

21.1 Organization of Living Things



Summarize main points from each video.

Video Title / topic _____

Video Title / topic _____

Video Title / topic _____

Topic Introduction



Summarize your understanding of each paragraph.

Scientists often group things into like-kind. This grouping of things results in a “taxonomy” ... taxonomy is the classification of something, especially organisms.

In biology class, we will focus on the taxonomy (classification) of living things. But, the expression *taxonomy* also applies to other natural sciences. The expression taxonomy even applies to social sciences. For example, we use “Bloom’s Taxonomy” to write learning objectives.

Though there is more than one system used to classify objects, science most commonly uses the Linnean system to group organisms.

Originally developed by Carolus Linneaus in the mid-1700s, this system is used to classify organisms starting with the broad grouping and ending with the most specific.

Read/Summarize Text



1. Read the passage.
2. Underline key expressions in each sentence.
3. Re-write each word (or expression) you underlined.
4. Summarize the passage.

Classification.

Classification is the process of organizing different objects into categories based on their common characteristics. Think about the dresser in your bedroom. Typically, one drawer is used for shirts, another for shorts, and yet another for socks. Each clothing item was classified based on how it is worn, and is then grouped with similar clothing in the dresser drawer.

A similar process is used in life science to group organisms. There are numerous different organisms in the universe, each with a unique set of characteristics. To organize them, scientists use a system called taxonomy. Taxonomy is the science of identifying, naming, organizing, and classifying organisms.

ck12.org

Re-write words you underlined

Using a complete sentence, summarize or rephrase the passage

Read Text for Comprehension

Read this article for deeper understanding. No summary is required, although you may want to circle, underline, or mark key ideas and words.

History of Biological Classification

The taxonomic term familia was first used by French botanist Pierre Magnol in his *Prodromus historiae generalis plantarum, in quo familiae plantarum per tabulas disponuntur* (1689) where he called the seventy-six groups of plants he recognised in his tables families (familiae). The concept of rank at that time was not yet settled, and in the preface to the *Prodromus* Magnol spoke of uniting his families into larger genera, which is far from how the term is used today.

Carolus Linnaeus used the word familia in his *Philosophia botanica* (1751) to denote major groups of plants: trees, herbs, ferns, palms, and so on. He used this term only in the morphological section of the book, discussing the vegetative and generative organs of plants. Subsequently, in French botanical publications, from Michel Adanson's *Familles naturelles des plantes* (1763) and until the end of the 19th century, the word famille was used as a French equivalent of the Latin ordo (or ordo naturalis). In nineteenth-century works such as the *Prodromus* of Augustin Pyramus de Candolle and the *Genera Plantarum* of George Bentham and Joseph Dalton Hooker this word ordo was used for what now is given the rank of family.

In zoology, the family as a rank intermediate between order and genus was introduced by Pierre André Latreille in his *Précis des caractères génériques des insectes, disposés dans un ordre naturel* (1796). He used families (some of them were not named) in some but not in all his orders of "insects" (which then included all arthropods).

[https://en.wikipedia.org/wiki/Family_\(biology\)](https://en.wikipedia.org/wiki/Family_(biology))

