

Unit title	Key concept	Related concepts	Global context	Statement of inquiry	Objectives	Assessment tasks	ATL skills	Content
Unit 1 <u>The scientific method</u> September, October 2021	Perspective	Evidence Patterns	Scientific and technical innovation	Scientific and technological advances enable societies to understand (or at least, to try to understand) the universe	A B C D	Discussion about the scientific method(D) Practical works: analysis of results(C) End-of-unit or chapter tests(A) Examples of design (B)	Communication, Collaboration, Critical thinking, Creative thinking	Elements of the scientific method Experimental approach How to design an experiment Variables in experiment How to understand graphs and tables Data analysis
Unit 2 <u>Evolution</u> November 2021	Change	Environment Consequences Balance	Fairness and development	Evolution is a consequence of the unbalanced opportunities provided by natural selection	A C D	End-of-unit or chapter tests (A) Analysis of similarities between various bones: collection and interpretation of data (C) The social impact of evolution (discussion and written piece of work)(D)	Organization Collaboration Communication Information literacy Critical thinking	Definition of evolution Evidence for evolution (fossil record, homologous structures, breeding) Overproduction, variation, natural selection and inheritance Evolution and sexual reproduction Evolution in response to environmental change
Unit 3 <u>The chemistry of life</u> December 2021 January, February, March 2022	Relationships	Function	Identities and relationships	There is a strong relationship between the structure and function of biologically important compounds	A B C	Practical work on biologically important compounds and enzymes (B, C) End-of-unit or chapter test	Organization Collaboration Communication Information literacy Reflection Critical thinking	Biologically important compounds Proteins and enzymes Carbohydrates Lipids Nutrition (proteins, carbohydrates and lipids in our diet) Conscious eating and healthy diet

<p>Unit 4</p> <p><u>Cells</u></p> <p>April, May, June 2022</p>	<p>Connections</p>	<p>Interaction Form</p>	<p>Identities and relationships</p>	<p>Life is the product of numerous interactions</p>	<p>A B</p>	<p>How to use the microscope (B) End-of-unit or chapter tests(A)</p>	<p>Communication (group work) Collaboration (group work) Reflection</p>	<p>Cells, organelles Cell membrane Cell to cell communication Transport through the membrane Diffusion Osmosis</p>
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Unit 1 <u>The human reproductive system</u> September, October 2021	Development	Consequences	Personal and cultural expression	Sexual development and its consequences for personal and cultural expression	A D	Discussion about methods of contraception and social issue (D) End-of-unit or chapter tests(A)	Organization Collaboration-working in groups Communication Information literacy Reflection: self-evaluation Thinking- Transfer	The basic anatomy of human reproductive system Sexual development The menstrual cycle Pregnancy and birth Contraception Personal aspects of sex Sexually transmitted diseases Responsible sexual behaviour
Unit 2 <u>The nervous system and drugs</u> November, December 2021	Systems	Balance Function	Orientation in time and space	Orientation in time and space depends on healthy and balanced nervous system	A B C D	End-of-unit or chapter tests(A) Design scientific investigation about learning in humans (B) Learning in humans, data analysis (C) Application of science: pills, drugs or help, written piece of work (D)	Organization-time management Collaboration Communication Information literacy Media literacy Reflection: self-evaluation Thinking- Transfer	General plan of the nervous system Nerve cells Nerve impulse The brain and behaviour The brain and learning The brain and sleep Drugs and mental illness
Unit 3 <u>Water</u> January 2022	Change	Transformation	Identities and relationship	How and why are transformations of liquid water, ice and vapour crucial for life and the relationship between life and environment?	A B C	Practical work on properties of water important for living beings(B,C) End-of-unit or chapter tests(A)	Organization-time management Collaboration Communication Reflection: self-evaluation Creative thinking (design of experiment)	Water: the structure Hydrogen bonds Properties of water The relationship between the properties of water and life as we know it

Unit 4 Basic ecology February, March, April, May, June 2022	Systems	Environment Interaction Energy	Globalization and sustainability	Organisms interact with the natural environment by transferring matter and energy	A D	Discussion about fossil fuels and our future (D) End-of-unit or chapter tests(A)	Organization-time management Collaboration Communication Information literacy Media literacy Reflection: self- evaluation Thinking- Transfer	Communities and ecosystems Food chains Pyramids of energy The role of bacteria The greenhouse effect and the precautionary principle Consequences of a global temperature rise on ecosystems Populations Population growth curve Binomial system of nomenclature Natural classification
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DIFFERENTIATION

For students with:

Dyslexia and dysgraphia

- Bigger font, bigger space between rows
- Dividing text in tests, practice sheets and instruction papers, Internet resources
- More time for reading, checking if the text/questions are understood
- Tolerating writing mistakes
- Allowing longer time for finishing a task if needed
- Working in a pair or a team with peers
- Check the ability of students to read primary and secondary sources and act according to results (more practice, allowing more time for group work)

ADHD

- Bigger font and space between rows
- Shorter paragraphs
- Additional explanation of tables, graphs if needed
- Check which type of graphs/diagrams are suitable for the student
- Fewer questions on tests
- Frequent checking if a student is concentrated on the work
- Questions and enough space for answers should be on the same page
- Work in pairs or small teams (up to four)
- Creating summary sheets when needed
- Encourage students to participate in class discussions
- Commend student on progress
- Regularly make notes about progress in e-dnevnik