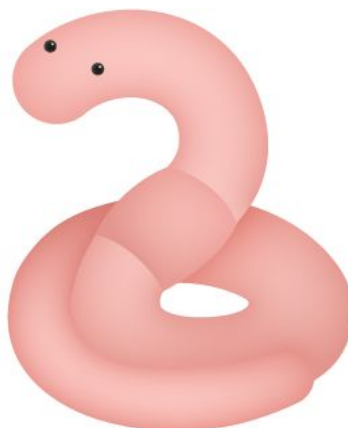


WORM EMOJI PROPOSAL



Credit: Aphelandra Messer. Free for use in conjunction with this proposal

SUBMITTED BY:

MELISSA THERMIDOR, EMOJINATION

ABSTRACT:

This proposal is to request the inclusion of a **WORM** emoji representing the soft-bodied, legless, bilaterally symmetrical invertebrate.

1. INTRODUCTION

There are about one million species of worm, living in a wide range of habitats.¹ They live on land and in water and can be found in virtually every habitat on Earth. Worms help to increase the amount of air and water that gets into soil. They break down organic matter, like leaves and grass into things that plants can use. When they eat, they leave behind castings that are a very valuable type of fertilizer, but some, however can cause major public health problems.

Soil-transmitted worm infections are among the most common infections worldwide and affect the poorest and most deprived communities. They are transmitted by eggs present in human faeces which in turn contaminate soil in areas where sanitation is poor.

¹ <https://www.factmonster.com/dk/encyclopedia/science/worms>

According to the World Health Organisation, latest estimates indicate that more than 880 million children are in need of treatment for these parasites.²

A **WORM** emoji would be a vital addition to the current set of emoji, because it would give health professionals and individuals alike a quick way to communicate with the public about the presence of parasitic worms in certain areas. Furthermore, it would allow researchers and WASH (Water, Sanitation and Hygiene) sector organisations to share best practice about safe measures to avoid such illnesses across digital platforms - helping to meet the United Nations Sustainable Development Goal 6: Ensure access to water and sanitation for all.³

In the U.K., new research is using worms to look at muscle loss in space that could lead to new treatments for muscular conditions for people on Earth. Hundreds of worms are being flown to the International Space Station in late 2018 for scientists to understand more about spaceflight-induced muscle loss.⁴ The health impact is viewed by scientists as an example of the ageing process on earth – and could even help improve treatment of diabetes.

In some parts of Asia, Africa and Latin America, people regularly eat worms. The Royal Society, published a study on the nutrient content of earthworms in January 2003.⁵ Researchers studied the eating habits of the Yekuana people of Venezuela who traditionally eat two kinds of earthworms – one type that lives in muddy streams and another that lives on the forest floor. The Yekuana people eat the worms fresh after heating them in water, or they smoke the worms over a fire. Most recently, in November 2015, U.K. restaurant *Grub Kitchen*⁶ was the first to include insects in most items on its menu. Some of the worm specialties include: the mealworm hummus and worms in wine sauce. Renowned Chef David George Gordon also features worm specialties he calls Superworm Tempura with Plum Dipping Sauce, Fried Green Tomato Hornworm and Alpha-Bait Soup in his book *The Eat-A-Bug Cookbook*.

Historically, Charles Darwin was fascinated by earthworm behaviour. He tested their intelligence, food preferences and sensitivity to noise, light and sound for most of his adult life. He set down everything he'd learned about earthworms over 44 years - in a book called *The Formation of Vegetable Mould Through the Action of Worms, with Observations on Their Habits*. Darwin has been described as one of the most influential figures in human history.

² http://www.who.int/intestinal_worms/more/en/

³ <https://www.un.org/sustainabledevelopment/water-and-sanitation/>

⁴ <https://www.gov.uk/government/news/worms-in-space-the-molecular-muscle-experiment>

⁵ https://www.researchgate.net/publication/10875172_Nutrient_content_of_earthworms_consumed_by_Ye'Kuana_Amerindians_of_the_Alto_Orinoco_of_Venezuela

⁶ <http://www.grubkitchen.co.uk/>



Image: Man is but a worm

*Caricature of Charles Darwin's theory of evolution. The image was published in a Punch almanac after Darwin released *The Formation of Vegetable Mould through the Action of Worms*.*

Popular media depictions of the worm include the character 'Earthworm Jim' featured in a series of video games and an American animated television series based on the video game. The 'Worm Guys' and 'Jeff' the giant worm in *Men In Black*. The ghost-eating sandworms in the film *Beetlejuice*, the Alaskan Bull Worm from the television show *SpongeBob SquarePants*, and The Glo Worm, plushie worm toys - ranked by Time Magazine as number 77 on the list of the 100 most influential toys.⁷

In addition, the worm is also a popular and fun form of dance associated with breakdancing, usually performed at parties and celebrations. In 2009, Apple co-founder, Steve Wozniak attempted to do the worm on the dance floor during his participation in the eighth season of *Dancing With the Stars*. In 2016, former AFL (Australian Football League) star David Rodan performed an amazing worm as part of a goal signal at the EJ Whitten Legends game. Most recently in 2017, Irish actor Michael Fassbender performed what he called a flick swan dive, gracefully launching himself backward and landing into a perfect worm on the popular, *The Graham Norton Show*.

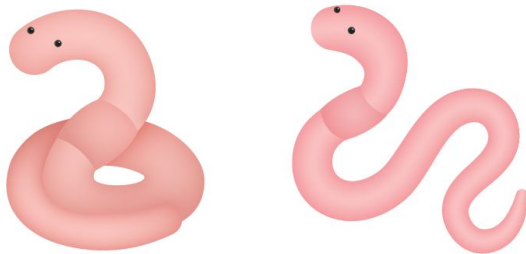
⁷ http://content.time.com/time/specials/packages/article/0,28804,2049243_2048660_2049194,00.html



*Steve Wozniak performing the 'worm' on Dancing with The Stars
Source: ABC*

The **WORM** is recognised globally and should be represented in the Unicode emoji set.

2. IMAGES



Images by Aphelandra Messer. They may be freely distributed in connection with this proposal.

3. NAMES

3.1 CLDR Short Names

Recommended names: WORM

3.2 CLDR Keywords

Recommended keyword: worm, earthworm, annelid, parasite

4. SELECTION FACTORS - INCLUSION

A. COMPATIBILITY

This is a new emoji for inclusion in Unicode and then other systems. It will contribute to the various phrases and usages defined below. There is no known similar emoji.