Adam Names the Animals

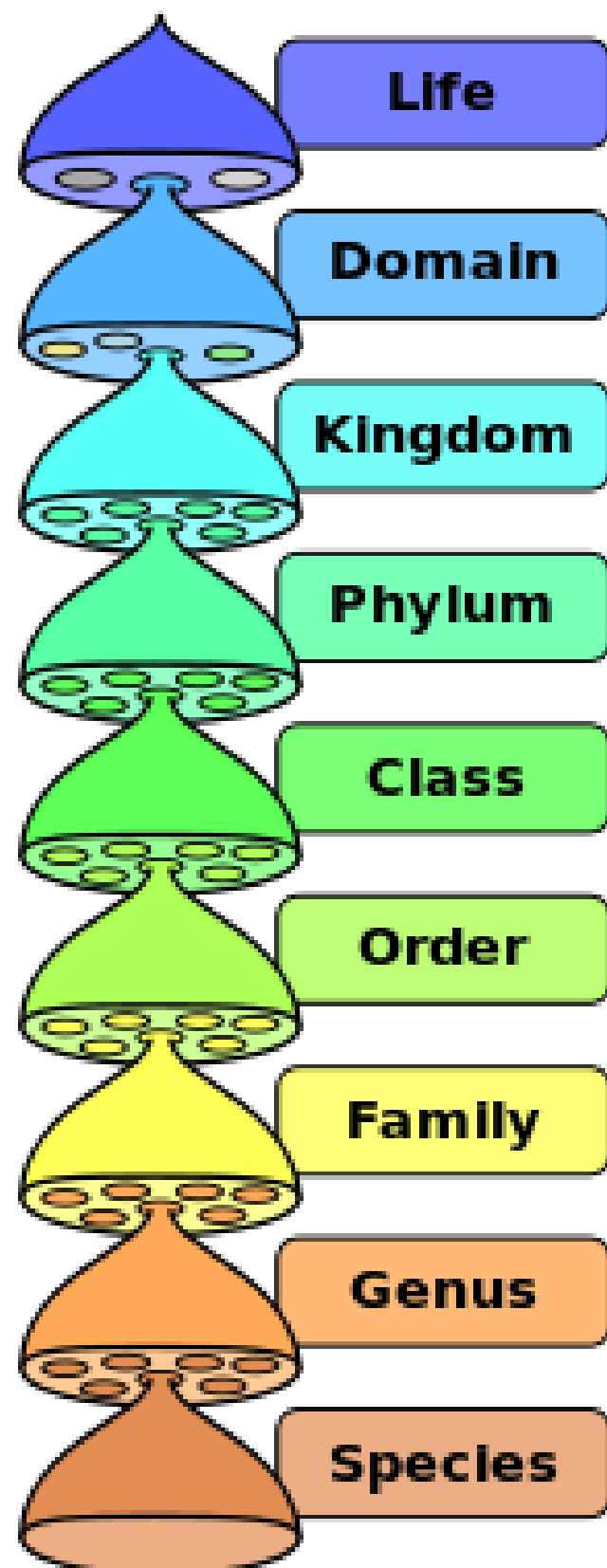
...¹⁹ Out of the ground the LORD God formed every beast of the field and every bird of the sky, and brought them to the man to see what he would call them; and whatever the man called a living creature, that was its name. ²⁰ The man gave names to all the cattle, and to the birds of the sky, and to every beast of the field ...

<http://biblehub.com/genesis/2-20.htm>

Draw Illustration



Copy and Label the Illustration in the Space Provided



[https://en.wikipedia.org/wiki/Family_\(biology\)](https://en.wikipedia.org/wiki/Family_(biology))

