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Spelling and Sounds - Consonant Clusters

A consonant cluster is a group of two or more consonant letters together in a word. For example, in the word "**brilliant**", "br" is a consonant cluster, as is "ll", and also "nt". Consonant clusters are also sometimes known as "consonant blends". Focusing on consonant clusters and vowel clusters (see p.203) is useful if you want to look at some of the differences between spelling and sounds in English words.

Consonant clusters can occur at the beginning (an **initial** consonant cluster), in the middle (a **medial** consonant cluster) or at the end of a syllable (a **final** consonant cluster). For example, in the world brilliant – Bril ynt – which has two syllables, there is a consonant cluster at the beginning of the first syllable ("br"), at the end of the first syllable ("ll"), and at the end of the second syllable ("nt"). They can also occur in the middle of a syllable, for example the consonant cluster "ch" in the middle of the word "a**ch**e".

We can include consonant *digraphs* within the term "consonant clusters". A consonant digraph is where two consecutive consonant letters in the spelling of a word are used together to make a single sound. For example, in the word "**kn**ow", "kn" is a digraph which represents a single sound: n. There are also digraphs which make vowel sounds, for example, in the word "beach", "ea" is a digraph which represents a single vowel sound: ee.

There are 21 consonant *letters* in the English alphabet, and 25 consonant *sounds* in spoken English. Therefore we need some consonant digraphs to represent consonant sounds because there are more consonant sounds than consonant letters. For example, there is no single letter in English that represents the sound *sh*. We need to use a digraph – two consonant letters together – and we end up with "sh" to represent *sh*. Similarly, there is no single letter that represents the sound *th*. Therefore we need to use a digraph – two consonant letters together – and we end up with "th" to represent *th*. Confusion can occur because the digraph "th" also represents another, different consonant sound: *tt*.

Part of the reason for the existence of digraphs – where two letters make one sound – is that English is an old language, and over hundreds of years the pronunciation of different words has changed. Some sounds that used to be pronounced in words are no longer pronounced, although the spelling has remained the same. Some used to be pronounced, but aren't any more. For example, up until the mid-17th century "knife" was pronounced in Old English as a three-syllable word, with the k, the n, and the final vowel sound all heard, like this: k Ni f.

As we have seen in our study of connected speech (see p.11.1 of *Talk a Lot Elementary Handbook*), consonants don't like to rub up against each other, and elision (where we lose a consonant sound) or assimilation (where a consonant sound changes) often occur when two consonant sounds meet, to make the syllable or word easier to pronounce. So it is no surprise then that the longer the consonant cluster, the more difficult it will be to pronounce, and the more likely it will be that either elision or assimilation take place. For example, try saying: "twelfths" out loud. This word crowbars seven different consonant letters into one syllable, which in turn produces six distinct consonant sounds: T w e I f tt z! Another example of a problematic word is "crisps", which is pronounced: Krispz . Try to pronounce all of the five distinct consonant sounds (in two consonant clusters) in just one syllable. Tricky!

Learn the Clear Alphabet

Spelling and Sounds – Consonant Clusters

Generally speaking most consonant clusters are only two or three letters long. The longest initial consonant cluster can be three letters long, e.g. "spr-" in the word "**spr**int", whilst the longest final consonant cluster will be generally four letters long, e.g. "-rsts" in the word "**firsts**". Perhaps the prize for the longest consonant cluster would have to go to the word "**rhythm**", which is soley made up of consonant letters – six to be precise! However, "rhythm" cheats as a consonant cluster, because it actually has two vowel sounds – the "y" acts as the vowel sound i in the first syllable, which is stressed, and the second syllable contains an embedded schwa sound: Ri thm .

Adverbs are a group of words that can have long consonant clusters at the end, e.g. exactly. Elision is likely to occur in such a cluster, for example "exactly" will often be pronounced without the † sound, like this: i *Gza* klii rather than i *Gza* ktlii . It would be too much unnecessary effort to try to pronounce the †, sandwiched as it is between two other consonant sounds. I say *unnecessary* because the most important sound in this word is the vowel sound on the stressed syllable, the *a* sound. This sound *must* be pronounced clearly, whilst the consonant sounds are less vital to communication.

