

# A-Level Physics

Entry requirement activities

<https://www.fairlighttuition.org/>

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# Summer milestone list

- Sevens
- YouTube playlist
- Fives
- Spelling list
- Times tables and number bonds

# Sevens <https://www.fairlighttuition.org/downloads/>

A Seven is a key topic broken down into 7 succinct concise points. They are reduced down to the bare minimum and designed to be memorised. They mainly comprise of key equations, laws or definitions that are crucial for the A-level course. You should be able to write them down on a blank piece of paper from memory perfectly.

Over the summer you need to learn the first 4 from mechanics

1. Scalars and Vectors.
2. Statics and Dynamics.
3. Falling bodies.
4. Kinematics.

# YouTube playlist <https://www.youtube.com/watch?v=H49R5OlvfC4&list=PL433B805A7B91A695&index=1>

These tutorials will walk you through the basics of what you will need as well as tackle questions and how you should approach them.

Pay attention to all the extra bits that get added to a question that are not necessarily answering the question e.g. circling key words, highlighting quantities and identifying them.

These are meant to go in conjunction with Fives.

# Fives <https://www.fairlighttuition.org/downloads-2/>

As you may have guessed Fives have something to do with 5 of a thing. They are 5 questions (2 easy, 2 medium, 1 hard) and are the basis of the tutorials on YouTube.

I recommend you watch the 1<sup>st</sup> tutorial, then do the 1<sup>st</sup> Five, then watch the walkthrough for the 1<sup>st</sup> Five and notate over your work in Green any corrections or things you should be adding to improve your understanding. Then move onto the 2<sup>nd</sup> tutorial. Rinse & Repeat.

# Spellings

Learn the 20 spellings, 10 general spellings and 10 mechanic spellings.

## General

1. Causing
2. Somewhat
3. Therefore
4. Parallel
5. Perpendicular
6. Dissipate
7. Satellite
8. Whenever
9. Equal
10. Definite

## Mechanics

1. Pythagoras
2. Trigonometry
3. Tension
4. Viscosity
5. Equilibrium
6. Negligible
7. Deceleration
8. Efficiency
9. Parabolic
10. Hysteresis

# Times tables and number bonds

Your fundamental mathematics needs to be quick and on point, this means knowing your times tables by heart and confident with number bonds.

Eg

1.  $7-13$

2.  $12--4$

3.  $-6+-3$

4.  $+17+-4$

5.  $-32--17$

6.  $6-+3$

The answer to these types of questions need to be second nature to you and on the tip of your tongue in seconds. A mistake on something like this can cost you 4 marks. In an exam you will fudge these.