

The Scientific Study of Written Language: Spelling and Writing Strategies

Jennifer Petrich, PhD

Outline

Handwriting and Spelling

- Connecting motor and letter names
- Scientific Investigation of Spelling
- Word Sums and Matrices

Grammar

- Meaning is key
- Punctuation
- Form vs. Function

Composition

- Putting the parts together
- Outlines
- Editing

Spoken vs. Written Language

Speaking is how we get **meaning** from our brain into others' brains via their ears.

Writing is how we get **meaning** from our brain into others' brains via their eyes.

Handwriting

Connecting motor and letter names

- Drawing vs. script
- Use EF steps
- Motor memory and verbalizing
- Goal: consistent automatic formation
- Resources: Handwriting without tears, Real Script
- Learn within the context of scientific word study

Scientific Inquiry

General Steps

- Collect data/evidence
- Develop a hypothesis
- Test your hypothesis
- Collect more data/evidence and refine your hypothesis as needed

Scientific Inquiry

Written Language

- Investigate semantics (meaning)
- Hypothesize about morphology (form/structure)
- Test your hypothesis using etymology (history and relatives)
- Investigate orthographic phonology
- Revise your hypothesis as needed

Scientific Inquiry

The four questions

- Q1: What does it mean?
- Q2/3: How is it built? What are its history and relatives?
- Q4: What can we learn from its pronunciation?

Scientific Inquiry

<sign>

Q1: What does it mean?

noun

- 1 an object, quality, or event whose presence or occurrence indicates the probable presence or occurrence of something else
- 2 a gesture or action used to convey information or instructions
- 4 *Mathematics* the positiveness or negativeness of a quantity

verb

- 1 [*with object*] write one's name on (a letter, card, or similar item) to identify oneself as the writer or sender
- 2 [*no object*] use gestures to convey information or instructions

Scientific Inquiry

<sign>

Q2: How is it built?

<sign> is a base element

Scientific Inquiry

<sign>

Q3: What are its history and relatives?

sign (n.)

early 13c., "gesture or motion of the hand," especially one meant to communicate something, from Old French *signe* "sign, mark," from Latin *signum* "identifying mark, token, indication, symbol; proof; military standard, ensign; a signal, an omen; sign in the heavens, constellation," according to Watkins, literally "standard that one follows," from PIE ***sekw-no-**, from root ***sekw-** (1) "to follow."

Scientific Inquiry

<sign>

Q3: What are its history and relatives?

sign (v.)

c. 1300, "to make the sign of the cross," from Old French *signier* "to make a sign (to someone); to mark," from Latin *signare* "to set a mark upon, mark out, designate; mark with a stamp; distinguish, adorn;" figuratively "to point out, signify, indicate," from *signum* "identifying mark, sign" (see **sign** (n.)). Sense of "to mark, stamp" is attested from mid-14c.; that of "to affix one's name" is from late 15c. Meaning "to communicate by hand signs" is recorded from 1700. Related: Signed; signing.

Scientific Inquiry

<sign>

Q3: What are its history and relatives?

signs → sign + s

signed → sign + ed

signing → sign + ing

signal → sign + al

signify → sign + i + fy

design → de + sign

designate → de + sign + ate

signature → sign + ate + ure

resignation → re + sign + ate + ion

Scientific Inquiry

<sign>

Q4: What can we learn from its pronunciation?

<s i g n>
[s aɪ n]

<d e s i g n>
[d ə z aɪ n]

<s i g n a l>
[s ɪ g n ə l]

<r e s i g n a t i o n>
[r ɛ z ə g n ɛ i ʃ ə n]