Consonant clusters can be divided into five categories:

- 1. Consonant Digraphs
- 2. Consonant Digraphs with Double Letters
- 3. True Consonant Clusters
- 4. Consonant Clusters Ending with z
- 5. Consonant Clusters in Compound Words

1. Consonant Digraphs

Some consonant clusters are *digraphs*, which are two letters together in the spelling of a word that combine to make a single sound. Note that most consonant digraphs end with the letter "**h**". (When three letters come together to form a single sound, e.g. "-tch" in the word "fetch" – which represents the sound ch – it is known as a *trigraph*.)

Here are some examples of **initial** consonant digraphs. (Note: you may wish to add your own examples in the space provided.)

digraph:	sounds like:	for example:	my example(s):
ch	ch	cheer, champion, change	
ch	sh	ch andelier, ch ampignon ¹	
ch	k	ch olera, ch rome, ch ronic	
[
gn	n	gn at, gn aw, gn ome	
			
kn	n	know, knife, knitting	

¹ Loan words from French.

Learn the Clear Alphabet

Spelling and Sounds - Consonant Clusters

ph	f	photo, pharmacy, pharaoh _	
rh	r	rhubarb, rhinoceros, rhyme _	
SC	S	science, scissors, scimitar _	
sh	sh	sheep, shine, shock, shed	
th th	tt th	thick, Thursday, thanks this, that, brother, there, the	
ts	S	tsunami ¹	
wh wh	w h	what, why, where, wheel, whip _ who, whose, whole, wholemeal _	
wr	r	writing, wrestler, wrong	
Here are some	e examples of fir	nal consonant cluster digraphs:	
Here are some digraph:	e examples of fil sounds like:		ny example(s):
	-		ny example(s):
digraph:	sounds like: ch	for example: n bea ch , coa ch , roa ch	ny example(s):
<i>digraph:</i> ch ch	sounds like: ch k	for example: n beach, coach, roach stomach	
<i>digraph:</i> ch ch ck	sounds like: ch k k	for example: m beach, coach, roach stomach black, track, pick, flock, luck	
digraph: ch ch ck gh	sounds like: ch k k f	for example: n beach, coach, roach	
digraph: ch ch ck gh mb	sounds like: ch k k f m	for example: n beach, coach, roach	

¹ This is a loan word from Japanese. In the word "**ts**ar" (from Russian) the "ts" digraph makes a tz sound: Tzar ² The digraph "gh" also contributes towards different vowel sounds, e.g. au in "b**ough**" and "pl**ough**", and can be included in various vowel clusters (see p.215).

Learn the Clear Alphabet

Spelling and Sounds – Consonant Clusters

Here are some **final** consonant digraphs which occur where the letter "r" is silent because it is helping to make a vowel sound:

digraph:	sounds like:	for example:	my example(s):
rb	b	distu rb , subu rb , rhuba rb	
rn	n	earn, turn, western, learn	
		,	
rt	†	hu rt , hea rt , a rt , sta rt , ale rt	

Just to confuse you, here's a consonant cluster where "r" *is* pronounced. This is not a digraph, because both of the letters are pronounced, but rather a true consonant cluster:

c/cluster:	sounds like:	for example:	my example(s):
ry	rii	dai ry , ee ry , dia ry , hai ry , bu ry	

2. Consonant Digraphs with Double Letters

These consonant clusters are digraphs that comprise a pair of identical letters, which make a single sound when said together. Most consonant letters can be doubled, although doubles with "h", "j", "q", "w", "x", and "y" are not natural in English. They usually occur in the middle of a word, although some, like "ff" in "cliff" come at the end. They never occur at the beginning of a word, unless the word has originated from a foreign language, for example "Ilama" from Spanish or "Lloyd" from Welsh. Here is a full list of consonant digraphs with double letters:

digraph:	sounds like:	for example:	my example(s):
bb	b	ro bb er, so bb ing, ho bb le	
СС	k	so cc er, o cc ur, stu cc o	
dd	d	pu dd ing, we dd ing, sa dd er	
ff	f	iffy, cliff, effect, off, effort	
gg	9	bo gg y, fla gg ed, bi gg er	
kk	k	tre kk ing, Tre kk er	
II	I	alluring, allied, balloon	
mm	m	su mm er, hu mm ing, i mm ature	
nn	n	ru nn er, a nn oy, a nn ouncement	
рр	р	o pp ortunity, sho pp ing, ki pp er	
rr	r	hu rr y, wo rr ied, cu rr y, so rr y	
SS	S	a ss e ss , le ss , ma ss ive	
SS	z	po ss ess	
tt	†	shutters, cottage, plotted	
VV	v	re vv ed	