B. EXPECTED USAGE LEVEL

Frequency:

The expected usage of a **WORM** emoji is high as shown below:

- The Instagram hashtag counts for ‘worm’ and ‘worms’ and ‘earthworm’ as of the date of this proposal are shown below.

#worm	405,599	https://www.instagram.com/explore/tags/worm/
#worms	330,338	https://www.instagram.com/explore/tags/worms/
#earthworm	30,937	https://www.instagram.com/explore/tags/earthworm/

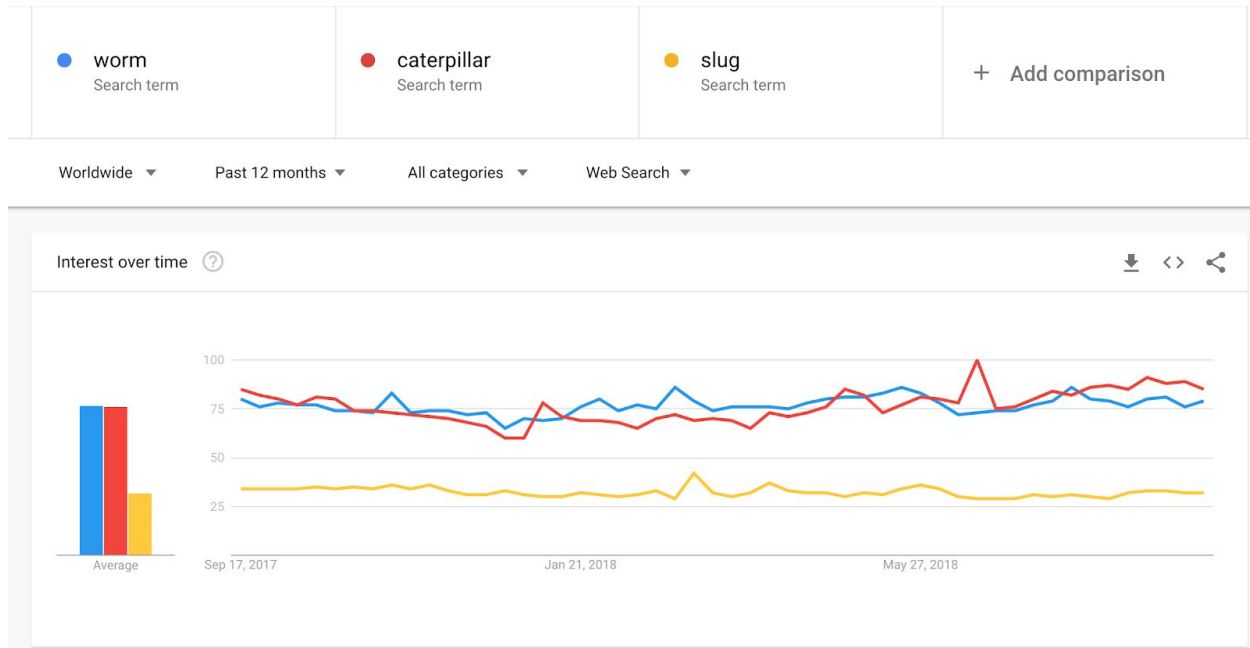
total	766,874
-------	----------------

- Usage of this emoji will be widespread and global as it is a common and immediately recognised animal that is seen daily by billions of people worldwide.
- A search for #compost on Instagram turns up 300K photographs, many of which feature earthworms prominently.
- The U.S. Army Field Manual⁸ and Boy Scout Handbook outline eating worms in the wild to survive. The projected active duty end strength in the armed forces for the fiscal year 2017 was 1,281,900 service members, with an additional 801,200 people in the seven reserve components.⁹
- As of 15 September 2018, a search for “worms” on Google videos returns over 29 million results
- The common earthworm is a universal bait for freshwater angling. Fishing is one of the most popular outdoor recreational activities in the United States. More than 49 million Americans participated in freshwater, saltwater and fly fishing in 2017.¹⁰
- A comparative search of “worm” (blue) and “caterpillar” (red) and “slug” (yellow) on Google trends shows a higher interest for “worm” over the other terms.

