



MathsNET

A joined up approach to
teaching and learning
mathematics

The Kelvin definition of temperature

- In this exercise we are going to think about temperature. I believe this is the hardest thing in classical thermodynamics because it is actually very difficult but most people (because temperature is now so familiar) think it is simple. **Before watching the video** I would thus like you to explain what temperature is. What characterises objects that have a high temperature and objects that have a low temperature. If you are struggling to answer this question start by explaining in your own words how an old fashioned mercury thermometer works. It will also be useful to think about whether temperature is an extensive or intensive thermodynamic variable.
- Now watch the video and explain how Kelvin's universal calibration for temperature operates in your own words.