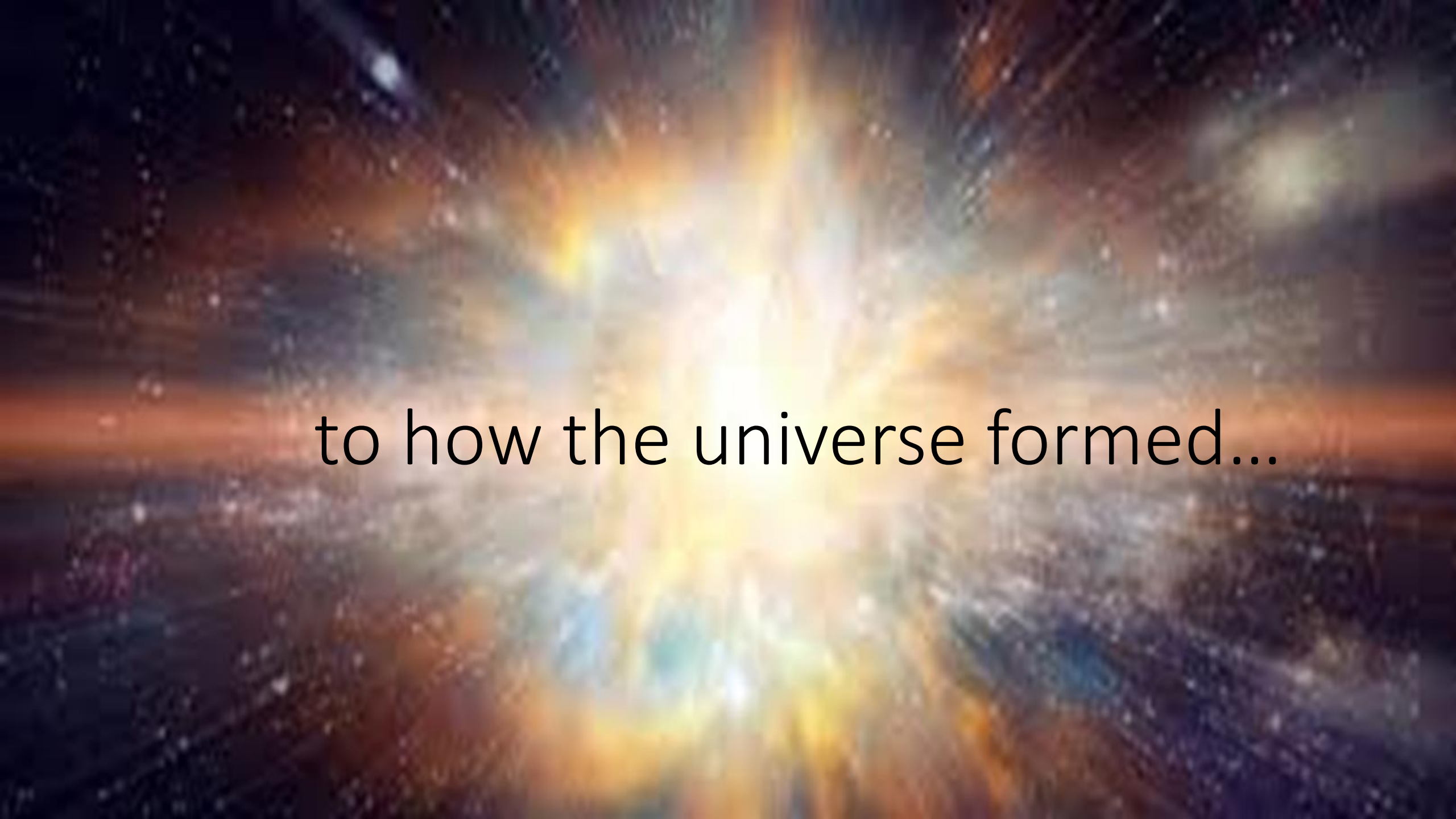
PHYSICS

Why choose physics ???

Physics covers a huge range of topics…

It’s how we understand the world we live in and beyond.

From how your phone works….


to how the universe formed…

Physics can explain it.

If you have a logical mind, enjoy solving problems, like building things or like to know how things work, then physics could be for you !

What kind of career options does physics offer? LOADS !!!!!

engineer

air traffic controller

computer programmer

doctor

lawyer

space technician

meteorologist

forensic scientist

veterinarian

lab technician

geophysicist

optician

designer

architect

teacher

What physics course would you be doing in third, fourth, fifth and sixth year?

S3

The course in S3 covers quite a bit of the physics needed for the exams in fourth year.

S4

In S4 you can choose either National 4 or National 5 level physics.
If you want to continue onto Higher physics you would have to choose National 5.

S5

In fifth year, if you do well in the S4 exam, you can go on to study Higher Physics.

