

Word Mapping Made Easy: How to ‘Map’ in Content Area Classrooms

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Agenda

- ▶ What We Know Works in Vocabulary Instruction
- ▶ Explicit Instruction
 - ▶ Tiered Words
 - ▶ Word Choice
- ▶ Tips for “Deconstructing” Words
- ▶ What’s on the Horizon?

2013 NAEP FOCUS on VOCABULARY

EXPLORE THE REPORT

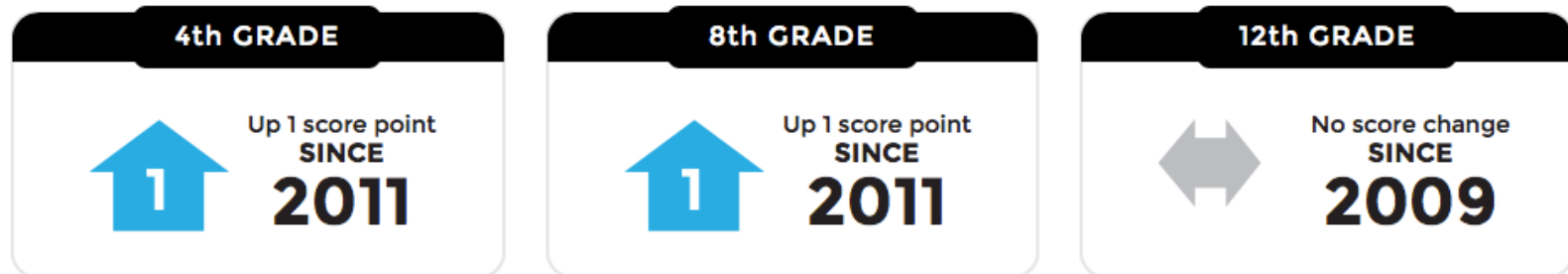
Vocabulary Knowledge

START ▶

NAEP Focus on Interpreting Words

As part of the National Assessment of Educational Progress (NAEP) in reading, students are asked to demonstrate their understanding of words as used in literary and informational texts. This focus on students' understanding of words in varied contexts highlights the importance of vocabulary in reading comprehension. Students' performance on the vocabulary questions is analyzed separately from the reading comprehension results and reported on a separate 0–500 vocabulary scale. Vocabulary scores are available for 2009, 2011, and 2013 at grades 4 and 8, and for 2009 and 2013 at grade 12.

National Score Trends



Inclusive Environments

- ▶ The environment for instruction must be **word-rich** and **motivating**, such as “**word play**” and giving students maximal opportunities to become interested in words and also experience **incidental word learning**.

Beck, Perfetti, & McKeown (1982)
and Haggard (1982)

Inclusive Environments

- ▶ Vocabulary should be addressed as a **distinct area** in the core curriculum.
- ▶ This allows for the development of **specific word learning** strategies.

Fisher & Blachowicz (2005)

Inclusive Environments

- ▶ Careful attention should be paid to the **selection of appropriate words** for **systematic instruction and reinforcement**.

Fisher & Blachowicz (2005)

Inclusive Environments

- ▶ Emphasis on words that are useful for **content learning** and open doors to more learning.
- ▶ Attention should be given to **generative words** that have parts found in many other words.
- ▶ Learning the **shared morpheme** leads to more word learning.

Biemiller (2001)

Inclusive Environments

- ▶ **Multiple modalities** should be used in both instruction and learning.

Pressley & Woloshyn (1995)

Inclusive Environments

- ▶ Students should be **active in exploring** words and meanings.

Beck & McKeown (1982)

- ▶ They should develop **independent strategies** for word learning and the ability to **use context, morphology and reference** tools.

