## October 23, 2023 MSE 2101 topics

- The impact of volcanism, magnetic fields and tectonic plates on long-term habitability of the planet
- The one factor to drive it all: internal heat
- Sources of internal heat
  - Collisions and impacts
  - Gravitational contraction
  - Radioactive decay
- Retaining internal heat
  - Heat capacity proportional to volume
  - Heat emission (loss) proportional to surface area