Learn the Clear Alphabet

Spelling and Sounds – Consonant Clusters

3. True Consonant Clusters

"True" consonant clusters are phonetic because they are pronounced in the same way as they are spelled. For example, "br" in "**br**ead" is pronounced in the same way as the phonemes that it represents: br . In true consonant clusters we pronounce all of the sounds. Note that the consonant clusters below in **bold type** are all good examples of when the consonant sound **r** is pronounced in an English word. This is helpful to know, because so often in spoken English the letter "r" in a word is not pronounced, since it's only there to help make a vowel sound, for example in the words: "c**ar**", "m**ore**", and "y**our**".

Here are some examples of true initial consonant clusters:

c/cluster:	sounds like:	for example:	my example(s):
bl	Ы	blood, blend, black, blown	
br	br	bright, bring, brush, brilliant	
cl	kl	clear, close, clothes, clever	
cr	kr	cr y, cr ime, cr ow, cr op, cr umb	
dr	dr	drink, drop, drive, drip, dreary	
fl	fl	flannel, fly, fleece, flame, flow	
fr	fr	frighten, from, frame, France	
gr	gr	great, grape, grip, grime, grow	
pr	pr	prove, provide, pray, princess	
qu	kw	qu ite, qu een, qu ick, qu iet ¹	
scr	skr	scream, script, scram, screw	
sm	sm	sm all, sm art, sm elly, sm ooth	
st	st	stay, stop, stink, stolen, sty	
str	str	strange, stroppy, street, strict	
tr	tr	tropical, trench, train, triumph	

Here are some examples of true final consonant clusters:

c/cluster:	sounds like:	for example:	my example(s):
ly mp	lii mp	on ly , lonely, truly, rarely hu mp , bu mp , cla mp , da mp	
mpt	mpt	exempt, contempt, dreampt	
nch	nch	mu nch , lu nch , be nch , ste nch	
nd	nd	e nd , sta nd , me nd , grou nd	
ndy	n dii	wi ndy , ca ndy , ha ndy , sa ndy	
ny	nii	ti ny , mea ny	

...and here are a couple that are neither initial nor final consonant clusters:

¹ Although "qu" is technically a consonant and a vowel together, the sounds that it produces -kw – are both consonant sounds.

Learn the Clear Alphabet

Spelling and Sounds - Consonant Clusters

c/cluster:	sounds like:	for example:	my example(s):
lv	lv	salvage, delve, shelves	
ng	nj	ora ng e, arra ng e, impi ng e	

4. Consonant Clusters Ending with z

These are consonant clusters that end with the letter "s", which represents the sound z at the end of a plural noun, for example:

c/cluster:	sounds like:	for example:	my example(s):
nts	ntz	plants, accounts, rents	
rds	dz	records, birds, cards, chords	
rs	z	colours, rivers, sisters	
ts	tz	sweets, oats, boats	

5. Consonant Clusters in Compound Words

In compound words, strange consonant clusters can occur, which are not "true" consonant clusters. This is because two separate words have been joined together to make a new word, meaning that the final consonant cluster from the first word has to sit side by side with the initial consonant cluster from the second word. Here are some examples:

c/cluster:	sounds like:	for example:	the two words are:
tchb	chb	swi tchb oard	switch + board
ffh	fh	cli ffh anger	cliff + hanger
ndf	ndf	gra ndf ather	grand + father
ndbr	ndbr	grou ndbr eaking	ground + breaking

As we have seen, it is common when consonant sounds meet for elision or assimilation to take place (see also Connected Speech, p.11.4 of *Talk a Lot Elementary Handbook*). So, for example, we wouldn't pronounce the whole mouthful of consonant sounds in the middle of "groundbreaking": *Graund brei king*, because it would be too difficult in rapid speech to pronounce the final consonant cluster "-nd" next to the initial consonant cluster, "br". On the contrary, we would automatically employ elision and lose the d sound, changing the word into: "groun-breaking" – *Graun brei king* – which is far easier to pronounce.