Draw (Copy) the Illustration Here

Interpret a Graph



Write the title of the graph _____

Circle the type of chart this represents

Bar Chart Line Chart Pie Chart Other

If applicable,

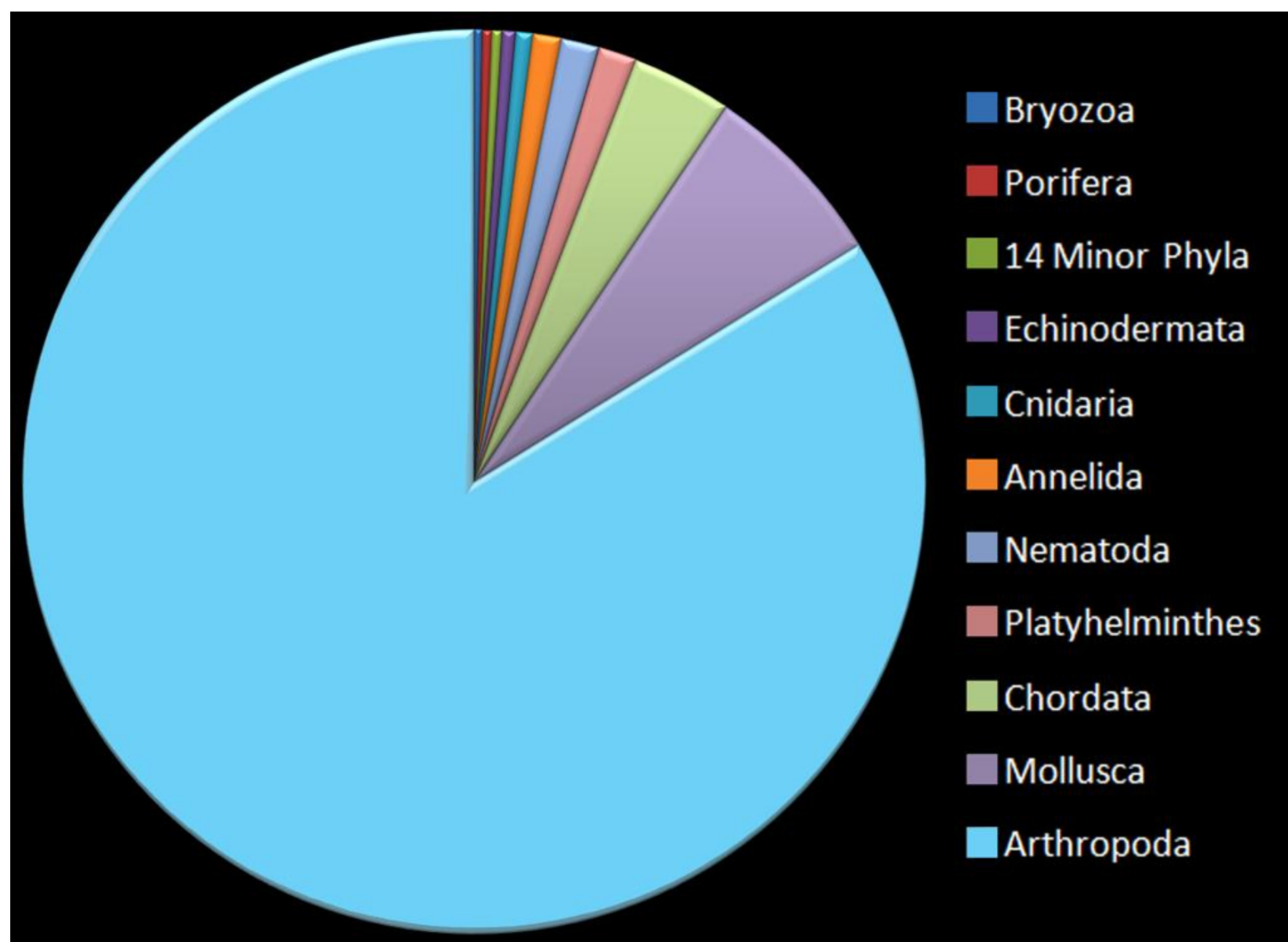
What does the X-axis represent _____

What does the Y-axis imply _____

Summarize what this graph represents or conveys

<https://commons.wikimedia.org/wiki/File:AnimalsRelativeNumbers.png>

AnimalsRelativeNumbers.png



Show-Off Your Smarts!



Instructions

- Complete as an individual or small group.
- Discuss your ideas/answers/responses in a small group.
- Select one person to present your responses to the class.

Q1. How can this information be applied to a young-person's life?

Q2. How does this information apply to (or impact) communities?

Q3. When do scientists need to apply this information? How?

Q4. How would a person from 100 years ago view this information?

