Istituto Tecnico Industriale Statale "Othoca" - A.S. 2024/25 CLASSE: 4^A PROGRAMMA DI: INGLESE / EDUCAZIONE CIVICA DOCENTE: Mariangela Mura

MATERIALI: Testo in adozione: **Mechatronix** (Giovanna Battistini-Elisa Cavalli, casa editrice Trinity Whitebridge) e fotocopie fornite dall'insegnante.

PROGRAMMA SVOLTO

SAFETY:

Safety in the workshop: key vocabulary, word formation and definition; objects used in the workshop; identifying mistakes in a workshop; safety inspector visit;

Workplace hazards and the most common dangers in the workplace: the Top 5 types of Workplace hazards (description and preventive measures);

Hazards and risks (responsibility for ensuring safety and risk assessement);

Safety signs (information, colours, symbols, shape and pictograms) and different types (mandatory, emergency and rescue, information signs);

PPE (definition, tasks, types - wearing the proper protective clothing and equipment - correct/incorrect workshop overall);

Dangers at home: accidents, causes and people involved;

Safety and the EU (EU-OSHA and Napo animates films).

GRAMMAR: modal verbs *must*, *could*, *might*; imperative; *What* ... *for*?, *for* + *-ing form* e *to* + *infinitive* (infinitive of purpose);

ENGINEERING MATERIALS:

Materials contained in a washing machine;

Classification and main types of materials, properties of materials; mechanical and technological properties; Steels and steel-making (steps in the production steel), the steel-making furnace;

The account of an experiment using two bars of steel with different carbon contents;

Plastics: plastics pollution and production; thermosetting and thermoplastics; bioplastics;

Aluminium recycling.

ENERGY / ENVIRONMENTAL ISSUES:

Definition of energy, different forms, energy 'production'; the Law of Conservation of Energy;

The History of energy: key moments in human history (different types of energy, inventions and discoveries);

Non-renewable energy sources (pros and cons of fossil fuels); alternative energy sources: definition, examples; pros and cons.

EDUCAZIONE CIVICA:

Tematiche affrontate: la sicurezza sul posto di lavoro – morti sul posto di lavoro.

Testi: No one has to die at work (workplace fatalities – articolo del quotidiano inglese The Guardian); some passages from the Italian Laws on health protection.

La docente: Mariangela Mura