**Tips and Strategies Sheet for TAs and LAs**  
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**Tips and Strategies for Probing Student Learning:** These tips and strategies should be directed at entire groups of students...when approaching a group it is best to never talk to just one student but rather to address the group as a whole 😊

- **When students are unmotivated:**
  - If students are off task and talking about other things...jump into their conversation casually...“oh that’s so cool!” or “really?!” and then slip in a “Hey! You even got me off task! But let’s focus on chemistry right now, you should definitely tell me more about that later though!” And if you’re lucky, a student’s story will directly relate into the concept at hand...and a real world application can be made right then and there: “Funny how you bring that up, that happened because __________, just like how __________ in chemistry.”

- **When students just want the answer:** Try to direct them to focus more on the thinking process.
  - “I could give it to you...but that’d be too easy.”
  - “If I just tell you the answer, then you wouldn’t really be learning now would you?”
  - “Okay. But tell me how you got the answer you have written down first.”
    - This allows you to lead them to the answer instead of simply telling them the answer.
  - “You’re almost there. I like how you’re thinking...just consider this for a moment ______

- **When students claim they’re “good” and “doing alright”:**
  - “Awesome. So let me just take a peek and make sure you’re on the right track. Can you describe how you got this?”
  - “Okay I’ll be back around to make sure everything is still okay later.”
    - This gives students the opportunity to consider if they really do understand everything....when you say this though, make sure you DO COME BACK to them!

- **When students are confused:**
  - “It’s okay...this used to confuse me all the time! Here...think about it this way...or maybe this way...”
  - “Don’t worry! Let’s see...so what’s confusing you? Is it the wording of the question?”

- **When students ask a hard question that you don’t know how to answer:**
  - “That’s a really good question. I don’t actually know the answer to that...I’ll ask _____ (TA or LA) and see if he/she knows. Be right back!”
    - ACTUALLY GO consult your cooperating TA/LA
“Hmmm…I’m going to have to get back to you on that. Can you please right down your email address for me? I’ll email you what I find.” (or get back to them the following week)
  - Again, ACTUALLY get back to them!

• **When students don’t want your help:**
  - When a particular student doesn’t want to speak to you talk to someone else in their group and probe discussion that way.
  - When an entire group of students do not cooperate, “Hey guys, so this part is really important...go over that again and let me know if there’s something I can help you clarify.” “This concept is really important...it’s a good one to know for the exam…” “If you know this concept...you’ll be able to understand ________”
    - Make the concepts sound really important.
  - Something else that can be done is asking students direct questions regarding the material instead of a simple “how are you guys doing?”
    - “Do you know why ________?”
    - “Okay so I see how you guys got that, but what if ________?”

• **When students don’t know the answer:**
  - “Well, it looks like you’re on the right track. Explain to me how you got this far...”
  - “Are you stuck? Well let’s see what we already know and have gathered?”
  - “So what do you know about (concept). Okay. So from what you told me (restate/summarize what students said), well if that’s the case...(tie in the question at hand)
  - Ask other students in the group if they can help out.

• **When students have the correct answer…but can’t explain how they got the answer:**
  - “You got the answer from the lecture notes? Nice. But lets see if we can come up with it another way...remember we can’t bring the notes with us into the tests.”
  - “You don’t know how you got it? Ha. I’m sure you do...let’s see...well what do you know straight off the bat about ________?”
  - “Well...it’s like (real life application)…”
    - This one is the hardest to apply, but is probably one of the most useful things (second to encouraging students) a TA and LA can do...to make connections and to show students the relevance chemistry has on our lives.