



**PROGRAMMA SVOLTO**

CLASSE	5ET2	DISCIPLINA	Inglese
DOCENTE	Prof. Antonio Iannella	A.S.	2020/2021

**Electromagnetism and Motors**

- Electricity and magnetism
- The electric motor
- Types of electric motor
- Electric cars
- Electric cars: advantages and disadvantages
- How a hybrid car works
- The Jaguar C-X75 supercar

**Generating Electricity**

- Methods of generating electricity
- The generator
- Fossil fuel power station
- Nuclear reactor
- How a nuclear reactor is kept under control
- Renewable energy 1: water and wind
- Renewable energy 2: sun and earth
- Our energy future
- Generating electricity

**Distributing electricity**

- The distribution grid
- The transformer
- The domestic circuit
- Managing the power supply
- Creating a smart grid
- Dangers of electricity
- Act in emergencies
- Safety signs
- Work safely with electricity

**Electronic components**

- Applications of electronics
- Semiconductors
- The transistor
- Basic electronic components
- Milestones in electronics
- William Shokley, the father of the transistor

## **Electronic systems**

- Coventional and integrated system circuits
- How an electronic system works
- Analogue and digital
- Digital recording
- Amplifirs
- Oscillators
- Read a data sheet

## **Automation**

- What is automation
- How automation works
- Automation in operation: a heating system
- Design a burglar alarm system
- The development of automation
- How a robot works
- Robots past and present
- Varieties and uses of robots
- Robots in manufacturing
- Artificial intelligence and robots

## **PCTO**

- The curriculum vitae
- What the CV should contain
- The letter of application
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- The interview
- The range of work in new technology.

Cesano Maderno, 15   05   2021	Firma Docente	Antonio Iannella
Firme degli studenti		