

## Student handout: Climate change – new words

### Task 2)

- a. What kinds of temperatures and temperature phenomena exist?

1. Go to [www.english-corpora.org/](http://www.english-corpora.org/) and choose the Corpus of Contemporary American English (COCA).



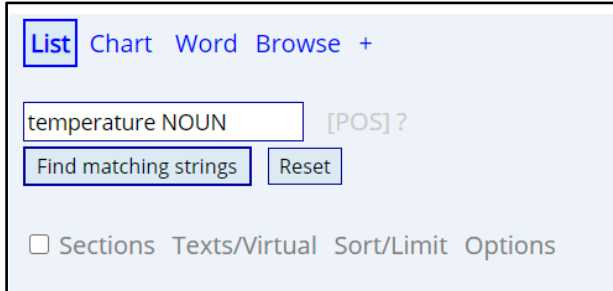
The screenshot shows the English-Corpora.org website. The header includes the logo and navigation links: home, corpora, users, related resources, my account, upgrade, help. Below the header, there is a paragraph of text and a table of corpora.

The most widely used online corpora. [Guided tour](#), [overview](#), [search types](#), [variation](#), [virtual corpora](#), [corpus-based resources](#).

The links below are for the online interface. But you can also  download the corpora for use on your own computer.

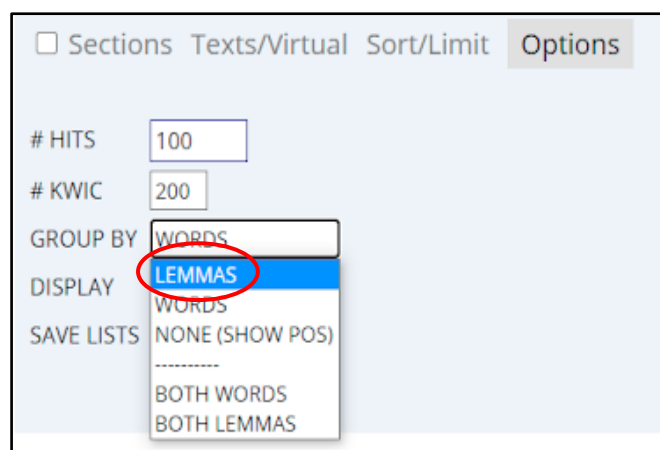
Corpus (online access)	Download	# words	Dialect	Time period	Genre(s)
<a href="#">iWeb: The Intelligent Web-based Corpus</a>		14 billion	6 countries	2017	Web
<a href="#">News on the Web (NOW)</a>		11.9 billion+	20 countries	2010-yesterday	Web: News
<a href="#">Global Web-Based English (GloWbE)</a>		1.9 billion	20 countries	2012-13	Web (incl blogs)
<a href="#">Wikipedia Corpus</a>		1.9 billion	(Various)	2014	Wikipedia
<a href="#">Corpus of Contemporary American English (COCA)</a>		1.0 billion	American	1990-2019	Balanced
<a href="#">Coronavirus Corpus</a>		844 million+	20 countries	Jan 2020-yesterday	Web: News
<a href="#">Corpus of Historical American English (COHA)</a>		400 million	American	1810-2000	Balanced

2. On the COCA search interface, type in the word “temperature” followed by “NOUN”.

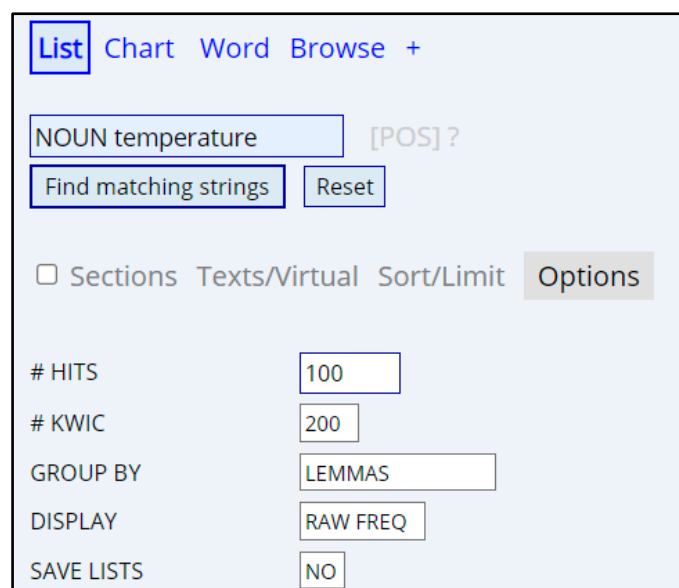


The screenshot shows the search interface of the COCA corpus. It includes a search bar with the text "temperature NOUN" and a "[POS]?" label. Below the search bar are two buttons: "Find matching strings" and "Reset". At the bottom, there is a checkbox labeled "Sections Texts/Virtual Sort/Limit Options".

3. Click on “Options” and change “GROUP BY WORDS” to “GROUP BY LEMMAS” in the drop-down menu.



4. Click on “Find matching strings” to reveal the list of *temperature* + NOUN collocations in the form of lemmas and ordered by frequency.
5. Out of the **five most frequent entries**, **choose two** that you find particularly helpful when it comes to talking about climate change. Write them down on your list.
6. Repeat the same procedure, this time with “NOUN” and “temperature” switched in positions.



b. How can we describe temperatures?

1. Repeat the search from task 2a, but now search for adjectives instead of nouns.

List Chart Word Browse +

temperature ADJ [POS] ?

