

PROGRAMMA DEFINITIVO

LINGUA E CIVILTÀ' INGLESE

Prof.ssa **Laura Nanna**  
(sostituita dalla prof. Sara Miliani dal giorno 29/04/2019)

a.s. 2018/2019

CLASSE:5ART

Libri di testo:

- “*CULT B2*”, ed. CIDEB BLACKCAT
- *Smartmech*, Ed. Eli (+fotocopie fornite dall’insegnante)
- “*English for New Technology*”, ed. Pearson Longman

From “*CULT B2*”, ed. CIDEB BLACKCAT:

| UNIT | GRAMMAR  | VOCABULARY                     | SKILLS   |
|------|--|--------------------------------|--|
| 9    | Linkers: Typologies: contrast, cause/effect, time/addition/illustration/enumeration<br>Tenses review<br><br>-Second and third conditional-I wish/Is only | WAR-NATIONS AND POLITICS       | GROUPWORK ON WAR: presenting a historical event (timeline, causes and effects)<br>-Listening to the song: Masters of War by BobDylan |
| 10   | Reported speech: statements-Indirect questions (commands-requests)-  | THE ENVIRONMENT-WORD FORMATION |  |

**Argomenti di microlingua:**

INDIRIZZO ELETTRONICO:

From “*English for New Technology*”:

| UNITA'                  | CONTENUTI   |
|-------------------------|---|
| <i>ELECTROMAGNETISM</i> | <b>PPT PRESENTATION: Electromagnetism</b><br>Definition of electromagnetism and electric current-solenoid-right-hand-rule-electric motor- components of the electric motor-commutation-<br><i>From “English for New Technology”</i> :UNIT p.32-33 -34-35-46-58/ |
| <i>SAFETY AT WORK</i>   | <u>Materiale in fotocopia:</u><br>Safety: vocabulary-Occupational hazards: equipment, attitudes, verbs, nouns-)-  |

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|---|---|
| <i>(Modulo di alternanza Scuola Lavoro)</i> | <p>Safety regulations in Italy: Decree 81/2008- Worker's rights and responsibilities + Employer's rights and responsibilities- Difference between hazard and risk- Safety and health in electronics- Picture describing: identifying hazards and solutions</p> <p><b>GROUPWORK:</b> creating a videoclip on a hazardous situation and presenting it to the class</p>  |
| <i>ELECTRONICS</i>                          | <p><b>Ppt Presentation: Electronics</b></p> <p>-Definition-Electronic components-Discrete components-Materials-Resistors-Capacitors-Diode-Transistors-Bipolar transistors and Field-effect transistors</p> <p><i>From: English for New Technology UNIT 6 (p. 72,73,74,75,76)</i></p> <p>Applications of electronics-Semiconductors-The transistor-Basic electronic components</p>   |
| <i>ROBOTICS AND AUTOMATION</i>              | <p><b>PPT presentation: ROBOTICS:</b></p> <p>Definition and etymology, Asimov's Laws of Robotics, Robots applications, benefits, Robots systems, types of control, Evolution of Robotics (cenni), Robot classification</p> <p><i>From "English for New Technology":UNIT 9 (p.108, 113,114,116,117,118)</i></p> <p>-The development of automation-How a robot works-Varieties and uses of Robots-Robots in manufacturing- loop, feedback system, automation and mechanization</p> <p><b><u>Debate on Robotics in class</u></b></p> |
| <i>THE ELECTRIC MOTOR</i>                   | <p><i>From: English for New Technology UNIT 3 (p.35, 36, 37, 39, 40, 41, 42)</i></p> <p>- The electric motor, Types of electric motor, Electric Cars)</p> <p>Video: Are electric cars really green?</p> <p><a href="https://www.youtube.com/watch?v=17xh_VRrnMU">https://www.youtube.com/watch?v=17xh_VRrnMU</a> - discussion</p>   |
| <i>MOVIES</i>                               | <p>"The Walk"</p> <p>"The Imitation Game"</p> <p>Watching the movies; vocabulary and plot analysis for discussion</p>   |
| <i>SVILUPPO ABILITA'</i>                    | <p>-Translation from Italian into English (Technical data sheets)</p> <p>-How to create a concept map</p> <p>-How to write a summary</p> <p>How to create a glossary on a specific topic</p> <p>-Esercitazioni sulle prove INVALSI (listening and Reading-livelli B1/B2)</p>  |

