

## Mind Map Molecular Tech Assignment

A mind map, also called a concept map, is a way to visually connect important terms and ideas. A concept map is a visual organization and representation of knowledge. It shows concepts and ideas and the relationships among them. You create a concept map by writing key words (sometimes enclosed in shapes such as circles, boxes, triangles, etc.) and then drawing arrows between the ideas that are related. Then you add a short explanation by the arrow to explain how the concepts are related. To see example of a concept or mind map, do a quick google search and click on images to see how they can be created.

Below are a series of terms and short phrases that you should become familiar with and make a mind map. You can talk with others about this, using zoom or whatever means you find appropriate and then each student must create his or her own mind map using the terms below. IF in the process you find more terms or ideas or short phrases, that you feel critical to understand the techniques of molecular biology feel free to add.

THIS IS AN INDIVIDUAL ASSIGNMENT - Grading will be done by the completeness and the short (emphasize short) explanation for the arrows. **Create your mind map by hand**, take a pic and convert to a PDF (a scan function on your phone works best).

Restriction Enzyme

Real time PCR

qPCR

Sybr green

Probe based rtPCR

Gibson cloning

TA overhang

PCR cloning

Restriction Enzyme Cloning (not the same as "restriction enzyme")

Reverse transcriptase

Plasmid

Construct

Complimentary DNA (cDNA)

RNAseq

Chain terminator sequencing

Next-Gen Sequencing

Bacteriophage

Sticky end DNA

Blunt end DNA

Expression vector

Site directed mutagenesis

Selectable markers

Processivity

Hot start polymerase

High Fidelity polymerase

Taq polymerase

Long range polymerase