⁸ <http://www.survivalebooks.com/08.htm#par1>

⁹ https://en.wikipedia.org/wiki/United_States_Armed_Forces

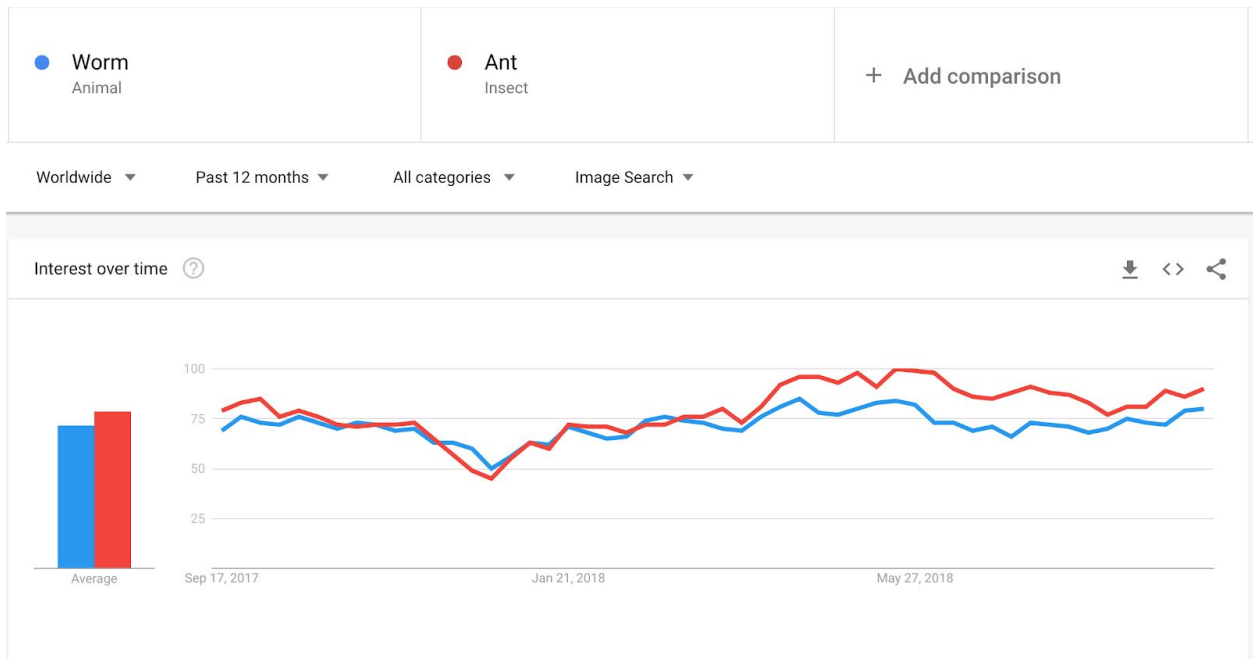
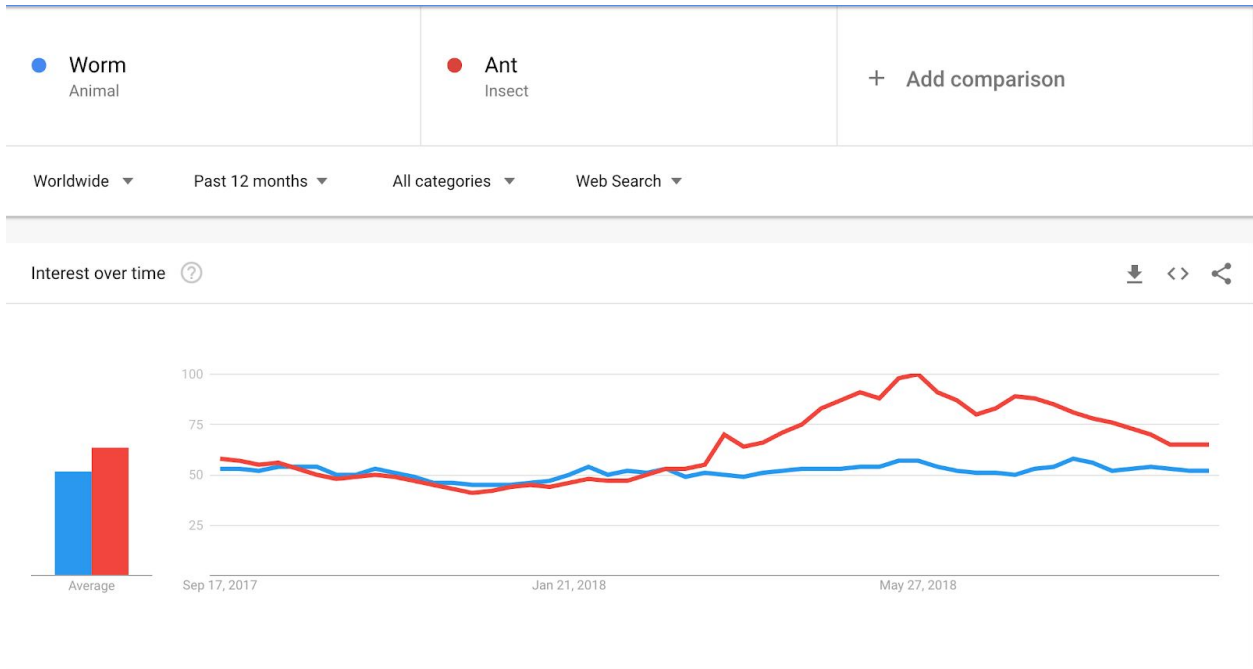
¹⁰ <https://www.statista.com/topics/1163/recreational-fishing/>



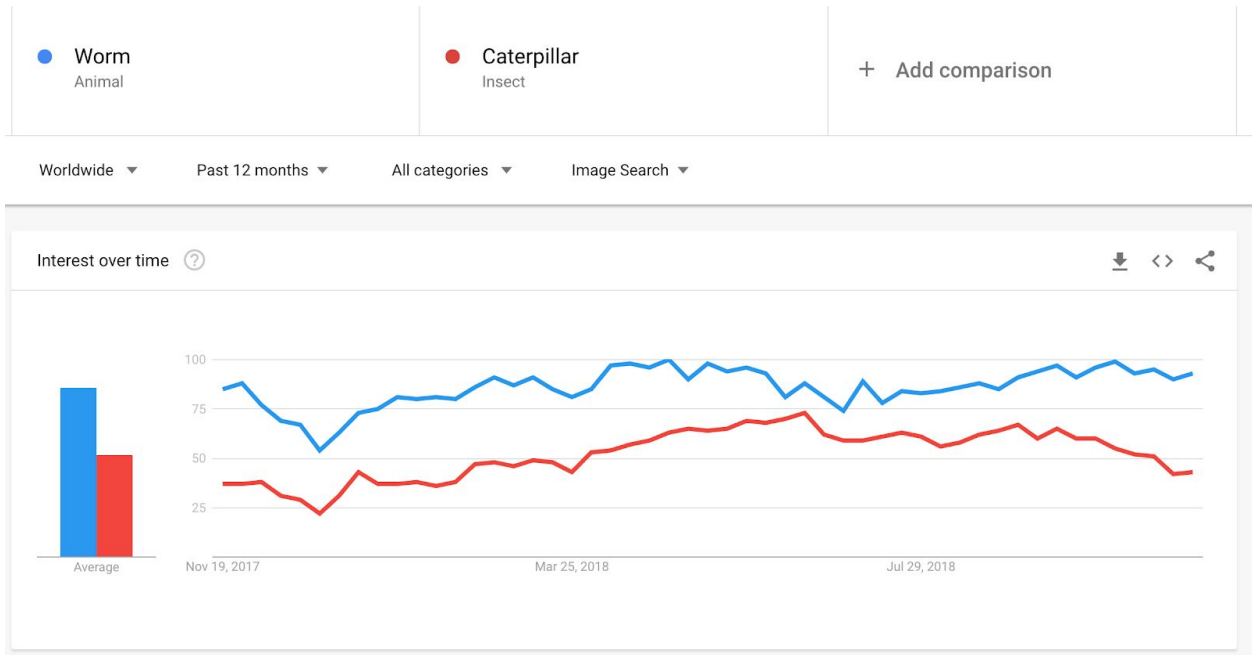
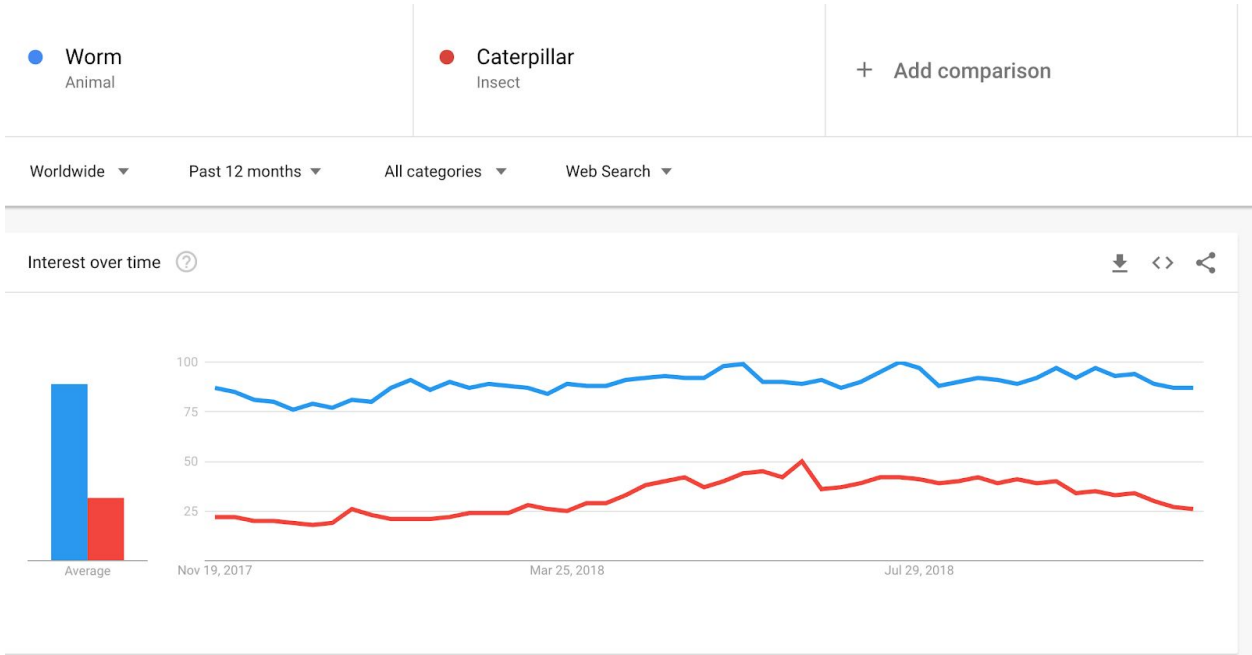
Frequency Data:

