

## STARTER FOR 12 PHYSICS

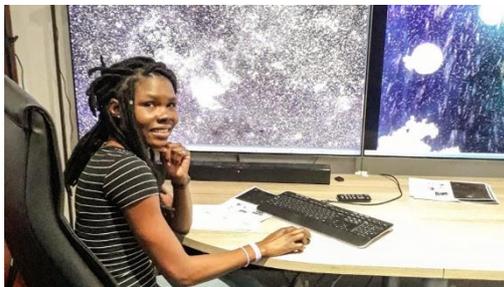
### Task 1:

Research a career associated with physics and create a poster or factfile about it. Your research could include (but is not limited to!):

- What the career involves
- What qualifications / routes will get you in to that career
- The possible salary range in the career
- How physics is used in that career area



Try to think outside the box with the career you research – there are a lot of cool physics jobs out there!



### Task 2:

Take pictures to document physics phenomena you see in every day life over the summer break. Write a short paragraph for each picture outlining what the physics phenomenon is that you're taking a picture of, and a brief summary of how it is caused.

Minimum 4 images, maximum 10. To be uploaded to Google Classroom when the course starts

# Task 3: Rearranging Equations

Complete the table below rearranging each equation to make the specified variable the subject

Equation	Rearrange Equation
$y = mx + c$	<b>c</b> =
$V = IR$	<b>R</b> =
$F = \frac{\Delta(mv)}{\Delta t}$	<b><math>\Delta t</math></b> =
$F = m\omega^2 r$	<b><math>\omega</math></b> =
$T = 2\pi \sqrt{\frac{l}{g}}$	<b>g</b> =
$T = 2\pi \sqrt{\frac{m}{k}}$	<b>m</b> =
$g = -\frac{GM}{r^2}$	<b>r</b> =
$F = \frac{Qq}{4\pi\epsilon_0 r^2}$	<b>q</b> =
$C = \frac{Q}{V}$	<b>V</b> =
$\epsilon = N \frac{\Delta\phi}{\Delta t}$	<b>N</b> =
$\frac{N_s}{N_p} = \frac{V_s}{V_p}$	<b><math>V_p</math></b> =
$pV = nRT$	<b>R</b> =
$Q = mc\Delta T$	<b>c</b> =