

Build a sound ladder

Travel from **PULLS** to **CHOK**. Every hop must insert, delete or replace exactly one speech sound. Spelling is allowed to surprise you.

Learning goals

- Order words by their pronunciation rather than their spelling.
- Name the one sound changed at each hop.
- Compare dictionary evidence with the accents spoken in the room.

1. Put the word bank in order

CHOSE

POLLS

POSE

Move	Word	CMU sound symbols
0	PULLS	P UH L Z
1	_____	Write after ordering
2	_____	Write after ordering
3	_____	Write after ordering
4	CHOK	CH OW K

2. Label each arrow

For each hop, circle **insert**, **delete** or **replace**. Then write the sound that changes.

3. Talk about the evidence

1. Which hop looks least like a one-sound change when you only inspect spelling?
2. Does anyone in the class pronounce a word differently from the dictionary row? Describe the difference without marking an accent wrong.
3. Invent one possible neighbour for any ladder word, then check it aloud.

This worksheet uses one pinned US-English dictionary resource as evidence, not as a correctness test for every accent. Teacher key, source, method and data cutoff are on page 2.

Route, prompts and source notes

Hop	Words	CMU symbols	One-sound edit
1	PULLS to POLLS	P UH L Z to P OW L Z	Replace UH with OW
2	POLLS to POSE	P OW L Z to P OW Z	Delete L
3	POSE to CHOSE	P OW Z to CH OW Z	Replace P with CH
4	CHOSE to CHOK	CH OW Z to CH OW K	Replace Z with K

Suggested 20-minute sequence

1. Say the endpoints and sort the three cards in pairs (5 minutes).
2. Read the route aloud and label each phoneme edit (6 minutes).
3. Compare spellings, CMU symbols and class accents (6 minutes).
4. Propose and test another neighbour (3 minutes).

Teacher note

CMUdict records primary pronunciations for a US-English dictionary. Treat a class-accent difference as a useful comparison, not an error. The friendly activity is about inspecting one explicit dataset and its limits.

Method, source and cutoff

Method: Primary CMUdict pronunciations with stress marks removed; each hop is exactly one phoneme insertion, deletion or substitution.

Dictionary source: CMU Pronouncing Dictionary (cmusphinx/cmu dict), commit 74790861f652b15e4ac49015a90074ad62a27690, BSD-2-Clause. <https://raw.githubusercontent.com/cmusphinx/cmu dict/74790861f652b15e4ac49015a90074ad62a27690/cmu dict.dict>

Source SHA-256: 81917843c7f44ce2b094ac63873c2c7a4cf802040792c455ba3ca406891c3d22. Licence: <https://github.com/cmusphinx/cmu dict/blob/74790861f652b15e4ac49015a90074ad62a27690/LICENSE>

Frequency source: wordfreq (Robyn Speer) 3.1.1, <https://github.com/rspeer/wordfreq>. Its code is MIT; the frequency data used to select the common-word graph universe and display spellings are CC BY-SA 4.0 (<https://creativecommons.org/licenses/by-sa/4.0/>).

Data cutoff: release v1, published 2026-08-30. Accepted five-letter CMUdict words plus 3–7-letter CMUdict words in wordfreq (Robyn Speer) 3.1.1's large English list at Zipf >= 3.2.

Safety: the fixed ladder was checked against data/blocked_answer_words.txt. Teachers should still review it for their class and context.

Reuse

This combined worksheet is distributed under CC BY-SA 4.0. Credit FiveLetterWords.io and wordfreq (Robyn Speer); retain the CMU Pronouncing Dictionary BSD-2-Clause notice and the cutoff when adapting it. Creator credit is required, but no hyperlink is required.