The following search results provide the data requested in the “Evidence of Frequency” section for submitting emoji proposals and all searches were completed in a private browser window. I have compared the terms ‘worm’ (animal) for the proposed emoji and ‘ant’ (insect) for the comparison existing emoji. The suggested examples from the sample Evidence of Frequency list do not fit the requirements for worm, but ‘ant’ the insect is a closely aligned search term for the existing emoji and is more relevant to the proposed emoji. The comparison for “worm and “caterpillar” has also been included as well as “worm” and “elephant” results for median popularity referencing.

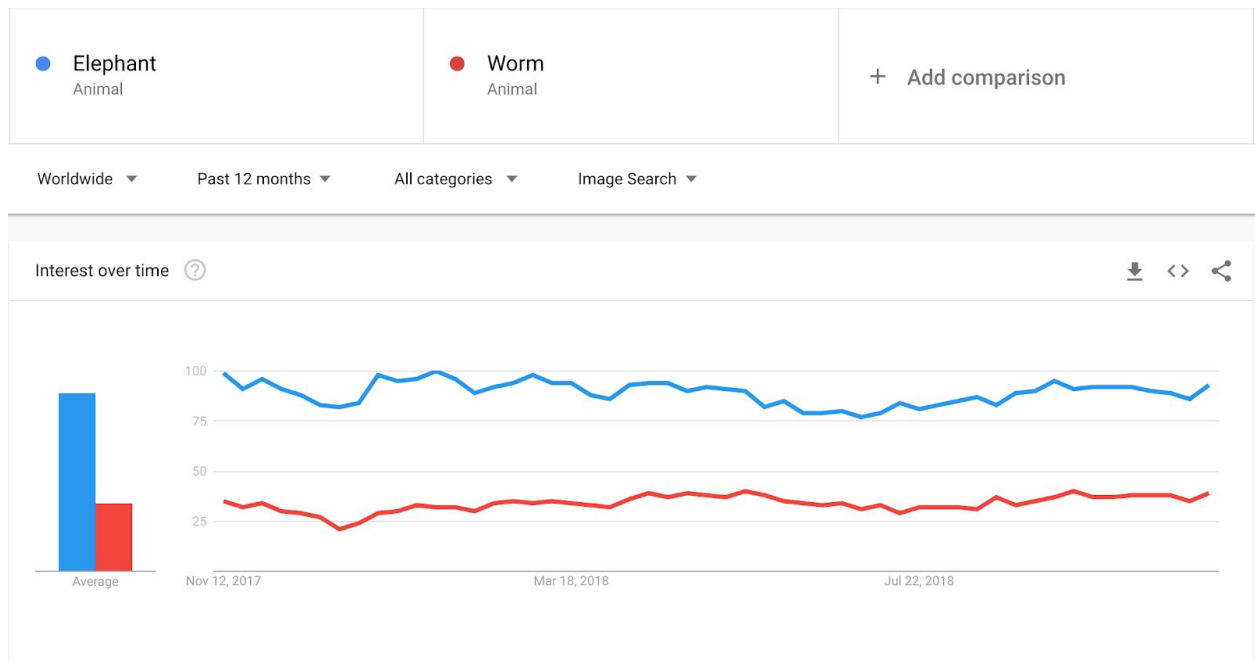
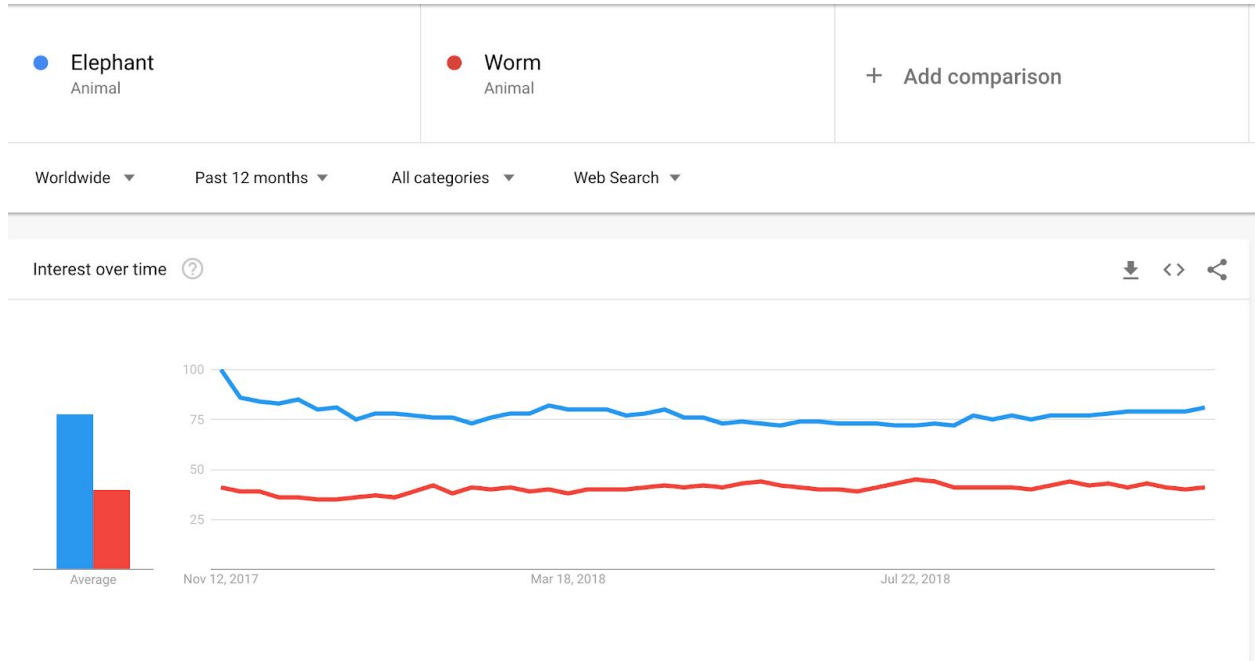
- Google Trends web and image searches for “worm” (animal) and “ant” (insect) shows a comparable demand for the worm