Fisher & Blachowicz (2005)

Inclusive Environments

- ▶ Instruction should emphasize the **connectedness** in which words are related to **topics and categories of meaning** (*e.g., synonyms, antonyms, classes, images, and events*)

Blachowicz & Fisher (2003)

Vocabulary Instruction in Content Areas for SWDs

- ▶ Increased fluency and vocab knowledge via Explicit Vocabulary Instruction with science textbook (Seifert & Espin, 2012)
- ▶ **Flash Cards** (digital vs paper) in science classroom (Grillo & Deiker, 2013)
- ▶ **Morphological Problem Solving** with ELA classrooms (Pacheco & Goodwin, 2013)
- ▶ **Definitions vs Concept Mapping** (Palmer, Boone, & Spencer, 2014)
- ▶ **Word Clue Strategy** with science terms (Helman, Calhoun, & Kern, 2015)
- ▶ Multimedia Vocabulary Instruction with **content acquisition podcasts (CAPs)** in world history (Kennedy, Deshler, & Lloyd, 2015)

How Best to Explicitly Teach?

- ▶ **LINCS** (Ellis, 1992)
 - ▶ Word Specific approach
 - ▶ Recall definition via visual/auditory memory device
- ▶ **Word Mapping** (Harris, Schumaker, & Deshler, 2008)
 - ▶ Generative approach
 - ▶ Predicting meaning based on word parts

Word Choice

Tier 1	Tier 2*	Tier 3*
<p>Very basic; sight words</p> <p>For example,</p> <ul style="list-style-type: none">• <i>house</i>• <i>food</i>• <i>happy</i>	<p>High frequency words; “utility” words</p> <p>For example,</p> <ul style="list-style-type: none">• <i>variable</i>• <i>incredible</i>• <i>representative</i>	<p>Content specific; contextual</p> <p>For example,</p> <ul style="list-style-type: none">• <i>polynomial</i>• <i>exoskeleton</i>• <i>circumference</i>

* A balance of Tier 2 & 3 words must be used in the content areas

Vocabulary Terms

1. Representation
2. ~~Weathering~~
3. Geomorphology
4. ~~Mt. Vesuvius~~
5. Convergent
6. Divergent
7. ~~Dome~~
8. ~~Plate tectonics~~
9. Eruption
10. Igneous
11. ~~Mudslides~~
12. Orogeny
13. Dormant
14. Erosion
15. ~~Volcanoes~~
16. Epicenter
17. ~~Crater Lake~~
18. Viscosity
19. Geoscience
20. ~~Earthquakes~~

Eliminate Tier 1 Terms

	Key Term	Tier 2	Tier 3
1	representation	X	
2	geomorphology		X
3	tectonics		X
4	converge	X	
5	diverge	X	
6	eruption	X	
7	igneous		X
8	orogeny		X
9	erosion		X
10	dormant	X	
11	viscosity		X
12	epicenter		X ⁵

Vocabulary for the Geomorphology Unit

	Key Term	Tier 2	Tier 3
1	representation	X	
2	geomorphology		X
3	tectonics		X
4	converge	X	
5	diverge	X	
6	eruption	X	
7	igneous		X
8	orogeny		X
9	erosion		X
10	dormant	X	
11	viscosity		X
12	epicenter		X