Word Sums and Matrices

as + sign + ment → assignment

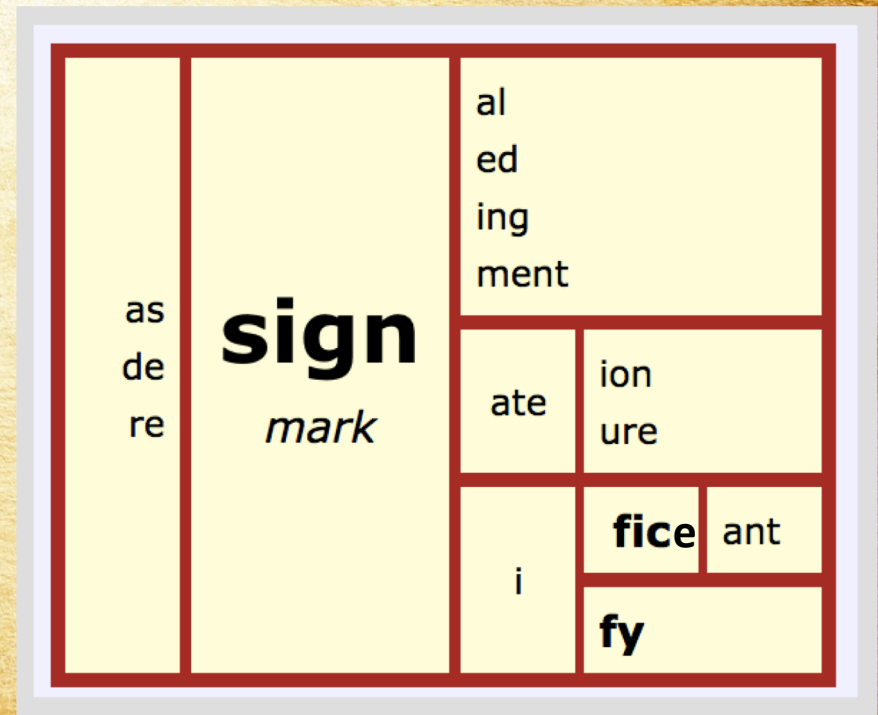
de + sign + ate/ + ed → designated

sign + i + fice + ant → significant

re + sign + ed → resigned

sign + al → signal

sign + ing → signing



Word Sums and Matrices

go	es ing ne
-----------	-----------------

go + es → goes

go + ing → going

go + ne → gone

re un	do	es ing ne
----------	-----------	-----------------

do + es → does

re + do → redo

do + ing → doing

do + ne → done

un + do + ne → undone

Grammar

Meaning is key

- Definition: system and structure of a language
- Descriptive vs. Prescriptive
- Spelling and grammar choices are driven by meaning

Grammar

Punctuation

- Definition: the marks, such as period, comma, parentheses, used in writing to separate sentences and their **elements** and to clarify **meaning**
- Go beyond periods and question marks
 - Commas (including the Oxford comma)
 - Colons and Semicolons
 - Parentheses

Grammar

Form vs. Function

- Not all <ing>s are verbs
- What is its job in the sentence?
- Word family chart

Noun	Adjective	Verb	Adverb
difference differences	different	differ differs differed differing	differently

Composition

Putting the parts together

- Letters build words
- Words build sentences
- Sentences build paragraphs

Outlines

- Main ideas
- Thesis statements and supporting ideas
- Introductions and Conclusions

Graphic Organizers

Name:

Main Idea and Details

Main Idea:

↓ ↓ ↓

Detail: Detail: Detail:

Summary:


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Sum It Up

Title: _____
Author: _____

Main Idea:

Detail #1 Detail #2 Detail #3

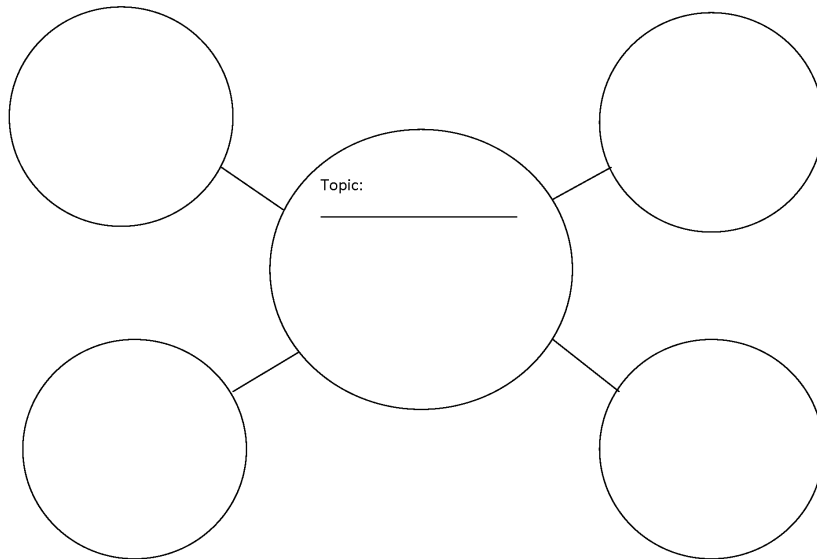
Designed by Shantel Ivits. Feel free to reproduce! 

Graphic Organizers

Name: _____

Date: _____

Bubble Map Graphic Organizers Worksheet



Name: _____

Hamburger Writing

A hamburger-themed writing template. It features a stack of five layers, each with a text box for writing. The layers are: a top bun, a patty, a slice of cheese, a slice of tomato, and a bottom bun. Each layer has a text box with a label and three lines for writing.

Topic Sentence: _____

Detail #1: _____

Detail #2: _____

Detail #3: _____

Closing Sentence: _____

Graphic Organizers

In My Opinion . . . (Main Topics and Supporting Points)

Five-Paragraph Essay

Main Idea, Introductory and Thesis Paragraph

Support/Proof Details

Support/Proof Details

Support/Proof Details

Summary/Conclusion

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Composition

Editing

- Everyone has to edit!
- Mark unsure spellings as you go
- Use cues/resources (COPS/CHOPS)
 - Capitalization
 - Handwriting/Organization
 - Out loud
 - Punctuation (not periods!)
 - Spelling/Sight words

Composition

Editing Examples:

Lets go to the fare it supose to be realy fun

The adventures of tom sawyer is a great book. I love the part when tom gets his friends to pain the fense because he doesn't want to so he uses ruvers sikology to make his friends and think its fun to pain the fence and then he doesn't have to.

Resources: Investigation of Written Language

Gina Cooke (LEX):

<https://linguisteducatorexchange.com/lexinars/>

Pete Bowers (WordWorksKingston):

<http://www.wordworkskingston.com/WordWorks/Home.html>

Real Spelling: <http://www.realspelling.fr/>

Resources: Online Tools

Online Etymology Dictionary:

<https://www.etymonline.com>

Word Searcher:

<http://www.neilramsden.co.uk/spelling/searcher/>

Mini Matrix Maker:

<http://www.neilramsden.co.uk/spelling/matrix/temp/index.html>