

Glaciology Lab Week 4: Theory workshop

Background information

Lots of glaciological research now is supported by computational tools, which we'll explore this week. To make best use of those computational tools, we need to develop physical intuition for the systems of interest. The goal of this lab session is to practice problem-solving with the tools available to us.

Materials

- Lab notebook
- Laptop computer (optional)

Procedure and questions

1. With a partner or small group, choose one of the problems on the following pages to tackle.
2. Make a “plan of attack”, and describe the steps you intend to take to solve the problem below.

3. Work through the steps you outlined above. If you try something that doesn't work, write down what went wrong and why.

4. Develop a new plan as necessary. Document any new steps you intend to take, and note anything new that doesn't work out.

5. When you are satisfied with your work, write up a solution guide using the two-column approach below. Place all calculations in the left column. In the right column, write your reasoning leading up to each calculation in full sentences.

Calculations	Reasoning

Problem statements