CONCEPT MAPPING: A guide on how to make and use a concept map

From an ACTC biology and psychology tutor

Before we go into exactly how you create a concept map, let's first establish the main goal of concept mapping. At its core, concept mapping is all about **finding connections and relationships** between concepts or the details of a particular concept. For example, you might want to look at the connection between different kinds of plant tissues or the different schools of psychology. In concept mapping these concepts, you end up looking at the differences and similarities between concepts, how concepts are related, and how concepts might not be related.

It forces you to think more deeply about the information that you would if you were just reading your notes, using flashcards, or looking at definitions. This, in turn, makes your studying more **effective**! It is also much more engaging, which can make the process of studying more interesting. Now on to the how-to part of the guide!

Note: Concept maps do not have to be fancy. As long as you have the information down and it is legible enough for you to read, that is all that matters! Having said that, it can be beneficial to color code similar information, as shown below. Creating a concept map will probably be easier with a bigger piece of paper compared to a smaller one, or you might benefit from using multiple pieces of paper and taping them together if you do not have enough room on the size of paper you have available. There are online programs that can be used for concept mapping as well.

Once you have chosen your medium for concept mapping, first start by choosing the **central concept** that you will be looking at. We will be using macromolecules as the central concept as our example. The central concept is supposed to be the main topic of the concept map and the general idea that you will be breaking down.

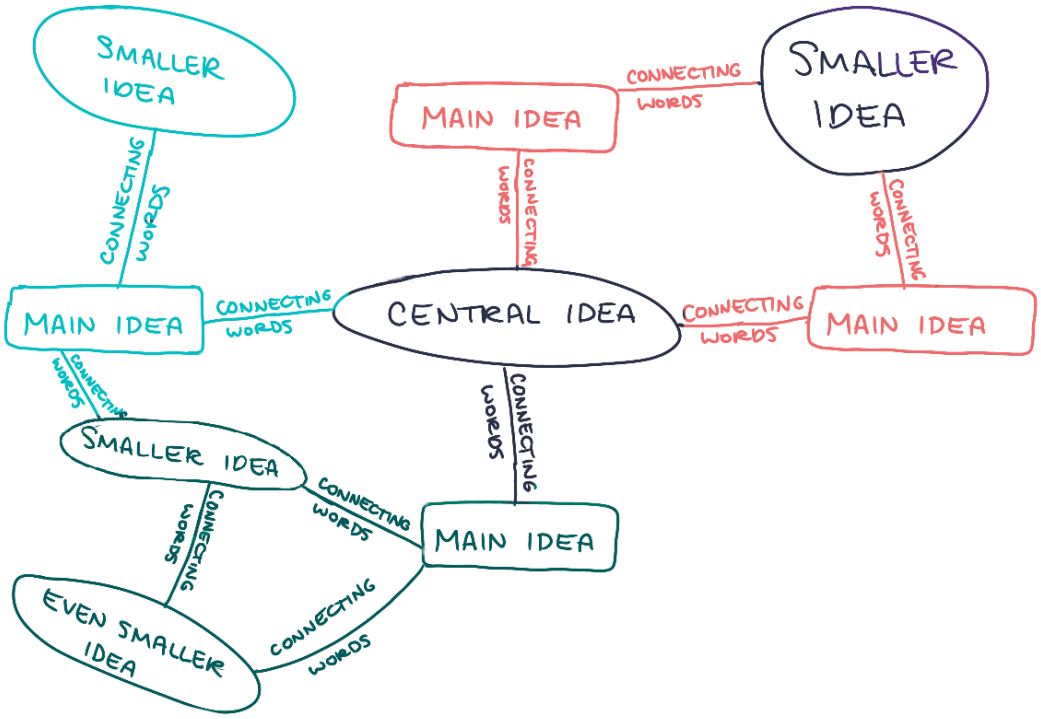
The central concept goes in the middle of the concept map. Next, you break the central concept into **main ideas**. You can have as many as you can fit; you might only need two or three, or you might have six or more. Main ideas can be anything broad that fits under the central concept, such as types of macromolecules or functions of macromolecules in our example below.

To connect the main ideas to the central concept, you will want to draw a line between the two and write **connecting words** on that line. The connecting words are used to show what kind of a relationship you are demonstrating between the central concept and main ideas, or even between main ideas. Connecting words can be verbs, nouns, prepositions, or just about anything else—all that matters is that they demonstrate the connection between the words. I recommend writing your connecting words before writing your main ideas so you know how much space you will need.

Next, you will break the main ideas into smaller ideas. These are more specific than the main ideas. For example, the main idea of "joined together" gets more specific by providing the term that is used for that idea. Carbs and fats are broken down into different roles they have. These more specific ideas can then be broken into even more specific ideas and connected to other terms with more connecting words.

As you add more and more terms and connections, you might discover new connections that you would not have thought to add to your map previously. That's where the deepest learning occurs!

EXAMPLES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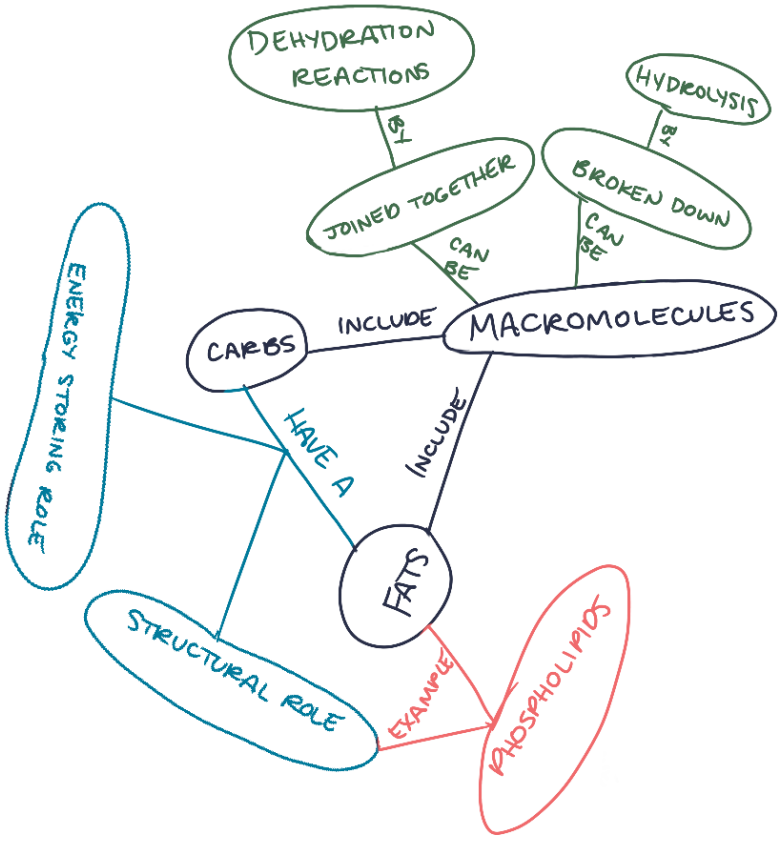
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