# Introduction to Internal Combustion Engines Practical and Applied Arts

#### **INTRODUCTION:**

The internal combustion engine represents one of the most important technological advancements of the Industrial Age. This project will introduce students to the basics of the internal combustion engine including the theory behind the technology.

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# **REQUIREMENTS:**

Students will complete the following:

- Investigate the history behind the internal combustion engine
- Construct an internal combustion engine model (V8 or Inline 4)
- Create a display that explains the mechanics behind the internal combustion engine

#### **SPECIFICS:**

### History:

- Must include pictures/diagrams
- Description of movement from steam power to petrol/diesel

#### 3D Model:

Model must be completed and timed appropriately

# Display

- Half of display will be history, the other half description of function
- Outline the various strokes

# **RUBRIC:**

## **PAA 8**

# 4 Mastery

- Model is neat and appropriately constructed
- Descriptions include pictures/diagrams
- Descriptions are neat and thorough

#### 3 Meeting

- Model is appropriately constructed
- Descriptions include pictures/diagrams
- Descriptions are neat

# 2 Approaching

- Model is mostly constructed
- There is a description

## **PAA 9**

- 4 Mastery
  - Model is neat and appropriately constructed
  - Timed appropriately
  - Descriptions include pictures/diagrams
  - Descriptions are neat and thorough

# 3 Meeting

- Model is appropriately constructed
- Descriptions include pictures/diagrams
- Descriptions are neat

#### 2 Approaching

- Model is constructed
- There is a description

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