

Summer Research Assignment.

Produce a page of research about each of these mechanical systems:

1. Compound gear systems.

How do they work?

How do you calculate gear ratios?

What are compound gears they used for? Give at least 3 examples.

2. Internal combustion engines.

How do they work?

What are the main components in an engine?

What are the stages in the four stroke cycle?

3. Electric motors.

How do they work?

How do they change electrical energy into rotational energy?

What is the difference between a DC motor and a Stepper motor?

- ◆ Your report should be 3 pages long.
- ◆ You may include labelled diagrams if you wish.
- ◆ **Do not** copy and paste from the internet, use your own words.
- ◆ You may produce your report on a computer if you wish.