- Google Trends web and image searches for “worm” (animal) and “caterpillar” (insect) shows a higher interest for worm over caterpillar



- Google Trends web and image searches for “worm” (animal) and “elephant” (animal)



- Google, Bing and Wikipedia search results

Google 'worm animal' and 'ant insect' search results



worm animal



[All](#) [Images](#) [Shopping](#) [Videos](#) [News](#) [More](#) [Settings](#) [Tools](#)

About 84,500,000 results (0.74 seconds)



ant insect



[All](#) [Images](#) [News](#) [Videos](#) [Shopping](#) [More](#) [Settings](#) [Tools](#)

About 41,200,000 results (0.59 seconds)

Google 'worm' and 'ant' search results



worm



[All](#) [Images](#) [Videos](#) [News](#) [Shopping](#) [More](#) [Settings](#) [Tools](#)

About 217,000,000 results (0.55 seconds)



ant



[All](#) [Images](#) [News](#) [Videos](#) [Shopping](#) [More](#) [Settings](#) [Tools](#)

About 351,000,000 results (0.54 seconds)

Google 'worm' and 'caterpillar' search results

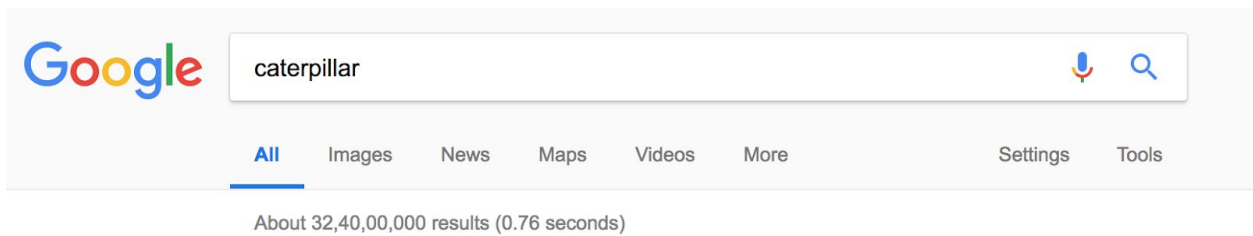


worm

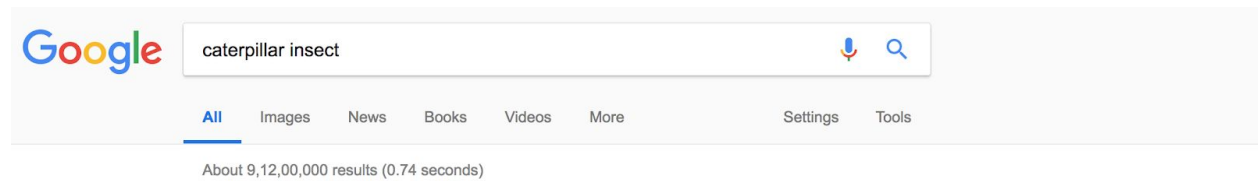
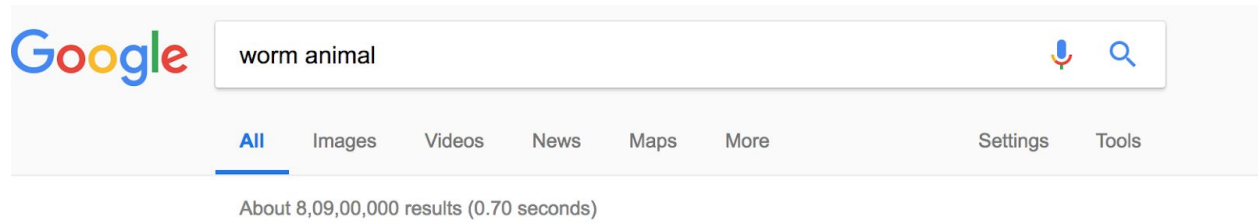


[All](#) [Images](#) [News](#) [Books](#) [Videos](#) [More](#) [Settings](#) [Tools](#)

