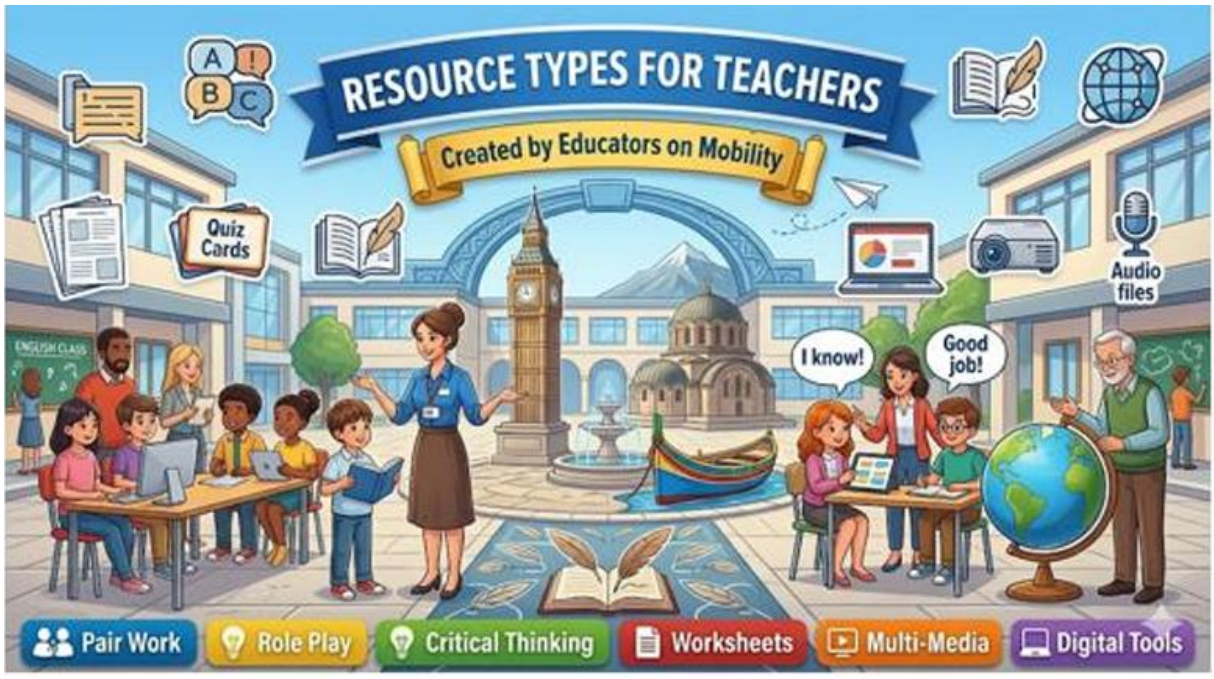
Dofinansowane przez
Unię Europejską

MATERIAŁY UCZESTNIKA MOBILNOŚCI

RODZAJ ZASOBU (RESOURCE TYPE):

Zestaw materiałów dydaktycznych z elementami metody CLIL
„URATUJ STACJĘ KOSMICZNĄ”
MATERIAŁ DO GRY MISSION – SAVE THE SPACE STATION
KL. 7 FIZYKA
WERSJA W JEZYKU ANGIELSKIM
„Podniesienie kompetencji kadry dydaktycznej Szkoły Podstawowej w Dubiczach Cerkiewnych”

Nr projektu: 2025-1-PL01-KA122-SCH-000339591
Projekt finansowany ze środków Unii Europejskiej w ramach programu Erasmus+ (2021–2027), KA1 Edukacja szkolna.



Opracowanie: ANNA WASILUK
anna.wasiluk@szkola.dubicze-cekiewne.pl



Mission: Save the Space Station

anna wasiluk



The year is 2084. The International Research Station "Aethelgard" floats majestically above the blue Earth. Inside, Vector and Nova, two young scientists, are conducting ground-breaking research on new forms of energy.
"Everything looks perfect," Nova says, gazing at the stars through a large porthole. The silence of space is soothing, and the station feels like the safest place in the universe.



Suddenly, a powerful explosion shakes the station. The lights go out, and seconds later, red emergency lamps flicker to life. "ALERT! SYSTEM FAILURE DETECTED!" a mechanical computer voice tears through the silence. Vector rushes to the main terminal, his face illuminated by the blood-red glow of the screen. "Main power is down, Nova! We have to switch to the emergency system!" he shouts, his fingers racing across the keyboard



The situation worsens by the second. Nova checks the environmental readings on her wrist computer. "Vector, we have a big problem! Oxygen levels are dropping fast!" she cries out in terror. The oxygen levels are plummeting. If they don't restore the life support systems within 45 minutes, the mission will end in catastrophe.



"The computer has locked access to the core!" Vector informs her. To unlock the system, they must pass through four security stations and solve physics-based protocols. "I can't do this alone. Nova, we must work in a team!" Nova nods, grabbing a set of tools. They know that only cooperation and their knowledge of physics can save them. The lives of the entire crew are at stake.



They reach the first section: Station 1 – Force & Motion. Here, they must balance the forces acting on the docking drones. "Look at the vectors!" Vector says, pointing to the screens. They need to calculate the net force to open the airlock. Any error in their calculations could send the drones spinning into the void of space.



Time is running out. They sprint to Station 2 – Speed Challenge. The station's navigation system has gone haywire. "We need to calculate the speed!" Nova yells. They must use the formula v = d/t to synchronize the station's speed with the communication satellites. Nova monitors the trajectory while Vector enters course corrections.



The next obstacle is Station 3 – Density Mystery. A leak from the chemical reactor has blocked the doors. They must identify an unknown substance by calculating its density (density = mass/volume). Vector carefully takes a sample for the analyzer. "If it's a high-density metal, we'll need the laser!" he states firmly.



Finally, they reach the Energy Lab – Station 4. This is the heart of the station. "Power and time are the keys," Nova whispers. They must correctly distribute energy between the shields and the oxygen systems using the energy formula: E = P x t. Every joule counts. Nova operates the energy switches, balancing the system's load.



The fans begin to hum, and fresh air fills the station. The lights return to normal. "We did it! We saved the station!" Nova laughs, giving Vector a high-five. But the mission isn't over for everyone else. Vector turns toward the screen and says, "Now it’s your turn, young scientists. Time is ticking. Save the space station!"