for the sounds			
/b/	b bat	-bb rabbit	bu building			
/k/	k kit	c cat	-ck duck	ch chameleon	qu bouquet	que plaque
/d/	d dig	-dd puddle	-ed rained			
/f/	f feathers	-ff cliff	ph photograph	-gh laugh		
/g/	g girl	-gg juggle	gu guitar	gh ghost	-gue catalogue	
/h/	h hat	wh who ?				
/j/	j jug	-ge cabbage	ge gerbil	gi giraffe	gy gymnast	-dge fridge
/l/	l ladder	-ll shell				
/u+l/	-le kettle	-il pencil	-al hospital		-el camel	
/m/	m map	-mm hammer	-me welcome	-mb thumb	-mn column	

The notion of a 'code'

Root all the teaching for decoding and encoding in the **CODE** - that is, the relationship between the sounds of speech and their spelling alternatives (the graphemes). This means avoiding the following ideas:

*that letters 'say' sounds - they **say nothing**, they simply prompt **us** to generate the sounds either 'aloud' or silently 'in our heads'

*that there are 'silent' letters as in '**k**n', '**w**r', 'm**b**', '**g**n' and so on – these are simply further graphemes which ARE CODE FOR the sounds – this is consistent, for example, with saying that the grapheme '**igh**' is code for the /**igh**/ sound (we don't suggest that '**gh**' are 'silent letters' in the grapheme '**igh**')

*that the **end letter 'e'** of split digraphs **a-e**, **e-e**, **i-e**, **o-e** and **u-e** "make the preceding vowel SAY ITS NAME" – this is inconsistent with modern synthetic phonics teaching rooted in the 'alphabetic code'.

To work out 'the code', start from a whole spoken word said slowly. Orally segment the word into its sounds and map those onto the graphemes in the written word.

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/n/	n net	-nn bonnet	kn knot	gn gnome	-ne engine	
/ng/	-ng gong	-n jungle				
/ng+k/	-nk ink	-nc uncle				
/p/	p pan	-pp puppet				
/k+w/	qu queen	kw awkward				
/r/	r rat	-rr arrow	wr write	rh rhinoceros		
/s/	s snake	-ss glass	-ce palace	ce cents	ci city	cy bicycle
		-se house	sc scissors	-st- castle	ps pseudonym	
/t/	t tent	-tt letter	-ed skipped	pt pterodactyl	-bt debt	
/v/	v violin	-ve dove				
/w/	w web	wh wheel	-u penguin			

THE SUB-SKILLS OF THE THREE CORE SKILLS

DECODING SUB-SKILLS:
Without print – hear the individual sounds of a word and 'discern' the word (= **oral blending**): hear /z/ /i/ /p/, say "**zip**"; hear /k/ /oa/ /t/, say "**coat**"
With print – see the graphemes and say the sounds to automaticity; see **s**, say /s/; see **oa**, say /oa/; see **ph**, say /f/

Use **capital letter resources** – not just lower case letters. Capital letters **ARE THE SAME CODE AS** lower case letters.

ENCODING SUB-SKILLS:
Without print – hear the whole spoken word said slowly, train the learner to split the word into its constituent sounds from beginning to end (= **oral segmenting**): "**zip**" "/z/ /i/ /p/"; "**coat**" "/k/ /oa/ /t/" (with no print, you can use any sounds) -use the left hand, palm facing to tally the separate sounds onto the thumb and fingers from left to right
With print – select grapheme tiles or magnetic letters, or write the letters, to spell the sounds identified [Use *manipulatives*, such as grapheme tiles, at the **basic code** stage for young learners as they get to grips with handwriting skills – then focus on *handwriting* to spell]

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/k+s/	-x **fox**	-ks **books**	-cks **ducks**	-kes **cakes**	-cs **I love picnics.**	
/g+z/	-x **exam**	-gs **pegs**	-ggs **eggs**			
/y/	y **yawn**					
/z/	z **zebra**	-zz **jazz**	-s **fries**	-se **cheese**	-ze **breeze**	x **xylophone**
/ch/	ch **chairs**	-tch **patch**		/ch+u/	-ture **picture**	
/sh/	sh **sheep**	ch **chef**	-ti **station**	-ci **magician**	-ssi **admission**	
unvoiced /th/	th **thistle**			voiced /th/	th **there**	
/zh/	-si **television**	-s **treasure**	-z **azure** (blue)	-g **courgette**	-ge **collage**	

HANDWRITING SUB-SKILLS:
Demonstrate the correct tripod hold – for young learners say, "**Froggy legs with the log under**" – pinch the pencil with thumb and forefinger just above where the cone end slopes, make a fist and place the middle finger beneath the pencil to form the tripod hold, or grip, (small hands struggle to 'grip' fat pencils or marker pens, use regular-sized pencils)
Air write, finger-trace and copy-write graphemes **whilst saying the sound** – this is 'multi-sensory' linking sounds to shapes and handwriting the shapes (e.g. say /**ch**/ for '**ch**' – *not* /**k**/ /**h**/)
Mini whiteboards are suitable for quick-fire 'show me' activities; **for handwriting practice** – use **paper and pencil routines** sitting with good posture at desks, paper slanted, spare hand holding paper steady
BE VIGILANT for learners hooking their wrists around and writing 'above' the words on the page – ensure they write 'below' the words

Please note that this version of an Alphabetic Code Chart is not definitive. Further code may be discovered in both common and unusual words. The word '**giraffe**', for example, is common but the grapheme '**ffe**' is rare AS CODE FOR the sound **/f/**. Add **discovered code** to the chart or to the MAIN PHONICS DISPLAY WALL.
On this chart, a **grey dash** indicates that the particular letter/s-sound correspondence is **unlikely to begin a word**.
Hollow letters alert the reader to various possible pronunciations; for example, **wa** could be the code for /w+a/ as in '**wa**g', but is more likely to be /w+o/ as in '**wa**tch'.
This is a generic alphabetic code chart highlighting the vowel sounds followed by the consonant sounds. Alphabetic Code Charts can be designed to be programme-specific according to the order that the letter/s-sound correspondences are introduced and with specific **mnemonic** systems (aids to memory for the sounds and/or spellings).
Vowel sounds can be spelled with both vowel letters and consonant letters such as '**igh**', '**ow**', '**or**', '**ough**'. Teachers need to make clear when they are referring to vowel or consonant **sounds**, or vowel or consonant **letters**. For further information, please visit phonicsinternational.com

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