



USE OF MENTAL MAPS IN BIOLOGY LESSONS

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Annotation

Different types of education are used today. One of these types of education is interactive education. A mental map is also used in the educational process. A mental map provides knowledge, understanding, application, synthesis and conclusion of the training. This article provides information about the use of mental maps in biology classes, and some examples of them are also given.

Keywords. Mental map, innovation, method, biology, knowledge, understanding, conclusion, human body systems.

A mental map represents a person's mental of their surroundings. Our brains subconsciously create mental maps to help us understand what our environment looks like and how to interact with the elements and objects within it. Mental maps are subjective - different people will have different mental maps of the same space, with variations stemming from their experiences, biases, and assumptions. You can even make a mental map of a place you've never been before. It may not be entirely accurate from a geographic or spatial perspective, but it'll reveal insights into your background knowledge and assumptions about the space. Because mental maps are generated in someone's mind, there are no hard rules about what must be present in them. Also, the elements present on a mental map can vary greatly depending on what type of space you're visualizing. Mental maps need to contain the features you would use to orient yourself within the space. For example, a mental map of an office would likely include things like desks, chairs, cubicles, closets, hallways, and stairways. Anything you use to orient or navigate yourself through a particular space can go on your mental map of that space. Mental maps help describe a person's mental of a given area or environment—but what are mental maps used for? There are many use cases for mental maps to help define and explore a person's relationship to their surroundings. For example, you might ask employees to create a map reflecting where they go throughout the workday, like the break room, manager's office, restrooms, the warehouse, and other areas. This exercise would help you understand how the person views themselves in relation to their surroundings. When interpreting a mental map, consider which elements are included and omitted. This information can reveal information about a person's





routines and priorities. Notice if any elements are distorted in any way. This analysis can indicate a person's Mental of that element's importance. The study of mental mapping and people's Mentals of the world around them fits into several social and scientific disciplines. Explore some of the various use cases for mental maps in different areas of study.

