

The following information is taken from *Developmental Phonological Disorders*, by Dr Caroline Bowen.

Table 1: *Expressive Language Development.*

Age	Language progress
By 6 months	Variety of cries, sounds and imitations
By 12 months	Babbles Consonant and Vowel (eg. 'Bababababa') Says one or two words Combines sounds with gestures (points and says 'uhuh')
By 18 months	says 3 to 10 words or more Uses words to communicate
By 24 months	Uses 50 or more words Combines two words (eg. 'car go', 'more juice', 'big truck')
By 30 months	uses 'my', 'me' and 'mine' Recites or sings bits of rhymes, songs or commercial
By 36 months	uses 1000 or more words Asks and answers simple questions Carries out a simple conversation.

Table 2: *How well words can be understood by parents*

Age	Intelligible utterances
By 18 months	25%
By 24 months	50 – 75%
By 36 months	75 – 100%

Table 3: *Normal phonetic development*

Average age by which the speech sound listed is 75% 'correct' during a child's speech	Speech sounds written in phonetic symbols	Manner in which speech sounds are produced
3 years	h ʒ j w m n p k t b g d	voiceless fricative voiced fricative voiced glides voiced nasals voiceless stops voiced stops
3 years 6 months	f	voiceless fricative
4 years	l	voiced liquid voiceless fricative voiceless affricative
4 years 6 months	dʒ s z	voiceless affricative voiceless fricative voiced fricative
5 years	r	voiced liquid
6 years	v	voiced fricative
8 years		voiced fricative
8 years 6 months		voiceless fricative

Table 4: *Chronology of phonological processes in normal speech sound development*

Phonological processes	Example	Gone by approximately
Context sensitive voicing and word- final de-voicing	pig = pick pig = big car = gar	3 years
Final consonant deletion	boat = bow up = uh soon = soo	3years 3 months
Fronting	car = tar go =doe ship =sip	3 years 6 months
Consonant harmony	mine =mime kittycat = tittycat	3years 9 months
Weeks syllable deletion	elephant = efant potatoes = tato television = tevision banana = nana	4 years
Cluster reduction	spoon = poon train = chain clean =keen	4 years
Gliding of liquids	run =one leg = weg leg = yeg	5 years
Stopping	/f/ fish = tish /s/ soap = dope /v/ very = berry /z/ zoo = doo // shop = dop /d3/ jump = dump // chair = tear // thing = ting // that = dat	3 years 3 years 3 years 6 months 3 years 6 months 4 years 6 months 4 years 6 months 4 years 6 months 5 years 5 years

Table 5: *Auditory bombardment lists.*

Initial /s/	Final voiceless stops	Initial affricates	Final nasals
sea	cape	chip	sing song
soap	cup	chop	ping pong
circle	cop	chicken	pom
silly	hat	cheese	pom
sausage	hit	jump	pom
sock	hoot	jack	sing song
sick	cot	joke	ping pong
sad	kit	juice	pom
	cat		pom
			pom

Table 6: *Auditory bombardment lists using word pairs and three- word constraints*

Final consonant Deletion	Cluster reduction	Velar fronting	Context sensitive voicing
boat bow boat	glow low	car tar	bowl pole pole
moon moo moon	black black	cap tap	buy pie pie
couch cow couch	steam team	corn torn	big pig pig
	clip lip	kite tight	beep peep peep
	ski key	call tall	gum come come
	spit pit	key tea	zoo sue sue
Word- final devoicing	Palato-alveolar fronting	Stopping of fricatives	Stopping of affricates
weed weat	ship sip	fat pat	chin tin
wag whack	sheet seat	feel peal	chair tear
pig pick	shoe sue	fill pill	chip tip
cub cup	shell sell	full pull	chop top
marge march	show sew	fall Paul	cheese tease
feed feet	short sort	foal pole	chick tick
cab cap		ship tip	
tag tack		shoe two	
buzz bus		sew toe	