Over the summer there are two main tasks for you to complete:

1. Research PAG 12 – this should be a fully referenced report on a topic of your choice that has links to the course and should go beyond the course – typical choices can be on material properties of Kevlar, black holes, superconductivity, supersymmetry, nuclear fusion to name a few. You should use the Harvard systems for referencing (if unsure then please click here for more info [https://www.librarydevelopment.group.shef.ac.uk/referencing/harvard.html](https://eur01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.librarydevelopment.group.shef.ac.uk%2Freferencing%2Fharvard.html&data=05%7C01%7CAHern%40opgs.org%7C9b0219bc6097428cff8108da640572f0%7C064b53d940d84867b4932e949a06ed13%7C1%7C0%7C637932272138285138%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=Jic0je4ga5tKx%2Bbr3ax5pFiOmF%2B2ea4myuXrFMY1YwQ%3D&reserved=0))

Please see attached document for more detail of the requirements

Please submit these n the first week back as follows – 12J to Mr Kedzia, 12K to Mr Hoskins and 12M to Mr Lindsay

1. Prepare for an AS assessment in the week you return to school. Assuming the timetable doesn’t change (no guarantee) then 12J will sit it on Thursday Period 1 and 2. 12K will be Tue Period 5 and Wed P2 and 12M will be Tue P3 and 4. In order to keep it fair the paper will be split into 2 sections and they will be sat in each of the two lessons allotted.

Content on these exams will be on a broad range of topics from the AS course:

1. Vector addition, forces and motion, materials, newton’s laws and conservation of momentum
2. Electric current, resistance, circuit analysis, waves, quantum

To aid with your revision for this please ensure you have completed all the attached past papers. Mark schemes of which can be found online for you to self-assess once complete.