

Wider reading and research

These are important skill to develop to achieve success at A level. To get you started choose one of the activities below. Bring in your research on the first Physics lesson in September.

EITHER: Search Youtube minute physics

https://www.youtube.com/results?search_query=minute+physics Choose any one minute physics topic that you are interested in and produce a short review using the criteria below.

OR: Search new scientist

<http://www.newscientist.com/topic/lastword/> Choose any physics related article you are interested in and produce a short summary using the criteria below

You should include

The topic

An overview/ quick summary

At least 5 bullet point facts from the video

Data sheet

Quantity	Symbol	Value	Units
speed of light in vacuum	c	3.00×10^8	m s^{-1}
permeability of free space	μ_0	$4\pi \times 10^{-7}$	H m^{-1}
permittivity of free space	ϵ_0	8.85×10^{-12}	F m^{-1}
magnitude of the charge of electron	e	1.60×10^{-19}	C
the Planck constant	h	6.63×10^{-34}	J s
gravitational constant	G	6.67×10^{-11}	$\text{N m}^2 \text{kg}^{-2}$
the Avogadro constant	N_A	6.02×10^{23}	mol^{-1}
electron rest mass	m_e	9.11×10^{-31}	kg
proton rest mass	m_p	$1.67(3) \times 10^{-27}$	kg
neutron rest mass	m_n	$1.67(5) \times 10^{-27}$	kg
gravitational field strength	g	9.81	N kg^{-1}
acceleration due to gravity	g	9.81	m s^{-2}
atomic mass unit	u	1.661×10^{-27}	kg
mass of the Sun		1.99×10^{30}	kg
mean radius of the Sun		6.96×10^8	m
mass of the Earth		5.98×10^{24}	kg

mean radius of the
Earth

