



This project has received funding from the European Union's Erasmus+ programme, under Grant Agreement No°000150994

Worksheet

This Worksheet is designed to guide educators on how the comic strips can be integrated into their classroom. Teachers can adjust based on student level and depth of discussion needed.

Topic N°4 – The Cyber Adventurers

Lesson Duration : [Suggested number of sessions/days]

Lesson Plan

1 Pedagogical objectives [Suggested duration]

By the end of this activity, students will:

- Understand the fundamentals of informatics, programming, and cybersecurity.
- Explore real-world applications of coding, data management, and cyber protection.
- Encourage critical thinking about digital safety and the role of programming in our world.

2 Introduction: What is informatics ? [Suggested duration]

Informatics is the study of information systems, data processing, and computer networks. It plays a crucial role in our daily lives, from the websites we visit to the apps we use. Ever wondered how programmers create software, or how cybercriminals are stopped by encryption? Let's dive into the digital world!

3 Explore the Storyline [Suggested duration]

Teacher's Role: Present the comic strip and guide the discussion.

Student Task: Read the comic strip and analyse:

- What is happening in the story?
- How do the characters interact with informatics?
- What challenges arise?

Discussion: The teacher and students analyse the scientific/technological principles in the comic.



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Activities

- **Activity 1: Observation and Reflection [Suggested duration]**

Objective: Recognize key informatics concepts visually.

Instructions : Observe the following images and identify those related to informatics. Justify your choice.

Materials: [Insert images of computer networks, programming codes, encryption locks, and unrelated items.]

Discussion Questions:

- How do these images relate to informatics?
- What common patterns do you notice?

- **Activity 2: Combine the Elements [Suggested duration]**

Objective: Reinforce understanding by linking concepts with definitions.

Instructions : Links each concept to its corresponding definition.

Concept	Definition
Programming	Writing instructions for computers using code.
Encryption	A method of protecting data by converting it into unreadable formats.
Cybersecurity	Measures taken to protect systems from digital threats.
Data Management	The process of storing, organizing, and securing information.

- **Activity 3: Reflective questions**
- **Activity 3.1. Mini-challenge: Creation and Imagination [Suggested duration]**

Objective: Encourage students to think creatively and apply their knowledge.

Instructions:: Imagine you are a cybersecurity expert. Propose a solution or invention to improve online security.

- Describe your idea in a few sentences.
- Make a diagram or a short comic strip explaining how it works.



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Activity 3.2. Group or pair discussions [Suggested duration]

- How do you think programming affects our daily lives?
- Why is cybersecurity important?
- What are the advantages and disadvantages of digitalization?

Conclusion and Review

Quick summary: Summarize the 3 most important points about the topic.

[Suggestion]

Three key points about informatics:

1. *Informatics is essential in managing and securing digital information.*
2. *Programming enables the creation of apps, software, and digital solutions.*
3. *Cybersecurity protects personal and organizational data from cyber threats.*

Final Quiz : Answer the following questions in one sentence.

1. What is informatics in one sentence ?
2. Give an example of a real-world application of cybersecurity.
3. How do you think programming will evolve in the future?

Remember: Understanding informatics and cybersecurity helps us navigate the digital world safely!