WM

VL

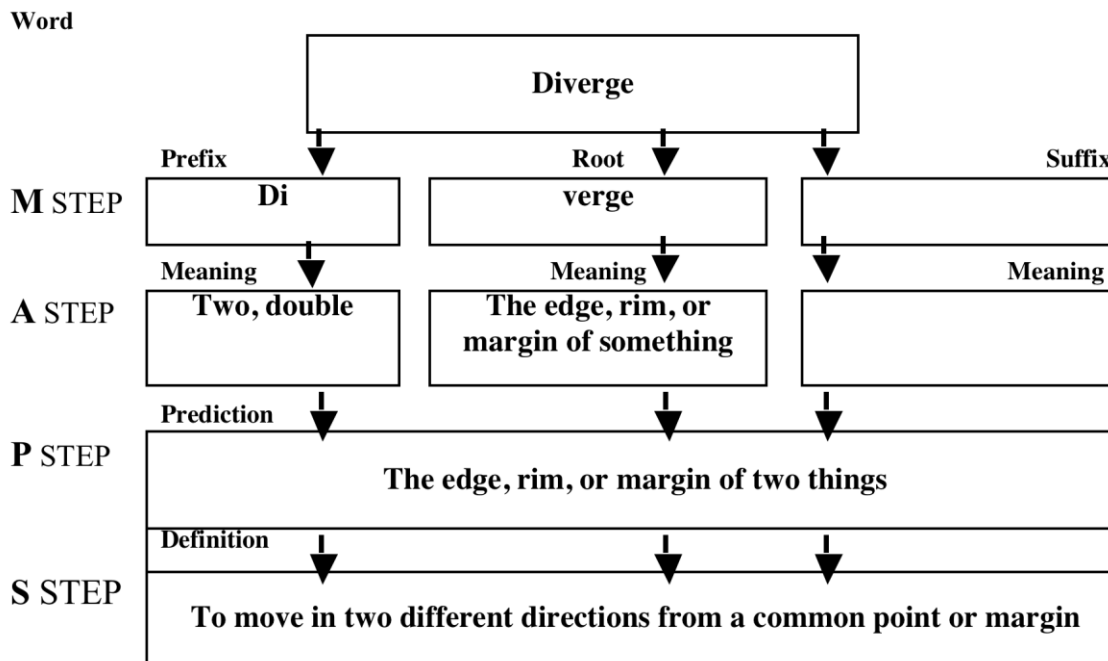
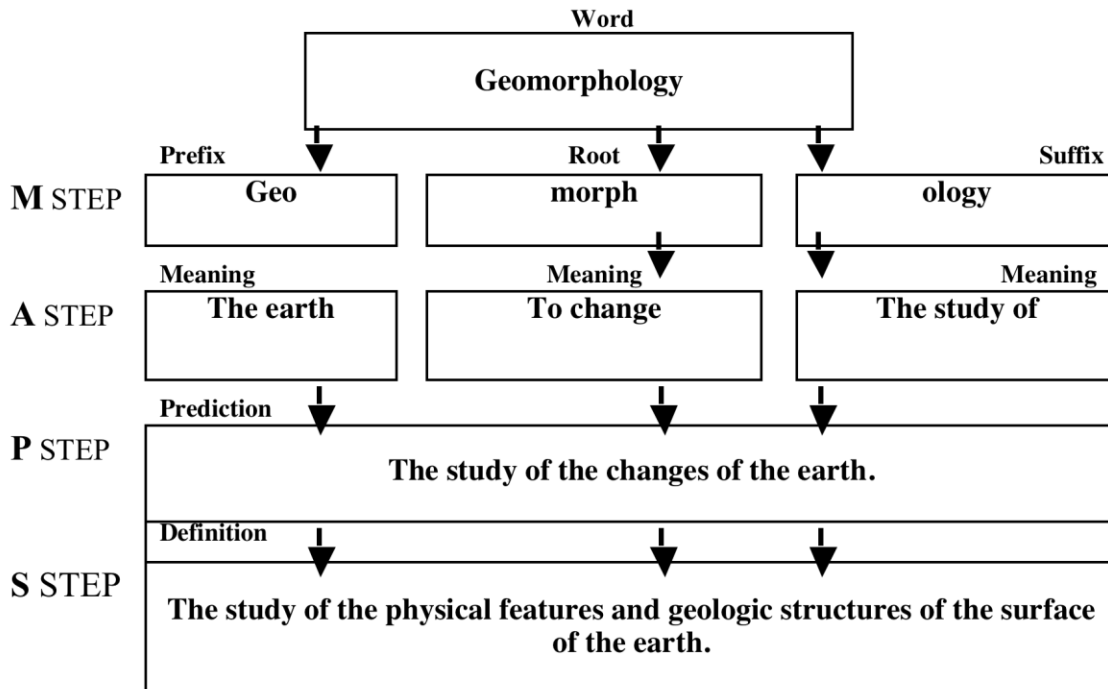
Tips for “Deconstructing” Words

