Problem solving strategy

- Use this approach to solve problems, in particular if at first you have no clue.

**Step 1** Recognize the problem
- What's going on?
- What does this have to do with...?

**Step 2** Describe the problem
- How do I get out of this?
- Plan a solution
- Let's get an answer

**Step 3** Plan a solution
- Execute the plan
- Evaluate the solution

**Step 4** Execute the plan
- Can this be true?
- Draw a picture

**Step 5** Evaluate the solution
- Phrase the question in your own words
- Relate the question to something you just learned
- Identify physics quantities, forces, fields, potentials...
- Find a physics principle (symmetry, conservation, ...)
- Solve equations, starting with intermediate steps
- Write down the equations
- Solve equations, starting with intermediate steps
- Check units, order-of-magnitude, insert into original question, ...