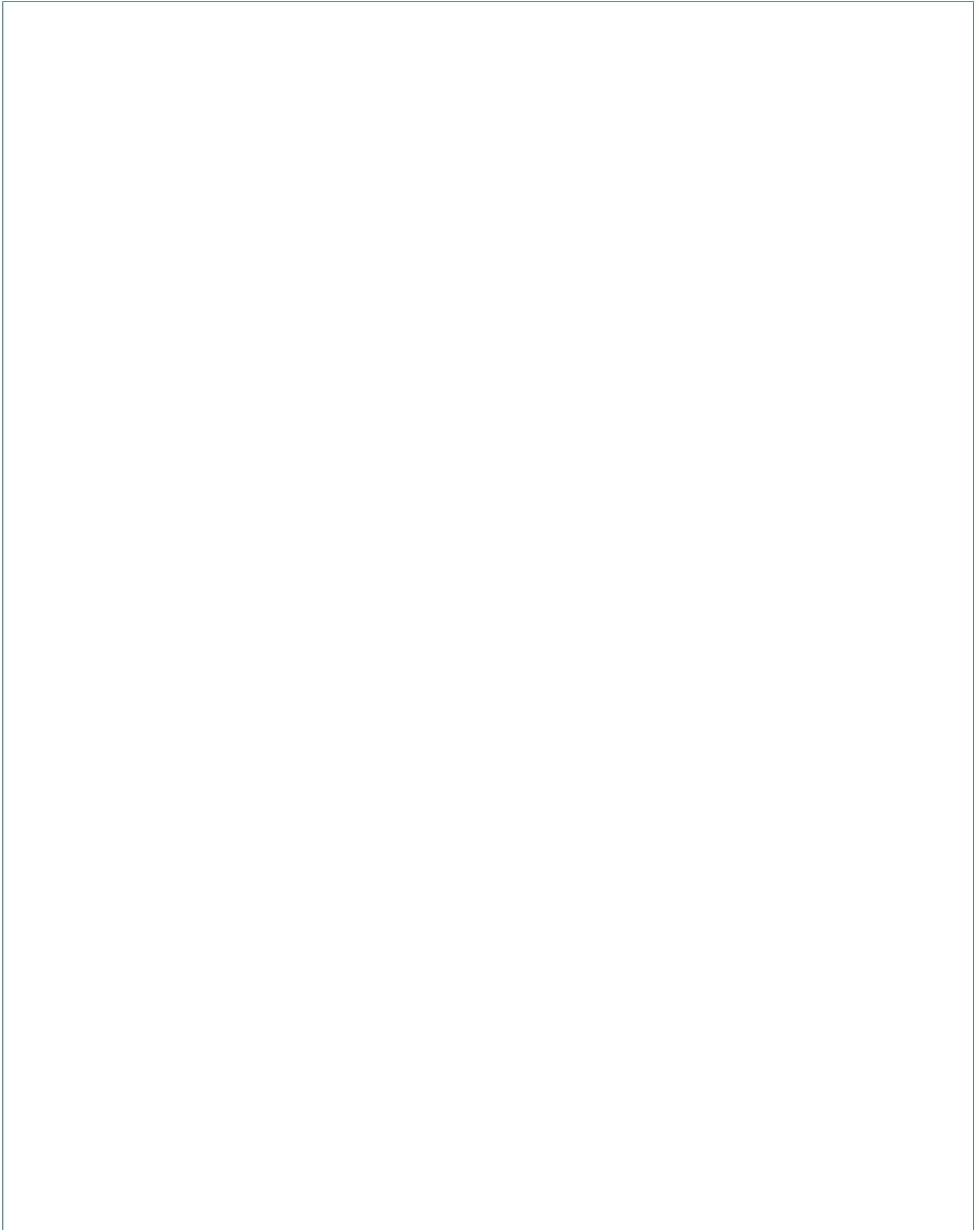
Q5. How does this topic connect to other science topics or math?

Write down at least three words introduced or covered by this topic.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Make a Poster

In the space provided here, create/draw a poster which conveys the concepts you have learned on this topic.

A large, empty rectangular box with a thin blue border, intended for the student to create a poster. The box occupies the majority of the page below the instructions.