- ▶ Look for words or known parts within the term.
 - ▶ un- healthy
- ▶ Bite off the biggest chunk!
 - ▶ anthrop- -ologist (instead of only an-)
- ▶ Word parts may have more than one meaning - must “play” with meanings to make prediction.
 - ▶ dis- ease

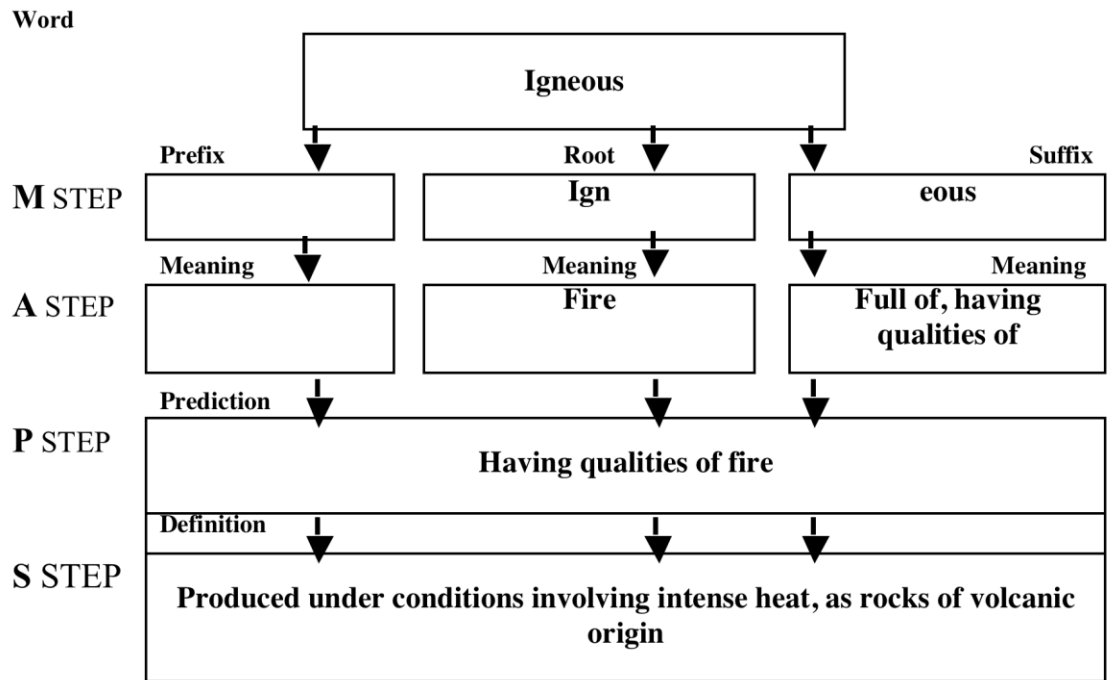
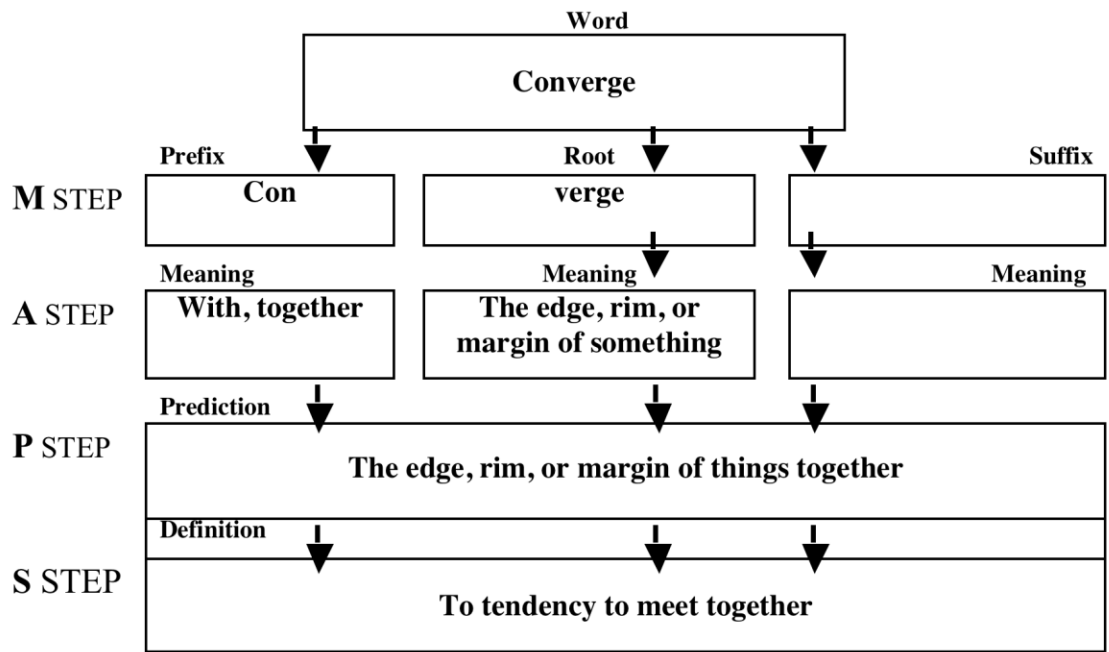
Tips for “Deconstructing” Words

