Week 1 homework task:
Writing practice & confidence-building questions

- **Choose an equation your students need practice with (KS3, 4 or 5 – your choice!)**

- **Write 6-10 practice questions involving this equation.**
- Guidance:
  - First questions just involve 'plugging numbers'
  - Later ones involve more complex re-arrangement
  - One or two can involve a challenge
  - Make the contexts of some questions relevant to applications
  - Make a question or two have visual impact
  - Ensure it is easy to mark!

- **You can get feedback on this next week, either in the session or email to ingrid@isaacphysics.org (so we can see your questions more easily)**

Anton's example:

- GCSE: $E = qV$

- Write 6-10 practice questions involving this equation.
  - How much energy is given to a 0.002C charge by a 9V battery?
  - Calculate the potential difference needed to give 50J to 0.25C of charge.
  - How much energy does a 240V supply give to 9nC?
  - Calculate the kinetic energy of an electron accelerated across 10kV in an X-ray machine.
  - A cat stands on a carpet and rubs itself against a sofa gaining 5μJ of electrostatically stored energy and 10nC of charge. What is its potential difference?