

FIVE-LETTER WORD PATTERNS

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Excluding patterns with three or more consecutive identical letters, there are 41 different patterns for five-letter words:

	abcde
1 pair	aabcd, abacd, abcad, abcd, baacd, bacad, bacda, bcaad, bcada, bcdaa
1 triple	aabac, aabca, abaac, abaca, abcaa, baaca, bacaa
1 quad	aabaa
2 pairs	aabbc, aabcb, aacbb, ababc, abacb, acabb, abbac, abcab, acbab, abbca, abcba, acbba, caabb, cabab, cabba
1 pair,	aabab, aabba, abaab, ababa, abbaa, baaba, babaa
1 triple	

Words corresponding to most of these patterns can be readily found in unabridged dictionaries or gazetteers; in fact, there are thousands of examples for some patterns. In this article, I illustrate each pattern with a set of words exhibiting all possible alphabetic permutations.

For example, the pattern abc can be illustrated with the six words can (213), you (312), dig (132), for (123), the (321) and nub (231), where the three-digit sequences indicate the alphabetic order of the letters. In the November 1978 Word Ways, the editor gave a list of 120 words showing all alphabetic permutations of words with the pattern abcde; I extend this study to the other 40 patterns in the tables below.

In each table, the column at the far left specifies the permutation of the letters. For example, the third permutation, 1324, states that for all words in this row the a-letter in the pattern must be earliest in the alphabet, followed by the c-letter in the pattern, followed by the b-letter in the pattern, followed by the d-letter in the pattern. In the second column, for example, the basic pattern of all the words is abacd. The word every has the pattern abacd and the alphabetic permutation 1324; e (the a-letter) comes before r (the c-letter), which in turn comes before v (the b-letter), and the latest letter is y (the d-letter). Most words can be found in the Second or Third Editions of Webster's New International Dictionary of the English Language, or are inferred forms such as plurals of nouns; words labeled * are in the OED, and proper names labeled § are in the Times Index-Gazetteer.

My thanks to the editor for various additions and improvements to the tables.

abcd	aabcd	abacd	abcad	abcda	baacd
1234	Aalst§	again	chick	elope	feels
1243	Aache§	abase	enter	elute	meets
1324	eemis	every	areas	elite	oddly
1342	ootus*	Bible	clock	dined	raash
1423	llyns	event	click	going	weeks
1432	Aaron	aware	crock	aroma	weets
2134	llano	memos	eager	harsh	allow
2143	oonts	lilts	catch	kapok	boots
2314	ootby	eject	pulpy	elate	needs
2341	Ccoya	emend	circa	loyal	sooth
2413	oozes	cycad	crack	evase	upper
2431	Ootsa§	kukri	gunge	hutch	toosh
3124	oobit	paper	palps	sinus	books
3142		icing	sayso	hatch	annul
3214	oones*	piper	olios	polyp	looks
3241	oomph	rerub	truth	river	issue
3412	oopak	tutor	stash	steps	utter
3421	ootid	ozone	iodic	local	zoid
4123		sasin	ladle	label	atter
4132	V-vats	gaged	valve	sales	apple
4213	ooman	sisal	uncut	signs	otter
4231	Ooike§	title	torte	legal	goold
4312	oolak	total	spasm	sides	mooch
4321	oolie*	tithe	trite	treat	moola
	bacad	bacda	bcaad	bcada	bcdaa
1234	leper	balsa	hobby	guava	stuff
1243	never	karma	green	drama	puree
1324	cabal	serve	jiffy	plaza	snuff
1342	seven	parka	queen	stele	stiff
1423	visit	tense	trees	there	three
1432	watap	panda	troop	sided	skiff
2134	defer	known	fully	ameve	bluff
2143	civil	belie	creep	crepe	atoll
2314	robot	leave	shoot	nabob	scuff
2341	livid	fence	stood	grebe	still
2413	seder	union	walls	scene	saree
2431	timid	which	speed	piece	small
3124	color	conto	floor	costs	abyss
3142	boron	dryer	bleed	alibi	frill
3214	logos	strut	happy	Jesus	idyll
3241	inone	stunt	myrrh	muses	guess
3412	solon	peace	gaffe	vases	radii
3421	wolof	urger	senna	vises	shall
4123	lupus	gypsy	fuzzy	desks	floss
4132	cutup	crier	blood	dryly	dress
4213	jugum	jocko	lasso	basis	igloo
4231	goloe	briar	flood	motet	class
4312	state	order	passe	shyly	phoss
4321	stote	ileal	pizza	wryly	plass

abc	aabbc	aabcb	aacbb	ababc	abacb	acabb	caabb
123			aalii	Alalu	inion	eyess	
132	Aassi§			bebed	asaks	amass	maass
213	oolly	llama	Lludd	pipit	Babua	tutee	
231		ooses*		cocoa	ilial	baboo	deess
312		uure*		papal	mamba		
321		oonin*		mimic	rerde	tatoo	allee
	abbac	abcab	acbab	abbca	abcba	acbba	cabab
123	array	astas	drede	deemd	civic	dreed	salal
132	attar	algal	erses	ettle	lysyl		slyly
213	peeps	danda	ended	soots	level	stees	reded
231	erred	onion	eases	hooch	imami	setts	cerer
312	teeth	sense	Umaua	seems	tenet	skiis	queue
321	poope	Miami	tests	seeds	solos	sells	ceded
	cabba						
123	labba						
132	potto						
213	webbe						
231	motto						
312	freer						
321	apoop						
	aabac	aabca	abaac	abaca	abcaa	baaca	bacaa
123	eeler	Aadra§	puppy	abaca	fluff	geese	levee
132	iiwis	eerie	lulls	asana		Kaaba	tepee
213		hheth	peppy	daded	feoff	added	belee
231	oopod	eence	tutti	susis	emcee	reede	pedee
312			sasse	urutu	salss	error	bohoo
321			sessa	sises	spiss	osses	stott
ab	aabab	aabba	abaab	ababa	abbaa	baaba	babaa
12		eette*	cocco	ajaja	Essee	unnun	reree
21			tatta	sisis		esses	