Task 1:

* Experiment 8 – Flame Tests
* Experiment 9 – Emission Spectra
* Atomic Absorption
* Emission Spectra
* Experimental aspects of experiments

THIS IS ALL WE NEED

Task 6:

* The chronology of the discoveries by the scientists in question – how do they fit together to form a timeline?
  + Dalton
  + Thomson
  + Rutherford
  + Bohr
  + Chadwick
* Specific experiments done by the scientists, and **how** outcomes of these experiments advanced our understanding of the structure of the atom.
  + The experiments that were done by the scientists ABOVE
  + Electrons – cathode ray experiment – J.J. Thomson
  + Protons (and essentially the nucleus) – Ernest Rutherford
  + Neutrons – Chadwick
  + Shells (Orbitals or energy levels) – Bohr
* Major discoveries that were made, theories that were developed, and developments to atomic models that were proposed.
  + Literally the stuff ABOVE (electrons, protons, neutrons, shells) for discoveries.
  + Theories:
    - Dalton’s atomic theory
    - Thomson – discovering electrons using cathode ray tube experiment – proposed plum-pudding model.
    - Rutherford – discovered electrons using gold foil (pew-pew alpha particles) experiment – proved Thomson’s model incorrect – proposed own model (nuclear model of the atom)
      * Then the problems with the model – unstable, half the atom’s mass, no explanation for emission spectra.
    - Bohr – used quantum theory and was like shells have specific energy levels blah blah blah - Bohr’s model of the atom.
    - Chadwick – everyone forgets about this guy – discovery of neutron.
      * More pew-pew of alpha particles but attacking beryllium instead.
      * Why neutron took so long to be found.
* Properties and locations of subatomic particles, and how we use the Periodic Table to establish numbers and arrangements of subatomic particles.
  + Surely this one’s clear enough. No need for explanation?
* Isotopes of elements, their similarities, and differences in terms of atomic structure and physical and chemical properties.
  + This one also.
* Explain how developments in technology have contributed to our understanding of the model of the atom. (SHE)
  + Uh, idk how to explain this.
* Describe the structure of the atom, including the locations of sub-atomic particles, holding the electrons to the nucleus.
  + No, I’m not explaining.
* Describe the properties of protons, neutrons and electrons, including relative mass and charge.
  + This is more than enough information.
* Define what the relative atomic mass of an element is, and explain how this is different from mass number.
  + You don’t need me anymore.

Ok since everyone is so paranoid about everything (myself included), here is what WE DON’T NEED:

* ELECTRON CONFIGURATION (this is not a this time thing, we need it for the test after this cap.)
* Mass spectrometry (this is DIFFERENT to emission and absorption spectrum)
* NO, we DO NOT need atomic emission spectroscopy AND (not or) atomic absorption spectroscopy (again, this is DIFFERENT to emission and absorption spectrum)
* NO ORBITAL SHAPES (I don’t even have them in my notes)

Recommended question sets:

Not all of the questions are relevant to the cap.

Just go through all the sets you’ve done in class and pick out the relevant stuff.

I’ve just put in the ones I think are more relevant.

Lucarelli:

* Set 3

STAWA:

* Exp 8 questions
* Exp 9 questions
* Set 8
* Set 12
* Set 21

Recommended chapters:

Lucarelli:

* 2

Pearson:

* 2

Study tips:

* Don’t just read your notes, you’ll only take in 10%
* Remember spelling tests in primary school? Yes, do look, cover, write, check. Seriously.
* Read things out loud a couple of times. Read it slowly, line by line if you have to. Literally read a line, close your eyes and repeat it.
* Try shutting your laptops and your notebooks and write down everything you know. Do it a couple of times, checking each time to see if you have missed anything.
* Most importantly, you need to first try to understand everything. Put some thought into those words. You can’t remember something you don’t understand.
* Take breaks.
* Get some sleep. Go to sleep before 10, 11 if you’re desperate. If you really think you need it, get up early to revise. Being tired is the equivalent of being drunk, you’re not going to remember anything. It’s like when I binge anime and watch until 2 in the morning, when I wake up, the plot and the character names have gone out the window. It’s the same concept.
* Do as many questions as you can. Do the same sets over and over again. I did the contradiction chapter at least three times, by the end of it, I knew it without really knowing it, yes it helped during the test. THERE’S ONLY SO MANY DIFFERENT QUESTIONS THEY CAN ASK.

Tips in general:

* Stop stressing.
* Stop overthinking everything.
* The world isn’t about to end.
* I can guarantee you that 90% of this stress is in your head. You keep having negative thoughts. The more negative thoughts you have, the deeper you go down the hole.
* I know you know the content and I know that you also know that you know the content.
* You just keep thinking about the worst case scenario.
* Actually, if you *rationally* think about it, there really isn’t anything that is extremely overwhelming.
* The topic is not big. It’s not everything we’ve done this term. *It’s only a chunk of it.*
* The connect notice has everything you need, don’t stress yourself out by thinking ‘what else do I need to know’, it’s all there.