

October 22, 2021
MSE 2101 topics

- The significance of internal heat
- Sources of internal heat
 - Collisions and impacts
 - Gravitational contraction
 - Radioactive decay
- An example of collision: the formation of Moon
 - Moon density equals that of Earth's mantle
 - No volatile elements on the Moon
- Retaining internal heat
 - Heat capacity proportional to volume
 - Heat emission (loss) proportional to surface area
 - Ratio V/A : heat retention (cheese slice/cube in the oven)
 - Bigger planets – better heat retention
- Why is Mars no longer habitable?
- Determining an age of a rock – forming a geological record
 - mineralogical analysis
 - chemical analysis
 - isotopic analysis
- What are isotopes again? Atoms? Nucleons? Electrons?