

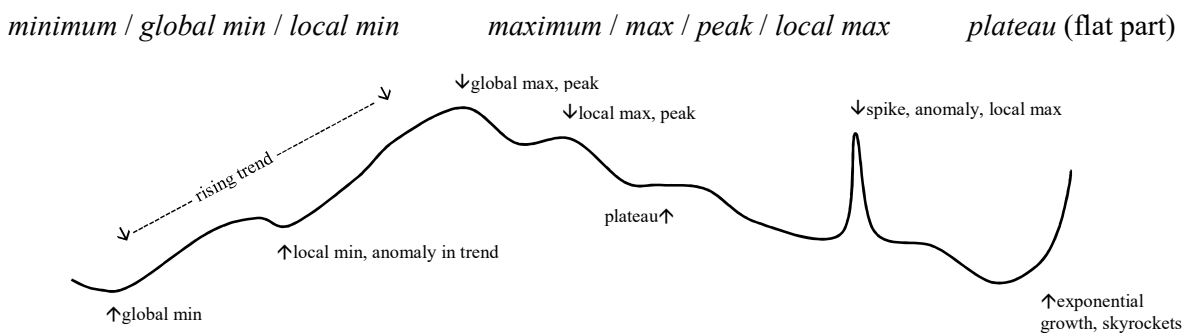
Describing a Figure (Graph or Table)

In the Body section of your presentation, you should explain at least one graph or table to prove that you have good command of this skill. You are showing the audience this figure for some important, interesting reason (otherwise, do not waste time on it), so what do you want them to learn from this figure? Help them to understand the key point of the figure and relate it to your talk's central idea. Use the **O-I-L** technique. 加油!
 To prove you have this skill, *it is better to explain one figure well than to quickly skim over 4 or 5 figures.*

- **"O"=Overview:** Identify the table/graph. "Here we see a table/graph showing XRD analysis of the pottery shards we found." If you think it is worth the time, mention the scale (graph), units (graph/table), or horizontal/vertical axis meaning (graph).
- **"I"=Identify Interesting parts:** Point out the most interesting part of the graph/table with words and gestures (i.e. actually **point on the slide using the mouse** or a laser pointer). "Notice this part <point on the graph/table>." "These red parts in this gray area represent zircons between 4.2 and 4.4 billion years old. This red part here <point> is for the oldest one we found at 4.4 billion years old."
- **"I"=Interpret the Interesting parts:** "This peak/number here proves that there is a significant amount of boron in the sample, which is the opposite of what previous theory said we should expect." "This number shows that our new method is 5 times more accurate than the old method." (Note: Do not just say "better", but rather better in what way? by how much?)
- **"L"=Link:** Tie the interesting data of the figure to the overall focus of your talk. "The amount of boron supports our theory that this material came from another area."

Graph Vocabulary Examples:

- Rise sharply = *skyrocket*, Rise sharply then fall sharply = *spike*
- *Exponential growth*: looks like $f(x) = c^x$ for some constant $c > 1$.
- Very high or very low level: "*skyrockets off the chart*" or "*falls off the chart/table*"
- Something unexpected = *anomaly* (could be spike, plateau, different pattern, etc.)
- Angle of line = *slope*: *gradual/slight/slow* $\sim <30^\circ$, *sharp/steep/sudden* $\sim >60^\circ$
- *Trend* = basically one slope but may have anomalies



No pattern↑: *irregular, aperiodic*

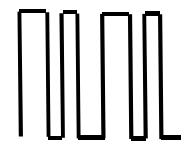
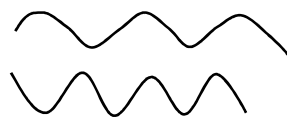
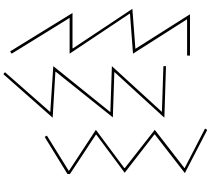
Patterns: *saw tooth,*

sine wave,

Has pattern↓: *regular, cyclic, periodic*

wavy,

discrete



Expressing reasons for graph/table features:

- This <effect> is/was due to <cause>
- We see <effect> because of <cause>
- The cause of <effect> is/was <cause>
- The reason for the <effect> is/was <cause>
- <cause> caused <effect>
- <effect> is ascribed to <cause> (This is correct but sounds too formal.)
- This peak *is assigned to* <some element> (in a spectrograph showing elements)