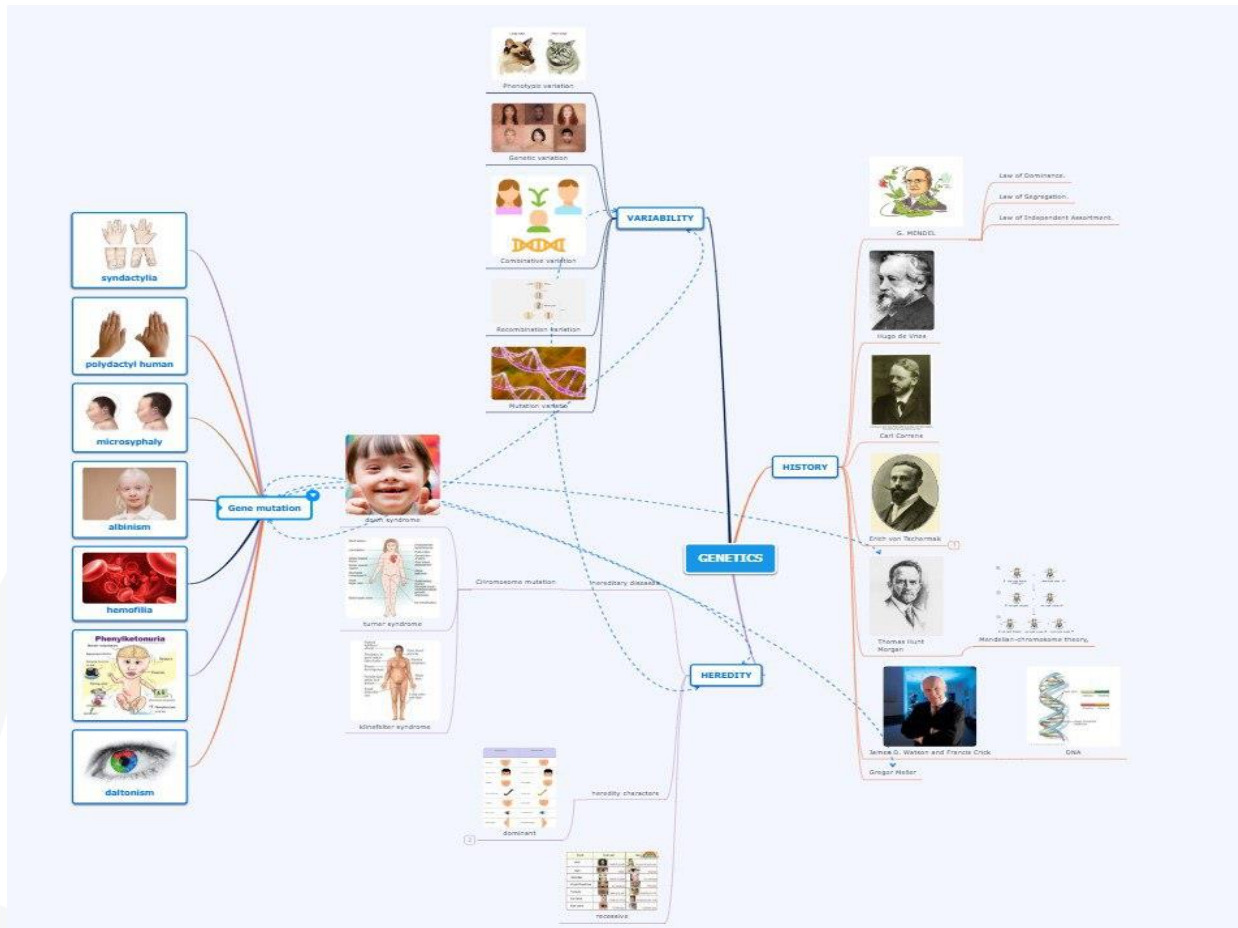


Figure 1. Examples of mental maps Genetic map.

A mental map can help you understand how a person sees a particular area or environment and how they interact with things within that space. Some benefits of mental mapping include: A mental map shows how much a person knows—or thinks they know—about an area. Ask someone to create a mental map of a specific space, and you'll be able to see knowledge gaps more clearly. Because mental maps are based on a person's mentals, many mental maps contain information that isn't factual. An example of this is when people perceive certain neighborhoods as unsafe, when the crime rates there may be similar to or lower than other areas that are perceived to be safe. Different people can have vastly different experiences within the same space. Asking a group to create mental maps of the same area will give you a more well-rounded look at the area, including what goes on there and how people



feel about it. Understanding someone's mental map of a space can help you find ways to improve the space. For example, asking community residents to create mental maps of their neighborhood could reveal various challenges, prompting municipal leaders to make improvements to services and infrastructure.

Since mental mapping is based on your unique perspective, making a mental map of an area you're familiar with, such as your house, office, or neighborhood, should be easy. Of course, creating a mental map of a place, area, or region you've never been to before is more complicated. To mentally map an unfamiliar place, you must rely on your imagination and any information you have on the area.

Follow these steps to create a mental map:

1. Define the area the map represents—a company office, a college campus, a neighborhood, a city, or another type of space.
2. Decide on the boundaries of the area. For example, if you're going to map your neighborhood, decide which streets you will include, and which are outside the map area.
3. Start with one feature or landmark around which to orient the rest of your map. It helps to pick something you're more familiar with. For the neighborhood example, you could start with putting your house on the map.
4. Begin to add more details. It should be easy to add the things right around your first element, and it'll get more challenging as you move further away. In a neighborhood mental map, add your next-door neighbors and any nearby roads, sidewalks, shops, parks, ponds, and other features.
5. Continue adding elements to your mental map until you reach the boundaries you decided on or run out of things to add. The level of detail is up to you.

Biology mind map models are a set of thorough revision tools that help you assess what you are studying and build superior thinking skills. It can also bring attention to crucial information while illuminating a subject's general organization and the relative importance of its various constituent pieces. Having said that, we've made an effort to list some concept maps in a useful and engaging way so that you can be prepared before taking the next.



