Phonological Processes

Phonological processes are predictable patterns that all children use to simplify speech as they are learning to talk. A *phonological disorder* occurs when the processes persist beyond the expected age, or when the processes used are different to the usual patterns expected. Listed below are some of the most common phonological processes and the age most children have stopped using them.

Process	Definition	Example	Gone by approx. age (years; months)
Pre-vocalic voicing	When a voiceless consonant in the beginning of a word is substituted with a voiced consonant. Typical examples include changing /k/→ /g/, /t/→ /d/, /p/→ /b/ and /f/ →/v/.	"gar" for "car" "big" for "pig"	3;0
Word final de-voicing	When a voiced consonant (e.g. /g/ or /z/) at the end of a word is substituted with a voiceless consonant (e.g. /k/ or /s/).	"pick" for "pig" "bus" for "buzz"	3;0
Final consonant deletion	When the final consonant in a word is left off.	"go" for "goat"	3;3
Fronting	When a back sound (velar or palatal sounds - e.g. /k/, /g/, and /sh/), is substituted with a front sound (alveolar sounds - e.g. /t/, /d/, and /s/).	"tee" for "key" "sop" for "shop"	3;6
Consonant Harmony	When the pronunciation of a whole word is influenced by the presence of one particular sound in the word.	"pup" for "cup" "mime" for "mine"	3;9
Weak syllable deletion	When the unstressed syllable in a word is deleted	"nana" for "banana"	4;0
Cluster reduction	When a combination of consonants is reduced to a single consonant	"pane" for "plane" "poon" for "spoon"	4;0
Stopping	When long sounds (fricatives or affricates – e.g. /f/ or /j/) are replaced by short sounds (stop sounds – e.g. /d/or/b/).	"four" as "bore" "sun" as "tun" "vacuum" as "bacuum" "zoo" as "do" "shoe" as "to" "jump" as "dump" "chair" as "tare" "thing" as "ting"	3;0 3;0 3;6 3;6 4;6 4;6 4;6 5;0
Fricative Simplification	When a later developing fricative (e.g. /th/) is replaced by an earlier developing one (e.g. /f/ or /v/).	"thumb" as "fum" "feather" as "feva"	5;0 +
Gliding of liquids	When /r/ becomes a /w/, and /l/ becomes a /w/ or /y/ sound	"wed" for "red" "yeyo" for "yellow"	5;0 +

Adapted from: Bowen, C. (2011) Elimination of Phonological Processes.
Dodd, B., Hua, Z., Crosbie, S., Holm, A. and Ozanne, A. (2002) Diagnostic Evaluation of Articulation and Phonology.