PROGRAMMA LINGUA STRANIERA INGLESE

ANNO SCOLASTICO 2022-23

CLASSE 5 A- BIOSANITARIO

TESTO UTILIZZATO**: Sciencewise** , English for Chemistry, Materials and Biotechnology di Cristina Oddone editrice San Marco

**Module 5: Organic Chemistry and Biochemistry**

Biochemistry and its relationship with molecular biology and genetics

Analysing Carbohydrates

Examining Lipids- , Fatty acids : Omega 3 and 6, Triglycerides

Exploring Proteins

The importance of food and nutrition:

Macro and Micronutrients, Malnutrition

The food pyramid

Food problems: allergies and intollerances (lactose)

**“Supersize Me”** documentary film by Morgan Spurlock, documentario e fotocopie

Consequences of a fast food diet

Obesity and Diabetes : Type 1 and Type 2 – fotocopie

**Module 6 :Uncovering Life, Biotechnology**

DNA and the secret of life and RNA

How proteins are synthesized

Protein synthesis: Transcription and translation

The discovery of the DNA structure, video on Rosalind Franklin

Stem Cells , video What are stem cells , you tube

Biotechnology and its innovations : hormones, insulin, antibiotics, penicillin

Genetic Modification-The Human Genome, human gene therapy

“Dolly the sheep”, The Story of Dolly , video di The New York Times

Artificial cloning: gene, therapeutic, reproductive cloning

Biotechnology in agriculture

GMO’s in the world

Biotechnology in the medical field

Tissue engineering

Artificial limbs: the future ahead

**Module 7: Science and health**

The Human Body and its Vital Organs

The role of the immune system: tasks and components

video “How does your Immune system work? By Emma Bryce

Dangers for the human body: pathogens, viruses, bacteria and fungi

Neurodegenerative diseases: Parkinson’s- AlZheimer’s

Other diseases: Diabetes, Bronchitis, Meningitis, Diabetes,

Autoimmune disease: the Celiac Disease

**Pandemics in the 20th century,** (fotocopie)

21Th century pandemics: Sars, Ebola, Mers, Covid 19 (fotocopia)

Video “What is a virus?How do they spread? How do they make you sick?”, theconversation.com

The importance of vaccines

Pharmaceutical drugs: antibiotics

**Educazione Civica**: Prevention and addiction

Dangers of tobacco and alcohol ; Binge Drinking

Visione del film**: Bohemian Rhapsody** -  ( 2018) diretto da Bryan Singer basato sulla storia vera dei Queen e Freddie Mercury

-Aids (fotocopia)

La classe è stata inoltre impegnata un’ora alla settimana a partire da gennaio per la preparazione dell’ INVALSI .

Parma, 25 maggio 2023

L’insegnante Gli alunni

Volghi Stefania