Lab Plan for 10/10/23:

* Lab work details:
  + 2 new extraction methods will be tested for the solvents.
  + Free periods: 10:20-12:50 (continuous)
* Boiling point extraction test:
  + 0.1g of the freeze-dried pomegranate peel will be added to 30mL of each solvent.
  + The solutions will then be heated until they reach around 10K lower than their boiling points.
    1. The 10K value can be changed as required; the only goal is to ensure that the solvent does not start to boil off.
  + After 15 minutes, they will be taken out and filtered.
    1. After the 15 minutes, a cool-down period of 1 minute will be given for the solutions to allow the beakers to reach a safe-to-handle temperature.
  + Then, 10mL of the CuSO4 standard will be added to each solution using a pipette.

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| **Solvent** | **Boiling Point/K** |
| Water | 373.15 |
| Ethanol | 351.52 |
| Diluted Ethanol (50%) | 351.52 |
| Chloroform | 334.3 |

* A new 100mL , 0.05 moldm-3 copper (II) sulfate standard will be made using 1.2484g of CuSO4 as only 10mL of the original standard will be remaining after conducting one of the extraction tests.
* Magnetic stirring extraction test:
  + 0.1g of the freeze-dried pomegranate peel will be added to 30mL of each solvent mentioned above.
  + Then the mixture will be put on the magnetic stirrer at the maximum speed.
  + After 30 minutes, they will be taken out and filtered.
  + Then 10mL of the new CuSO4 standard will be added to each solution using a pipette.