## INDIRIZZO MECCANICA E MECCATRONICA

From Smartmech:

| <i>MODULO</i>                        | CONTENUTI  |
|--------------------------------------|--|
| <i>BASIC METAL PROCESSES- Unit 5</i> | <p>pp. 94, 95, 96, 97; pp. 100, 101, 102, 103; pp. 108, 109, 110, 111.</p> <p>Steelmaking, the steelmaking process, casting, die-casting, hot and cold processes, forging, welding, brazing and soldering,</p> <p><b>PPT Presentation: Basic metal processes</b></p> |

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|--|--|
|  | First steps in metal working-The iron-making process-Material retention processes; casting, forging, rolling, joining processes, welding, brazing and soldering  |
| <i>MACHINING OPERATIONS- Unit 4</i>                        | <p>p.70-71-72-73-74-78-79-80-81-82-83</p> <p>Machine tools-Machine tools classification-The Lathe-Drilling-Boring-Milling-Grinding-</p> <p><b>Ppt Presentation: Machine shop and Machine tools</b></p> <ul style="list-style-type: none"> <li>-Operations in a machine shop (bench and machine operations)</li> <li>-Bench tools</li> <li>-machining processes</li> <li>-material removal processes</li> <li>-Material retention processes (casting, forging)</li> <li>-turning</li> <li>-Parts and types of a lathe</li> <li>-Milling</li> <li>-Drilling</li> <li>-Grinding</li> </ul> <p><b>PROJECT WORK:</b> Translating technical data sheets of different machine tools from Italian into English (groupwork)</p> |
| <i>SAFETY AT WORK (Modulo di alternanza Scuola Lavoro)</i> | <p><u>Material e in fotocopia:</u></p> <p>Safety: vocabulary-Occupational hazards: equipment, attitudes, verbs, nouns-)- Safety regulations in Italy: Decree 81/2008- Worker's rights and responsibilities + Employer's rights and responsibilities-Difference between hazard and risk Safety and health in mechanics- Picture describing: identifying hazards and solutions</p> <p><b>GROUPWORK:</b> creating a videoclip on a hazardous situation and presenting it to the class</p>   |
| <i>ROBOTICS AND AUTOMATION Unit 7</i>                      | <p>Robotics p.157-Numerical control and CNC p.160</p> <p>Fotocopie: How automation works: reading and summarising the main concepts: loop, feedback system, automation and mechanization, the development of automation-Robots in manufacturing- varieties and uses of robots</p> <p><b>PPT presentation: ROBOTICS</b></p> <p>Definition and etymology, Asimov's Laws of Robotics, Robots applications, benefits, Robots systems, types of control, Evolution of Robotics (cenni), Robot classification</p> <p><b><u>Debate on Robotics in class</u></b></p>   |
| <i>THE MOTOR VEHICLE Unit 6</i>                            | <p>What makes a car move: the drive train, the four stroke engine, the diesel engine (p.120, 121, 122, 123, 126)</p> <p>Alternative Engines: electric cars and hybrid cars, fuel cell cars (p.138, 140)</p> <p>Video: The four-stroke engine</p> <p>Video: Are electric cars really green?</p> <p><a href="https://www.youtube.com/watch?v=17xh_VRrnMU">https://www.youtube.com/watch?v=17xh_VRrnMU</a> - discussion</p>   |
| <i>MOVIES</i>  | "The Darkest Hour"   |

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|-------------------------------------|--|
|                                     | <p>Watching the movie; vocabulary and plot analysis for discussion<br/> <i>"Forrest Gump"</i><br/>         Watching the movie; vocabulary and plot analysis for discussion</p>   |
| <p><i>SVILUPPO<br/>ABILITA'</i></p> | <p>-Translation from Italian into English (Technical data sheets)<br/>         -How to create a concept map<br/>         -How to write a summary<br/>         How to create a glossary on a specific topic<br/>         -Esercitazioni sulle prove INVALSI (listening and Reading-livelli B1/B2)</p> |

Lucca, 01/06/2019

Il docente

Gli studenti

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