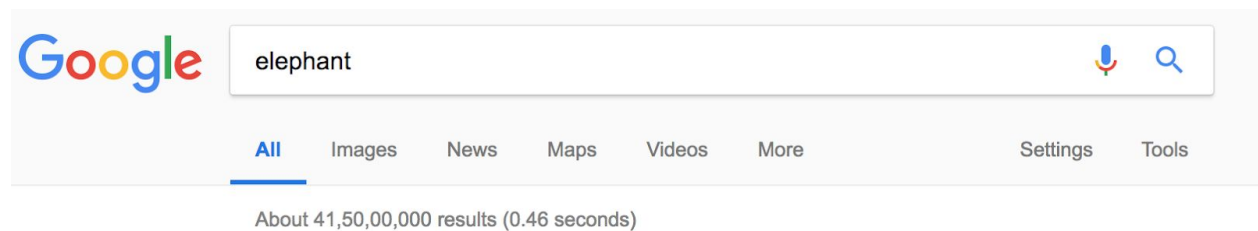
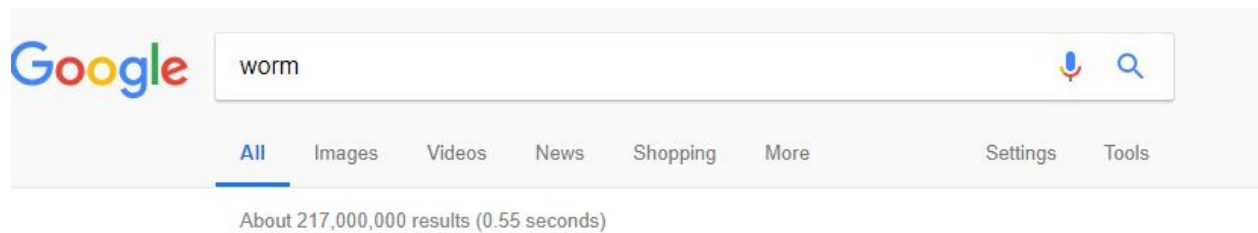
About 22,90,00,000 results (0.80 seconds)



Google 'worm animal' and 'caterpillar insect' search results



Google 'worm' and 'elephant' search results



Bing 'worm' and 'ant' search results



All Images Videos News | My saves

12,300,000 Results Date ▾ Language ▾ Region ▾



All Images Videos News | My saves

15,000,000 Results Date ▾ Language ▾ Region ▾

Bing 'worm' and 'caterpillar' search results



All Images Videos Maps News Shopping | My saves

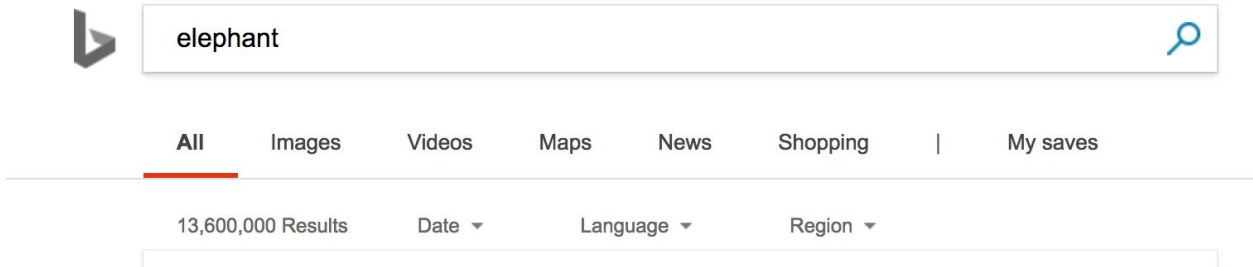
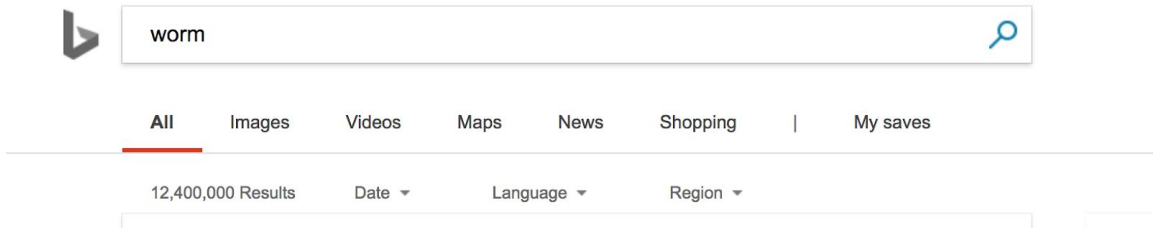
12,400,000 Results Date ▾ Language ▾ Region ▾



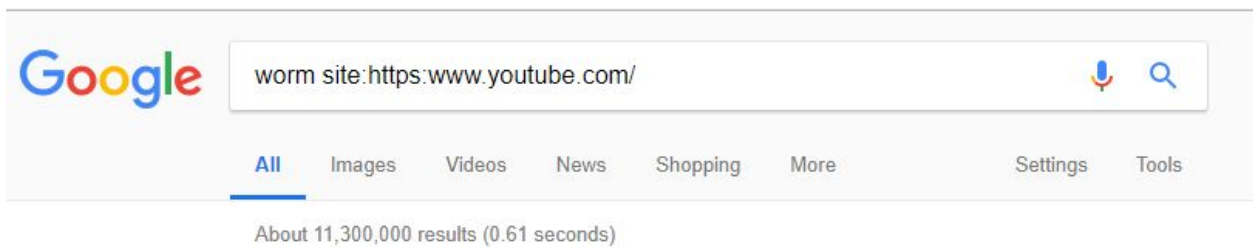
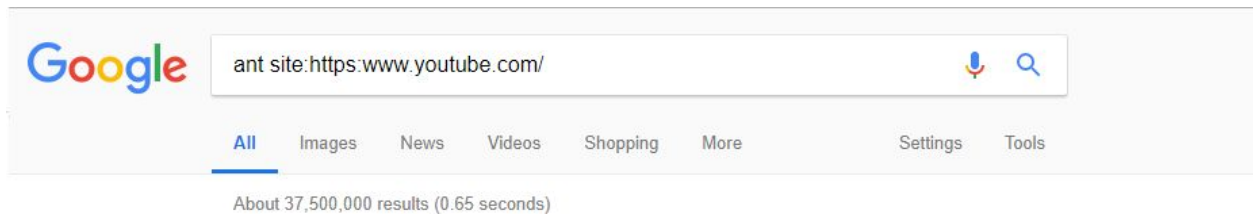
All Images Videos Maps News Shopping |

12,400,000 Results Date ▾ Language ▾ Region ▾



Bing 'worm' and 'elephant' search results



- YouTube search results for 'ant' and 'worm'





- YouTube search results for 'caterpillar' and 'worm'

Google caterpillar site:https://www.youtube.com/  

[All](#) [Images](#) [News](#) [Maps](#) [Videos](#) [More](#) [Settings](#) [Tools](#)