- ▶ At times, the prefix/root/suffix “sequence” will not be used; not all words have all parts.
 - ▶ port or dia- meter
 - ▶
- ▶ At times, there will be “extra” letters (or vowels) left between word parts.
 - ▶ jud (ic) -ial



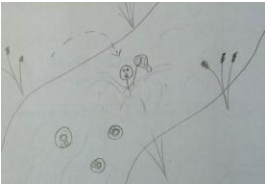

**Word Mapping:
MAPS**



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MAPS**



The LINCing Table

<p>① Term tectonics</p>	<p>④ LINCing Story Processes Man saves kids trapped in a school bus by <u>moving the earth's crust</u> in the latest comics.</p>	<p>⑤ LINCing Picture </p>	<p>② Definition The study of the processes by which the earth's crust has attained its present structure</p>
<p>③ Reminding Word comics</p>			
<p>① Term dormant</p>	<p>④ LINCing Story The robbers snuck into the building when the doorman decided to <u>rest</u>.</p>	<p>⑤ LINCing Picture </p>	<p>② Definition In a state of rest or inactivity</p>
<p>③ Reminding Word doorman</p>			
<p>① Term viscosity</p>	<p>④ LINCing Story The disc jockey jumped into the water with a net to help his CDs <u>resist flowing</u> down the river.</p>	<p>⑤ LINCing Picture </p>	<p>② Definition The internal friction of a fluid, causing it to resist flowing</p>
<p>③ Reminding Word disc jockey</p>			
<p>① Term epicenter</p>	<p>④ LINCing Story The shopping center began to <u>shake</u> from a <u>disturbance</u> <u>beneath</u> it.</p>	<p>⑤ LINCing Picture </p>	<p>② Definition A point, directly above the true center of disturbance, from which the shock waves of an earthquake radiate</p>
<p>③ Reminding Word shopping center</p>			

List the parts **I**dentify a remaining word **N**ote a LINCing story **C**reate a LINCing picture **S**elf-test

The Goal...

To work toward independence by choosing words for instruction carefully, focusing on **content** and **generative words** as part of a shared knowledge base.

Thus, both **general vocabulary knowledge** and **specific text-based vocabulary** should receive attention.

Meanings should be made **explicit** through demonstrations, discussion, usage, further discussion, and refinement

What's Next...?

▶ Spanish Cognates

▶ Domain Specific Vocabulary

