

Phonological Processes

SUBSTITUTIONS	DEFINITION	EXAMPLE	APPROX. AGE OF ELIMINATION
Affrication	When a nonaffricate is replaced with an affricate	“cheap” for “sheep”	5:0
Backing	When alveolar sounds are substituted with velar sounds	“go” for “doe”	N/A
Deaffrication	When an affricate is replaced with a fricative or stop	“ships” for “chips”	4:0
Fronting	When velar or palatal sounds are substituted with alveolar sounds	“tup” for “cup”	4:0
Gliding	When a liquid is replaced with a glide	“wed” for “red” or “yion” for “lion”	5:0-6:0
Stopping	When a fricative or affricate is substituted with a stop consonant	“teep” for “sheep” or “pan” for “fan”	/f, s/ - 3:0 /z, v/ - 4:0 /sh, ch, j, th/ - 5:0
*Vocalization (vowelization)	When /l/ or /er/ sounds are replaced with a vowel	“appo” for “apple” or “papuh” for “paper”	3:0-4:0
ASSIMILATIONS	DEFINITION	EXAMPLE	APPROX. AGE OF ELIMINATION
Assimilation (Consonant Harmony)	One sound becomes the same or similar to another sound in the word	“bab” for “bad”, “nan” for “can”, “gog” for “dog”	3:0
Final Consonant Devoicing	When a voiced consonant at the end of the word is substituted with a voiceless consonant	“bat” for “bad”	3:0
Prevocalic Voicing	When a voiceless consonant in the beginning of the word is substituted with a voiced consonant	“gomb” for “comb”	3:0
SYLLABLE STRUCTURE	DEFINITION	EXAMPLE	APPROX. AGE OF ELIMINATION
Consonant Cluster Reduction	When a consonant cluster is reduced to a single consonant	“pane” for “plane” or “top” for “stop”	4:0-5:0
Final Consonant Deletion	When the final consonant in a word is left off	“toe” for “toad”	3:0
Initial Consonant Deletion	When the initial consonant in a word is left off	“unny” for “bunny”	N/A*
Weak Syllable Deletion	When the weak syllable in a word is deleted	“nana” for “banana”	4:0
Coalescence	When two phonemes are substituted with a different phoneme that has similar features	“foon” for “spoon”	N/A*
Epenthesis	When a vowel sound is added between two consonants, typically the uh sound	“bu-lue” for “blue”	N/A*
Metathesis	Two sounds or segments are transposed	“cimmanin” for “cinnamon”	N/A*
Reduplication	When a complete or incomplete syllable is repeated	“baba” for “bottle”	2:0

Note: Norms vary widely in the literature and across individuals as reflected by the age ranges in the chart. Clinicians should not rely solely on the age of suppression for eligibility but rather use this as a guide when considering overall intelligibility

***N/A indicates atypical phonological processes that are not considered developmentally appropriate at any age.**

References:

Peña-Brooks, A., & Hegde, M. N. (2015). *Assessment and Treatment of Speech Sound Disorders in Children: A Dual-Level Text*. Austin, TX: PRO-ED.

Shipley, K. G., & McAfee, J. G. (2016). *Assessment in speech-language pathology: A resource manual*. Boston, MA: Cengage Learning.

Bennett (11/85: 9/87) Adapted from Hodson (1980); Ingram (1981); Shriber & Kwiakowski (1981); Kahn (1982).