About 74,00,000 results (0.86 seconds)

Google worm site:https://www.youtube.com/  

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About 1,38,00,000 results (0.71 seconds)

- YouTube search results for ‘elephant’ and ‘worm’

Google elephant site:https://www.youtube.com/  

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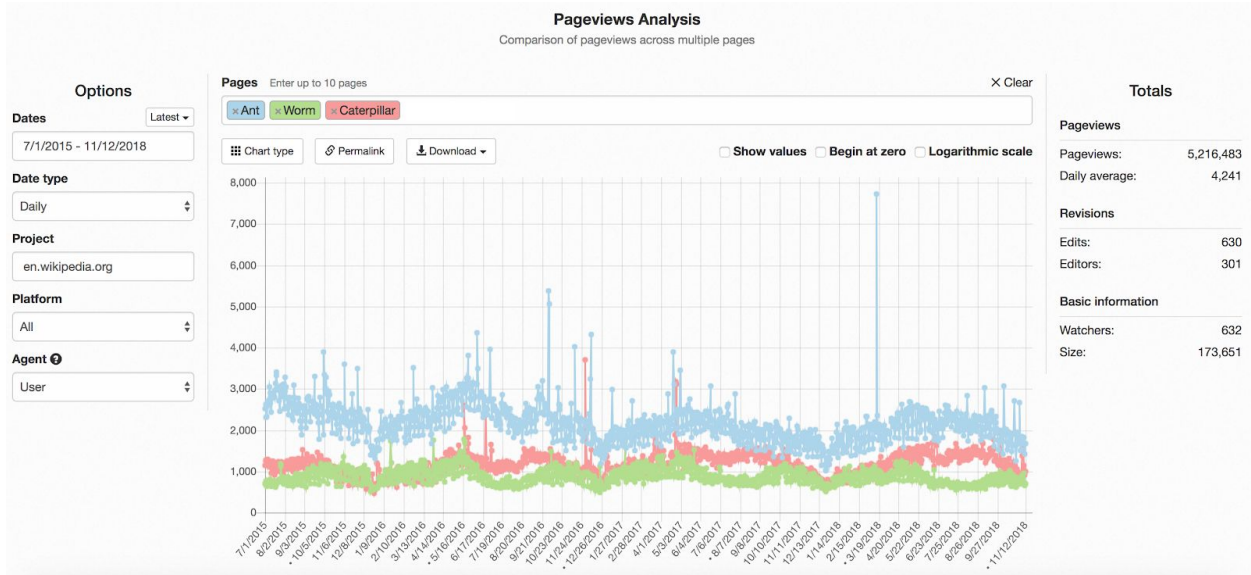
About 3,67,00,000 results (0.62 seconds)

Google worm site:https://www.youtube.com/  

[All](#) [Images](#) [News](#) [Books](#) [Videos](#) [More](#) [Settings](#) [Tools](#)

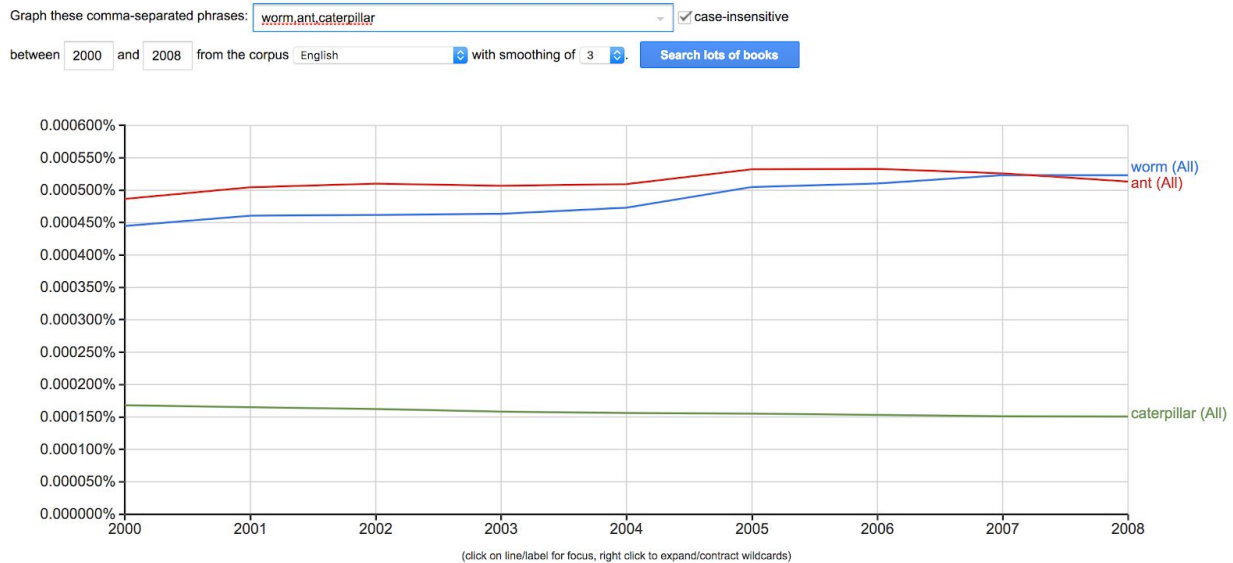
About 1,38,00,000 results (0.71 seconds)

Wikipedia search results



- Google Ngram Viewer search results for worm, ant and caterpillar

Google Books Ngram Viewer



ii. Multiple Usages:


























The **WORM** has several usages:

- The WORM is used to represent disease and infection
- The WORM is used to represent fishing and bait

- The WORM is used to represent dancing
- The WORM is used to represent food (worm meal, gummy worms)
- The WORM is used in many common metaphors and expressions: “An early bird catches the worm”; “Book worm”; “Can of worms” ; “The worm of conscience”; “To worm out information”; “Worm!”; Worm's eye view” ; “To worm oneself into someone's favour/confidence/affection”; “I am a worm and not human” - Psalm 22:6 in the Bible
- The WORM is used to represent Halloween
- The WORM is used to represent farming and composting
- The WORM is used to represent computer malware

iii. Use in Sequences

The **WORM** is a singular item and will work effectively alone. However, it can be used in sequence:

-  +  = CAN OF WORMS
-  +  = WORMS EYE VIEW
-  +  = WORM SOUP
-  +  = HALLOWEEN COSTUME
-  +  = DO THE WORM
-  +  = COMPOSTING
-  +  = DOG HAS WORMS
-  +  = COMPUTER WORM (VIRUS)
-  +  = BOOKWORM
-  +  = FISHING
-  +  = WORMS IN THE WATER - DON'T DRINK
-  +  or  = BAD APPLE

C: IMAGE DISTINCTIVENESS

The **WORM** is clearly identifiable – even on a small screen as an emoji character. It is clearly differentiated from other characters of related shapes or colours.