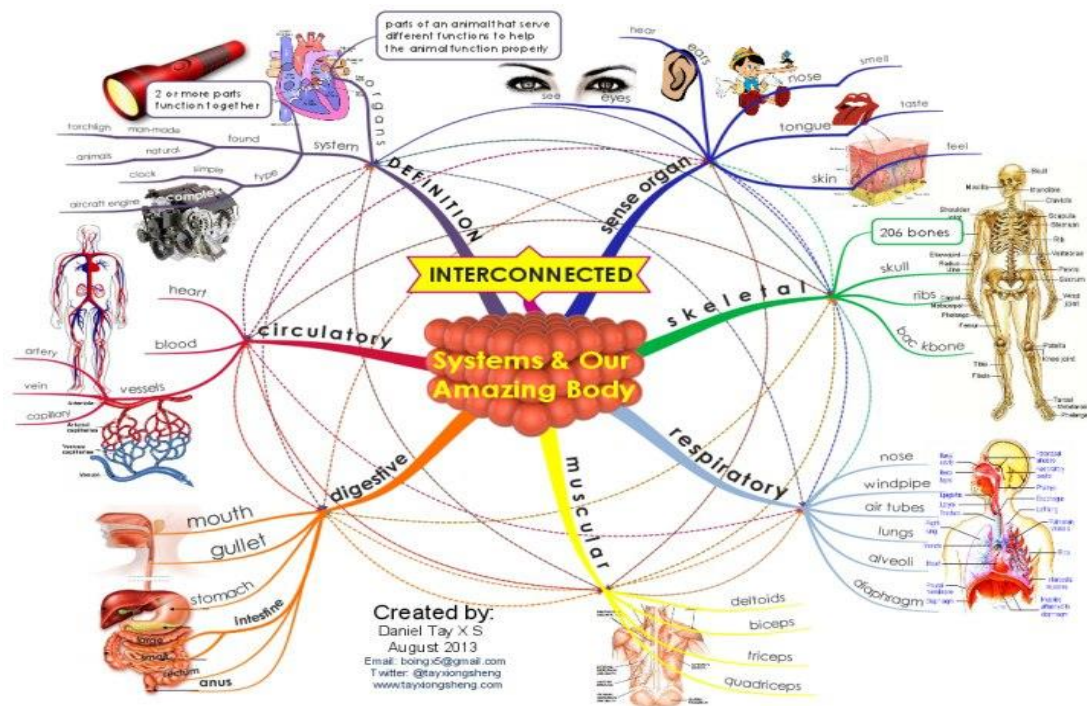


Figure 2. Examples of mental map. Human body systems.

This biology mind map for neet pdf summarizes the necessary content for passing the biology examination and the specific topic. It also defines systems of the body as a group of organ systems that collaborate to perform vital functions for the body. All body systems are required for an organism to survive and reproduce. However, this map will teach you how the organs work together into a body way of completing their respective tasks.

"Mental map" improves students' ability to analyze and understand the topic develops, teaches to fill in with own thoughts. If you notice concepts related to the topic are one word or phrase, sometimes one sentence given in the form it is the same when the student sees the ready-made "Mental Map". Expand information on several topics and explain them at the level of a large text will be able to get it. Now, what is a "cognitive map" in biology classes if we pay attention to its use in order. After the topic has been studied, summarizing about them has become a regular activity of the student. But if the student is assigned to systematize the "Mental map" as a homework assignment does not copy blindly, but carefully studies information and maps makes as a result, he turned to non-textbook sources of information to enrich the map will have to look. Because the teacher is in the process of evaluating homework whoever has a lot of data lines on the map and finds new information, his should not forget to give additional incentives for evaluation. For this the teacher should arrange the main lines for the students.



The following steps are taken to systematize ideas based on the "Mental Map" is increased:

The topic is carefully read by the student.

Get acquainted with other literature on the topic.

The central idea, person, object of the subject is located in the central part of the map takes the main lines of the map are marked. For example, on the cognitive map of topics in the chapter of genetics, its history, heredity and variability, terms and concepts related to them are written in sequence, etc. Thoughts on each direction are extra thin on the outline of the main map connected with a line.

The information entered on the map is in the form of a word, a phrase or a simple sentence can also be.

Thin lines connecting to the main lines of the map are of the same color must be. Because this is a system of thoughts that forms an ideological direction says that.

And the map lines that complement the adjacent ideas should be of a different color requires. Because every idea has its own imaginative color and color for the student's Mental will be. And this serves to remain in the memory for a long time.

CONCLUSION

Mental maps help us understand and interact with our surroundings. You can use mental mapping to determine what you know about a familiar location or challenge your assumptions about a place you've never visited. Mental mapping is also a great tool for broader research and study, helping scientists, geographers, psychologists, and other professionals explore people's Mentals of different environments.

"Mental Map":

- In biology lessons, a branch of science or a related one it gives a good result when it is compiled by students in reinforcement lessons after several topics have been covered.
- It is effective in creating clear and comprehensible abstracts of topics, abstracts, composing texts, and writing articles.
- Also in memory restoration and strengthening of previously covered topics is used.
- It is possible to systematize training in laboratory classes.

It can be used effectively both in the process of evaluating the performance of groups and in the process of individual evaluation.

This is such a method that in the reinforcement part of the lesson, the knowledge gained by making a general map of the class can repeat.





Mental mapping as homework and the student is independent and effective they help to acquire knowledge.

"Mental map" colored pencils, using markers such as can also be prepared on a computer.

A certain related to each other understanding of the topic, information connecting lines must be the same color. (From "Cluster" of "Mental Map" the difference is that the connecting lines are represented by the same colors.) Main the concept is defined by a thicker line or border. Out of data the connecting line may become thinner as it progresses.

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