Find matching strings Reset

Sections Texts/Virtual Sort/Limit Options

# HITS 100

# KWIC 200

GROUP BY LEMMAS

DISPLAY RAW FREQ

SAVE LISTS NO

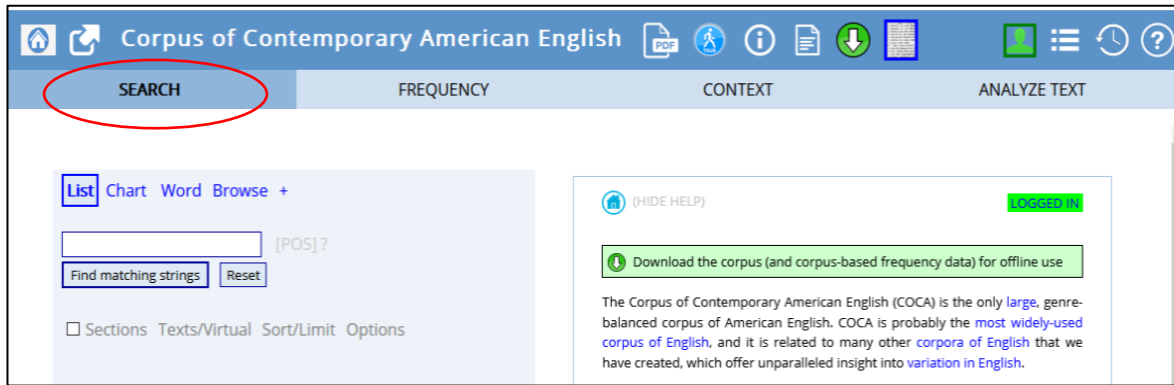
c. What can temperature “do”?

1. You probably already know at least one word or phrase to express what temperature does when it gets warmer or colder. Enter “temperature” into the search field, followed by the expression you already know. Make sure it is in the right order!
2. Insert an equal sign (=) directly before your chosen word, without leaving a space. Start the search.
3. You will now see synonyms of your word in combination with *temperature*, grouped by lemmas and ordered by frequency.

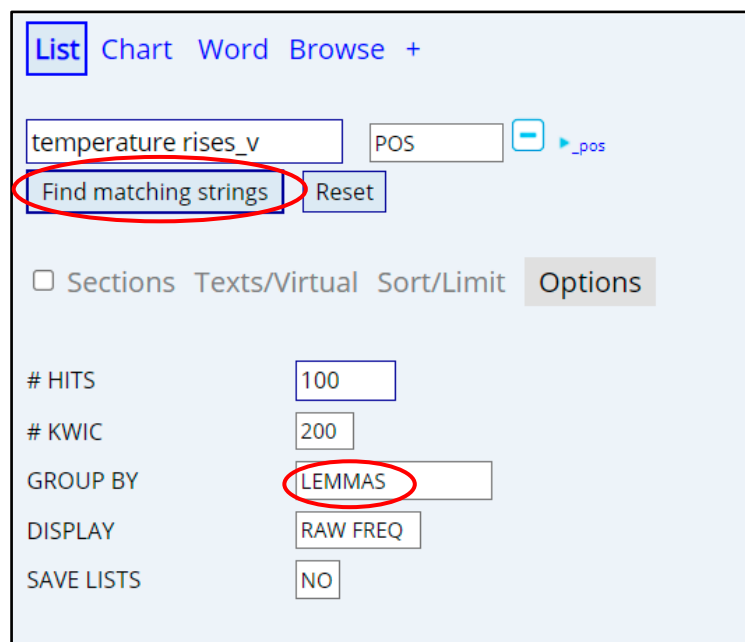
**Task 3**

a. Either... or...?

1. Go back to the “SEARCH” section of the COCA.



2. Type the first phrase, *temperature rises*, into the blank field and add “\_v” directly after the verb. This is necessary to make sure that only results of *rises* as a verb are found – because *rises* is also the plural of the noun *rise*!
3. Go to “Options” and group the results by LEMMAS. This will make sure that different word forms (e.g., *temperature* vs. *temperatures*, *rises* vs. *rising*) are treated as one word.
4. Press ENTER or click on “Find matching strings”.



5. You will find the frequency number on the right side of the table.

SEARCH	FREQUENCY	CONTEXT	OVERVIEW
ON CLICK: <a href="#">CONTEXT</a> <a href="#">TRANSLATE (??)</a> <a href="#">GOOGLE</a> <a href="#">IMAGE</a> <a href="#">PRON/VIDEO</a> <a href="#">BOOK</a> (HELP)			
HELP	ALL FORMS (SAMPLE): 100 200 500	FREQ	
1	<a href="#">[TEMPERATURE]</a> <a href="#">[RISE]</a>	113	

6. Click on “[TEMPERATURE] [RISES]” and read through some of the concordance lines, (these are the short text excerpts where the phrase is used in context).

7. Repeat the same steps for the other expressions to compare their frequencies.

b. What could I say instead?

1. To find out about alternative phrases, go back to the SEARCH interface. Type in “AVERAGE temperature”. Insert an equal sign (=) directly before the word (=AVERAGE) so that the system searches for synonyms of *average* preceding *temperature*.

[List](#) [Chart](#) [Word](#) [Browse](#) +

[POS] ?

Sections  Texts/Virtual  Sort/Limit

# HITS

# KWIC

GROUP BY

DISPLAY

SAVE LISTS

2. Then click on “Find matching strings” and wait for the following page to load.

3. You will find a list of synonyms of *average* that combine with *temperature*, sorted by frequency.

Solutions: 2a) A; 2b) D; 2c) C