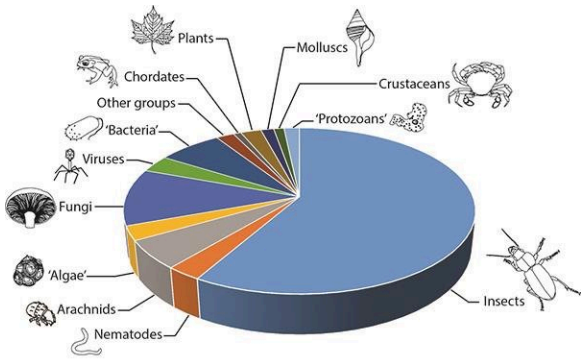
Lesson 2 - Species Count Part 2 (2.5)

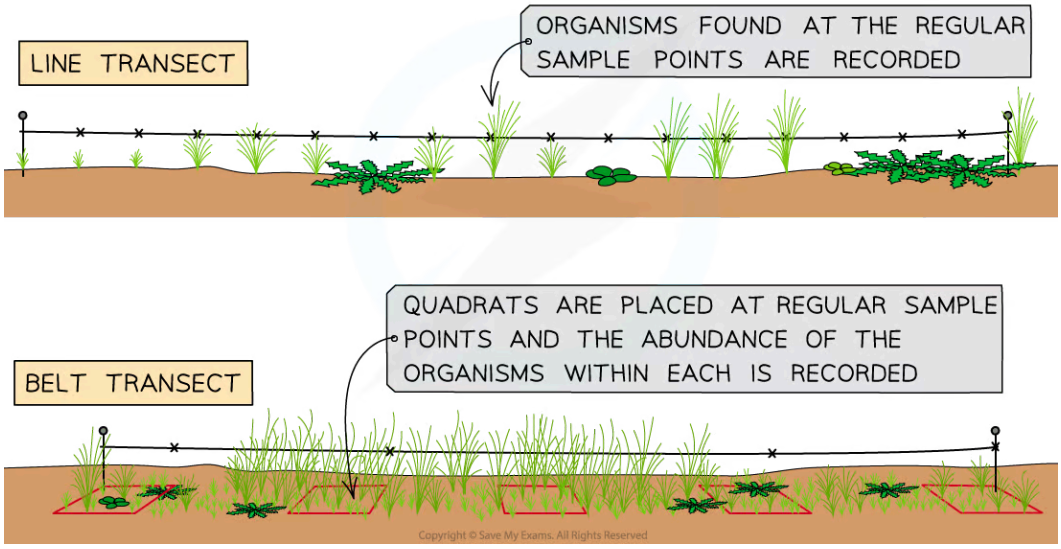
Purpose - Use data to justify biodiversity of 2 samples.



1. Warm up -
   - **Big Questions** - Add to your "Big Questions" page - IB will use similar language in unit tests and IB exams.
   - What causes biodiversity loss, and how are ecological and societal systems impacted? (3.2)
   - How do worldviews affect the choices made in protecting natural systems? (3.3)

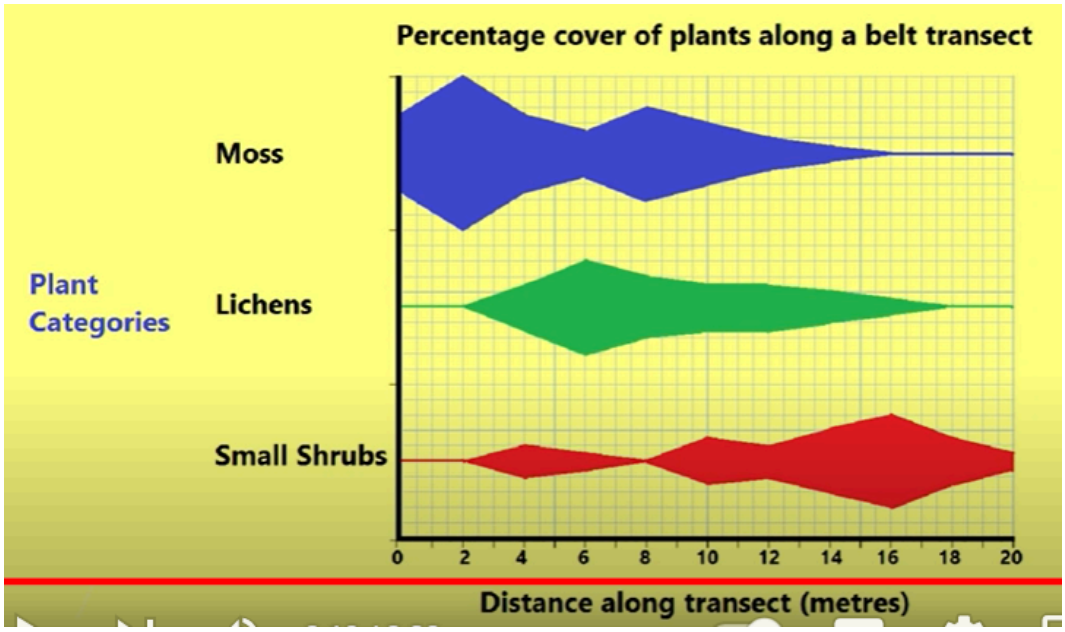
(lots of big words here - let's think, pair, share, and then write)

2. Data Collection - Complete this today. (IA - Treatment of Data)
   - Reminder - Belt Transect
   - For temperature - drive a hole first with a solid object and then use the probe 2nd - we will probably have to share probes.



3. Create - Make a "kite diagram" to show changes of species to show **zonation**. Use these terms in your conclusion. Copy these on a note page.
    - Zonation - Zonation refers to changes in community along an environmental gradient (such as elevation, latitude, tidal level, soil horizons or distance from a water source).
    - Niche - A niche describes the particular set of abiotic and biotic conditions and resources upon which an organism or a population depends.
    - See bottom of “Zonation” page. (support video)

Example:



4. Note - we are not doing any Data Processing for this experiment - we only displayed raw data
    - If you were to Data Processing, you could look up “what statistical analysis would I use when comparing plant cover biodiversity of a belt transect?”
    - What are the suggestions? How could you learn more about that?
    - **Internal Assessment** (but would probably need to be done soon. Let me know if biodiversity species comparison interests you as you would want to collect data in the next few weeks)

5. Write - Conclusion -
    i. Discuss - what are the broad observations made from each group. Say a short summary.
    ii. Now, write a conclusion. (See rubric below). Think about using **Claim, Evidence, and Reason**. Use your data (quantitative) and other observations of the area (qualitative) to explain your choice and include ideas of how the building might have impacted the environment.
    - Collect Notebooks - Turn in Planning, Data, and Conclusions

Level	Analysis and Conclusion (E)
1-2	• The analysis **identifies** patterns or trends within the data that are relevant to the research question. • The conclusion either **does not** address the research question or **is not** supported by the analysis presented.
3-4	• The analysis **describes** patterns or trends within the data that are relevant to the research question, **including** (some) measures of bias, reliability, validity and uncertainty. • The conclusion addresses the research question **and** is **partially** supported by the analysis presented.
5-6	• The analysis **explains all** the patterns and trends within the data that are relevant to the research question, **including** measures of bias, reliability, validity and uncertainty. • The conclusion addresses the research question **and is supported** by the analysis presented.