Learn the Clear Alphabet

Spelling and Sounds - Common Consonant Clusters

A consonant cluster is a group of two or more consonant letters together in a word. They can be **initial** (at the beginning of a word), **medial** (in the middle of a word), and **final** (at the end of a word). Focusing on consonant clusters and vowel clusters (see p.203) is useful if you want to look at some of the differences between spelling and sounds in English words. Consonant clusters can be divided into five categories:

1. Consonant Digraphs (two consonant letters together make a single sound) - INITIAL:

digraph:	sounds like:	for example:	my example(s):
ch	ch	cheer, champion, change	
gn	n	gn at, gn aw, gn ome	
kn	n	kn ow, kn ife, kn itting	
ph	f	ph oto, ph armacy, ph araoh	
SC	S	science, scissors, scimitar	
sh	sh	sheep, shine, shock, shed	
th	††	thick, Thursday, thanks	
th	th	this, that, there, the	
wh	W	what, why, where, wheel, whip	
		contraction and an entering and an	
wr	r	writing, wrestler, wrong	
wr <u>FINAL:</u>	r	writing, wrestier, wrong	
	r sounds like:	for example:	my example(s):
FINAL:			
<u>FINAL:</u> digraph:	sounds like:	for example:	my example(s):
<u>FINAL:</u> <i>digraph:</i> ch	sounds like: ch	for example: bea ch , coa ch , roa ch	my example(s):
<u>FINAL:</u> <i>digraph:</i> ch ck	sounds like: ch k	<i>for example:</i> bea ch , coa ch , roa ch bla ck , tra ck , pi ck , flo ck , lu ck	<i>my example(s):</i> tou gh
<u>FINAL:</u> <i>digraph:</i> ch ck gh	sounds like: ch k f	<i>for example:</i> beach, coach, roach black, track, pick, flock, luck cough, trough, rough, enough,	<i>my example(s):</i> tou gh
<u>FINAL:</u> <i>digraph:</i> ch ck gh mb	<i>sounds like:</i> ch k f m	for example: beach, coach, roach black, track, pick, flock, luck cough, trough, rough, enough, comb, tomb, aplomb, plumb	my example(s):

2. Consonant Digraphs with Double Letters - MEDIAL:

digraph:	sounds like:	for example:	my example(s):
bb	b	ro bb er, so bb ing, ho bb le	
cc	k	so cc er, o cc ur, stu cc o	
dd	d	pu dd ing, we dd ing, sa dd er	
II	I	alluring, allied, balloon	
mm	m	summer, humming, immature	
nn	n	runner, annoy, announcement	
pp	p	o pp ortunity, sho pp ing, ki pp er	
rr	r	hu rr y, wo rr ied, cu rr y, so rr y	
ss	s	a ssess , le ss , ma ss ive	
tt	†	shutters, cottage, plotted	

Learn the Clear Alphabet

Spelling and Sounds – Common Consonant Clusters

3. True Consonant Clusters (that sound the same as they are spelled) - INITIAL:

c/cluster:	sounds like:	for example:	my example(s):
bl br cr dr fr gr pr qu scr sm st tr	bl br kr dr fr gr pr kw skr sm st tr	blood, blend, black, blown bright, bring, brush, brilliant cry, crime, crow, crop, crumb drink, drop, drive, drip, dreary frighten, from, frame, France great, grape, grip, grime, grow prove, provide, pray, princess quite, queen, quick, quiet scream, script, scram, screw small, smart, smelly, smooth stay, stop, stink, stolen, sty tropical, trench, train, triumph	
FINAL: c/cluster:	sounds like:	for example:	my example(s):
ly mp nch nd ndy ry	lii mp nch nd n dii rii	only, lonely, truly, rarely hump, bump, clamp, damp munch, lunch, bench, stench end, stand, mend, ground windy, candy, handy, sandy dairy, eery, diary, hairy, bury	
4. Consonant Clusters Ending with z (at the end of a plural noun) – FINAL:			
c/cluster:	sounds like:	for example:	my example(s):
nts rds ts	ntz dz tz	pla nts , accou nts , re nts reco rds , bi rds , ca rds , cho rds swee ts , oa ts , boats	
5. Consonant Clusters in Compound Words – (consonant clusters meet) – MEDIAL:			
c/cluster:	sounds like:	for example:	the two words are:
tchb ffh ndf ndbr	chb fh ndf ndbr	swi tchb oard cli ffh anger gra ndf ather grou ndbr eaking	switch + board cliff + hanger grand + father ground + breaking