If you didn’t choose National 4 or 5 in fourth year there is the option to do it in S5.

S6

In sixth year, if you do well in the S5 exam, you can go on to study Advanced Higher Physics.

S3

S3 Physics

S4

National 4

S5

National 5

S6

Higher

National 5

S4

Higher

S5

AdvancedHigher

S6

Physics: Course Content

Dynamics & Space:

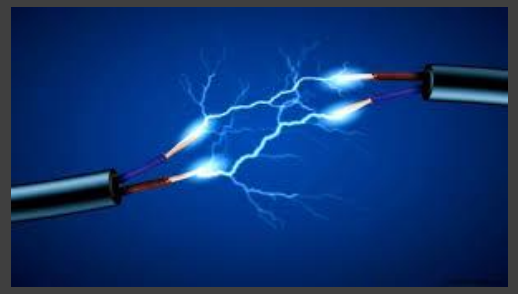
- We look at how things move on Earth and in space

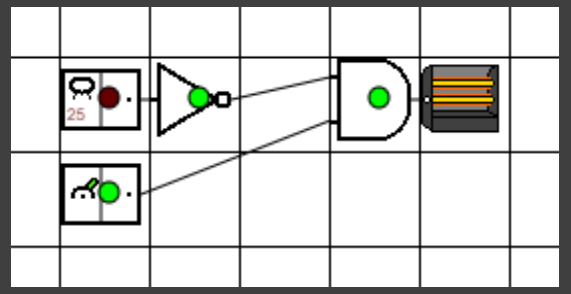
- How forces change the movement of objects
- Friction and air resistance
- The effect of gravity

Physics: Course Content

Electricity:

- Build and learn about circuits – series and parallel
- Voltage and current – what they are and how to find them
- Electronics – logic gates to process inputs

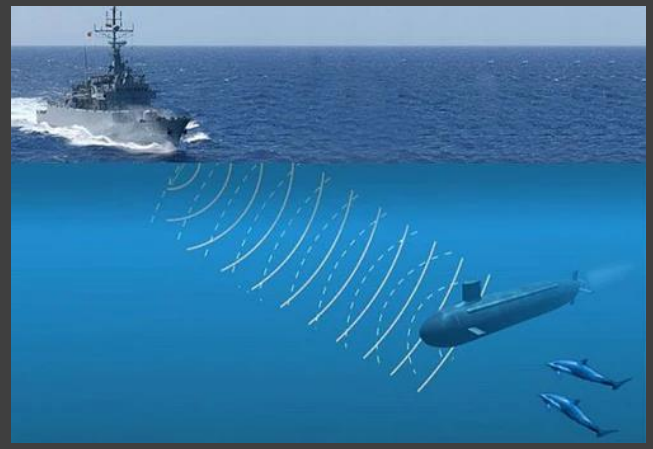


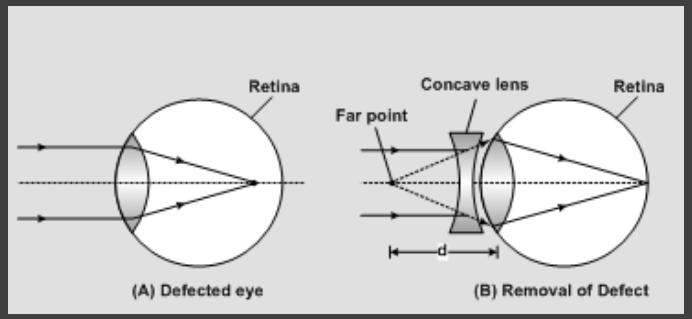


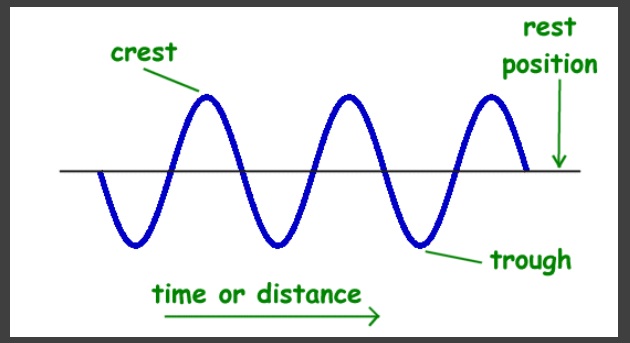
Physics: Course Content

Waves and Radiation:

- Wave behaviour and properties
- Speed of sound, sonar, ultrasound
- Light, lenses, eye and vision problems
- Nuclear radiation - α, β, γ







Physics: Assessment

- Each unit has an end of topic unit test
  - Both written and numerical question types

- Mini investigation
  - Simplified version of the assignment you need to complete N5

Physics: Entry Requirements

- <u>Keys skills:</u>
- Numeracy- there is a lot of maths!
- Problem solving
- Design and/or carry out experimental work