D: COMPLETENESS

The addition of a **WORM** emoji would be an important addition as it is globally recognized.

E: FREQUENCY REQUEST

A cursory search of the phrase “worm emoji” on Twitter reveals plenty of demand for the character. A small sample from the past couple of months:



echo
@baaakedpotato

Follow

@apple where's the worm emoji u cowards.
when i say oh worm i don't want no
caterpillar. give me the earthworm

4:33 PM - 6 Sep 2018



Bats
@tteukseom

Follow

What...does this mean?? And why is there no
worm emoji?

George ❤️ 25 days @softyoongibear

Replying to @softyoongibear @sloshmallo and 2 others

Hahaha sammi and bats are the losers I have someone to cuddle. Don't go into the woods if you are afraid of worms loserzzz

2:50 PM - 10 Sep 2018



Theodora
@helgapatakiz

Follow

Why is there no worm emoji?

7:56 PM - 1 Mar 2018

2 Retweets 8 Likes



scooby doo showdown in ghost to...
@newgroundstier

Follow

wheres the worm emoji

3:44 PM - 8 Sep 2018



eh?
@isnii

Follow

I'm so upset that worm emoji doesn't exist
[@Ashton5SOS](#)

2:08 PM - 10 Sep 2018



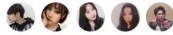
tam|CEELIX DAY ITS FELIX AND C...
@strayult

Follow

why isn't their a worm emoji

1:04 PM - 7 Sep 2018

6 Likes



isa 🍷🐛
@isamontana00

Follow

this girl posted a gym selfie with the caption 'the early bird gets the 🐛' but its not a worm emoji its a caterpillar so really she just said that the early bird gets the caterpillar instead of the worm and this is why we need a distinct worm emoji

3:42 PM - 8 Jun 2018

12 Likes

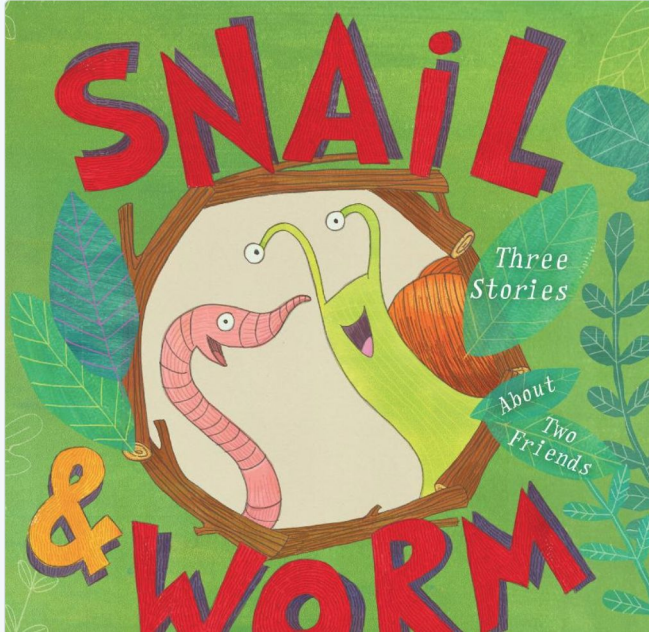




HMH Kids @HMHKids · Aug 13

👤 + 🌱 creator @tinatheatre stops by @teachingbooks to share the inspiration behind her picture books! teachingbooks.net/qlww6at

*Pretend this is a **worm**, it was that or the crocodile emoji



titty boy @EMOGOTH420

Follow

i think its absolutely appalling that weve had ios for over 10 years and apple has yet to release a "Worm" Emoji

8:40 PM - 2 Jun 2018

3 Retweets 27 Likes



taehyung enthusiast @loveyoursf

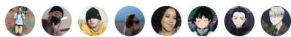
Follow

a worm emoji

@kozumetwt
WHAT DO WE WANT

3:10 AM - 27 Apr 2018

1 Retweet 10 Likes



5. FACTORS FOR EXCLUSION

F. OVERLY SPECIFIC

The **WORM** emoji is not overly specific. There are about one million species of worm and the three main groups are FLATWORMS, ROUNDWORMS, and SEGMENTED WORMS, including all of these groups would be overly specific.

The **WORM** can be used in a wide range of contexts in addition to its main connotation.

G: OPEN ENDED

The **WORM** is distinct with a specific and unique purpose and doesn't open up a direct open – ended set of related symbols.

H: ALREADY REPRESENTABLE

There is no easy way to convey the **WORM** using existing emoji.

I: Logos, Brands, UI Icons, Signage, Specific People, Deities

The **WORM** is suitable for encoding as a character. It does not contain any references to deities, logos, specific people, historical or living. It is universally recognisable.

J: TRANSIENT

WORMS have been around for hundreds of millions of years, longer than humans, Unicode or emoji.

K: FAULTY COMPARISON

The submission for **WORM** is one made on its own merits – in line with the Unicode selection factors for inclusion – and it avoids the factors for exclusion. No case is made that the **WORM** should be included due to other emojis, emoji patterns – or due to comparison.

6. SORT LOCATION

A. CATEGORY

The **WORM** should be inserted within the ANIMAL-BUG section of the emoji ordering.

B. EMOJI BEFORE

There are a few places that this would effectively fit, but it is recommended to fit in the animal-bug category alongside SNAIL and BUG. This would place it with other related animals.

Character Properties

The other character properties are suggested to be defined as follows.

General Category: So

Canonical Combining Class: 0

Bidirectional Class: ON

Decomposition Type: Decomposition Mapping:

Numeric Type:

Numeric Value:

Bidirectional Mirrored: N Unicode 1 Name:

ISO Comment:

Simple Uppercase Mapping: Simple Lowercase Mapping: Simple Titlecase Mapping:

Bios

Melissa Thermidor (melissa.thermidor@nhsbt.nhs.uk) is the Social Media Lead at NHS Blood and Transplant and a New Yorker who now lives in London. She is passionate about using social media to save and improve lives.