**PROGRAMMA SVOLTO DI LINGUA INGLESE**

**CLASSE 5A BA**

**A.S. 2024-2025**

**Docente: Prof.ssa Paola De Dominicis**

**Testi in adozione : Briano - Anerdi, *A Matter of Life*, Edisco**

**Modulo 1 - THE WONDER OF CHEMISTRY**

The substance of the universe

What everything centres around

The shelf where elements are organised

How matter can change

Pure substances and impure materials

The major branches of chemistry

Chemical analysis

In the chemistry lab

Laboratory equipment

Microbiology lab equipment

Measuring equipment

Lab clean-up

The scientific method <https://youtu.be/chODOKSPJS4?si=OJx8rhrTHdrQtgmT>

**Extra material**: From alchemy to chemistry ,“The origin of chemistry” <https://youtu.be/chODOKSPJS4?si=OJx8rhrTHdrQtgmT>)

**Ed. Civica primo periodo:**  
“*Safety rules in the lab”*: campaign about the security in the lab. The target you should address are the students of your school (production of a video, a poster or a presentation about safety in the lab). Produzione a gruppi. Elaborati degli Studenti consegnati in Google Classroom

**Modulo 2 -  MORE WONDERS OF CHEMISTRY**

Organic chemistry in daily life

Aromatic compounds vs aliphatic compounds

Polymers

What is biochemistry?

Carbohydrates

Proteins - essential amino acids

Lipids - Omega-3

Nucleic acids -

The discovery of DNA - Rosalind Franklin, the Discovery of the Structure of DNA (video

**Extra material:**

Organic chemistry and the relationship with biochemistry; Friedrich Wöhler<https://docs.google.com/document/d/1GaImg6VxUiMeqb_19zuB55Pm1rVJA8Jv/edit?usp=sharing&ouid=112639569877048526144&rtpof=true&sd=true>

**Modulo 3 -  MICROBES AND BIOTECHNOLOGY**

Microbial biotechnology

The dazzling colours of biotechnology

Genetic engineering

Genetic engineering debates

Environmental biotechnology

Bioremediation

Agricultural biotechnologyBiotechnology for medical purposes

Industrial Biotechnology

Biotech debates

Plastc eaters

**Modulo 6 -  TAKING CARE OF OUR PLANET**

Ecosystems

Biodiversity

Earth’s greatest threats

Air pollution

Water pollution - The Great Pacific Garbage Patch

Land Pollution

Lab-grown meat is also good for the environment

The Bhopal Disaster

Non-renewable energy sources

Renewable energy sources

Green Economy

**Extra material**

Da *Career Path in Technology (temi anticipati il quarto anno e ripresi il quinto):*

* Methods of producing electricity: <https://lh3.googleusercontent.com/drive-storage/AJQWtBPVUE3kJOKMYCGORAF6l8Eeux-1gjG2qcN8CEP5urokWyiIFisfR2Jafmt4xhjVni9YuWS56evr789tGIWICbS_XnyBXGUyyKQ3kxT9L4PviQU=w1350-h640>
* Nuclear power station: <https://lh3.googleusercontent.com/drive-storage/AJQWtBOsNZ6yO_Y9F2Bdm60hGJYDnOC8LtP4PLpLITVxL_DKzgT8RcTQOLF3-gjv5NvR3lmVfZSnC5ydTrit-YBjjb6ecufRSscrdUMis-V8UPuJDak=w1350-h640>
* Controlling a nuclear reactor <https://lh3.googleusercontent.com/drive-storage/AJQWtBMsSrD4wkDEB7yB9S2cIlIlruWwz0-atwgJhGe5_GrmoEA26MwlSLPBle0CtoJowo_rIrkQKqnuBoFoWsO5CUCbzxn9Vg85PyU8dc5liPD6MHg=w1350-h640>
* Facing climate change: <https://lh3.googleusercontent.com/drive-storage/AJQWtBMLsnk28vNlZ0ALK4BRnm7k2c0pcBk6PKQ-YZeQfLOv3GRvvb0af8_v0UShYPnQdyFQRPYEHviyUIPnfL0bG9NVy3gWPt9GQqtWIzCoG-FkBK4=w1350-h640>

Bhopal disaster:

* [**https://youtu.be/\_cZ\_Ka2OxgQ?si=e6w1\_xgTosFWxS\_k**](https://youtu.be/_cZ_Ka2OxgQ?si=e6w1_xgTosFWxS_k)
* [**https://youtu.be/pGSJc\_5p2og?si=Wwh8AxZMoI-nRMpn**](https://youtu.be/pGSJc_5p2og?si=Wwh8AxZMoI-nRMpn)
* [**https://www.theguardian.com/world/2025/jan/02/india-toxic-waste-removal-bhopal-disaster-site-dismissed-as-farce**](https://www.theguardian.com/world/2025/jan/02/india-toxic-waste-removal-bhopal-disaster-site-dismissed-as-farce)

The water cycle <https://docs.google.com/document/d/1Im1VHXzwR4m23-La5QJ28YbHnYxz6cCT/edit?usp=sharing&ouid=112639569877048526144&rtpof=true&sd=true>

Asbestos <https://drive.google.com/file/d/11ubzNgwoTX3-0qQXUR8RmVzlM3a59OyS/view?usp=sharing>

Rachel Carson, *Silent Spring* <https://drive.google.com/file/d/1NN5cgoIfb76SwlMIu4DAUgmQc9GLDt4N/view?usp=sharing>

Who controls what we eat (Goals B2)

<https://drive.google.com/file/d/1tf5-4ObJ-R4P_Lcuc8p1alIHaH8qv0zY/view?usp=sharing>

**Ed. Civica secondo periodo:**

* “ Polymers”: Attività interdisciplinare (chimica organica e biochimica – inglese) con produzione elaborati a gruppi (Google Classroom):  GOMMA VULCANIZZATA /GOMMA NATURALE, KEVLAR / NOMEX , NYLON, POLIPROPILENE, PET  PVC, MATER-B
* "If it's on the Internet, it's true." Fake news, heuristics and bias. (ricerche e presentazioni individuali o a gruppo. Materiali in Google Classroom)

**PCTO - didattica orientativa:**

* 4th-year working placement (PCTO), hard and soft skills (presentazioni individuali)
* CV and covering letter

Parma 24 maggio 2025

Gli Alunni Rappresentanti                                                                                                      L’Insegnante