

# What are Phonological Processes?



Phonological processes are the patterns that young children use to simplify adult speech. All children use these processes while their speech and language are developing. For example, very young children (ages 1 to 3) may say “wa-wa” for “water” or “tat” for “cat.” Other children may leave out the final sound in words (for example, “pi” for “pig” or “ha” for “hat.”) Up to age 3, these are appropriate productions. As children mature, so does their speech and they stop using these patterns to simplify words. In fact, by age 5, most children stop using all phonological processes and their speech sounds more like the adults around them.

As children stop using phonological processes, their speech becomes more understandable. This allows them to become better communicators. For example, between 1½ and 2 years of age, typically developing children may produce around 50 words. Between the ages of 4½ and 5 years, children are able to produce up to 2,000 words. When children continue to apply these processes or patterns to their speech AND learn new words at the same time, their speech can become very difficult to understand. Many times the children do not hear the differences in the words and will say one word to mean three different ones. For example, children who continue to delete the initial consonant from a word may say “all” to mean each of these words: fall, ball, wall.



## Types of Phonological Processes

### Syllable Structure Processes

**Sound changes that cause sounds or syllables to be reduced in number, deleted, or repeated.**

**Final Consonant Deletion** is the deletion of the final consonant or consonant cluster in a syllable or word.

Ex: "soap" /sop/ is pronounced "sew" /so/; "pig" /pɪg/ is pronounced "pi" /pɪ/

**Cluster Reduction** is the deletion of one or more consonants from a two or three consonant cluster.

Ex: "spot" /spat/ is pronounced "pot" /pat/; "clown" /klaʊn/ is pronounced "cown" /kaʊn/

**Syllable Reduction** is the deletion of a syllable from a word containing two or more syllables. The deletion usually occurs in the unstressed syllable.

Ex: "computer" /kəmputə/ is pronounced "puter" /pjutə/

### Substitution Processes

**Sound changes in which one sound class replaces another class of sounds.**

**Gliding** occurs when /r/ becomes /w/ or /l/ becomes /w/ or /j/.

Ex: "rail" /rel/ is pronounced "whale" /wel/; "leap" /lip/ is pronounced "weep" /wip/

**Vocalization** occurs when one of the following, /l/, /ɛ/, or /ə/, is replaced by a more neutral vowel.

Ex: "seal" /sil/ is pronounced "sio" /sio/; "computer" /kəmputə/ is pronounced "computa" /kəmpjutə/

**Fronting (Velar and Palatal)** is the substitution of sounds in the front of the mouth, usually alveolars, for velar or palatal sounds.

Ex: "key" /ki/ is pronounced "tea" /ti/; "gate" /get/ is pronounced "date" /det/

**Deaffrication** is the deletion of a stop component from an affricate leaving only the continuant aspect.

Ex: "cheese" /tʃiz/ is pronounced "sheese" /ʃiz/; "jar" /dʒɑ/ is pronounced "zhar" /zɑ/

**Stopping** is the substitution of a stop consonant for a fricative or an affricate.

Ex: "sail" /sel/ is pronounced "tail" /tel/; "knife" /naif/ is pronounced "knipe" /naip/

### Assimilation Processes

**Sound changes in which one sound or syllable influences another sound or syllable.**

**Prevocalic Voicing** is the voicing of an initial voiceless consonant in a word.

Ex: "peach" /pitʃ/ is pronounced "beach" /bitʃ/

**Postvocalic Devoicing** is the devoicing of a final voiced consonant in a word.

Ex: "bag" /bæg/ is pronounced "back" /bæk/