



Introduction for High School Teachers

At **Small Worlds ME**, high school students will embark on an immersive journey through an inspiring miniature landscape representing Europe, from the edge of the sea to towering mountains. The interactive experience connects advanced STEM concepts to real-world challenges, encouraging analytical thinking and hands-on problem-solving. Small Worlds provides an innovative platform for students to explore STEM applications.

Lesson Objectives

- **Understand the Integration of STEM in real-world applications:**
 - Students will identify how principles of science, technology, engineering, and mathematics are applied in the design and creation of a miniature world, from structural development to automation and logistics.
- **Develop analytical and observational skills through inquiry-based learning:**
 - Students will interact with the miniature set by activating specific events using push buttons and completing a curriculum-aligned questionnaire. This activity will enhance their ability to observe, analyse, and interpret key elements of the set, fostering connections to STEM concepts such as automation, engineering design, and problem-solving. Explore the Creative and Technical
- **Processes behind innovation:**
 - Students will gain insight into the step-by-step process of constructing a miniature layout, including design, engineering, and artistic detailing, fostering an appreciation for the blend of creativity and technical skills.

Materials/Resources provided by Small Worlds

- Interactive places to bring sceneries in action.
- Access to digital and physical learning tools.
- Take-home STEM activity work sheet and resources for further classroom exploration.

Activity Overview

1. **Exploration:**

Students study the engineering and logistics behind miniature cities and transportation systems, discussing scalability and real-world applications.
2. **Questionnaire:**

Students will engage in inquiry-based learning by answering seek-and-find questions related to the set.
3. **Discussion & Reflection:**

Discussions focus on how STEM careers impact society, encouraging students to explore paths in engineering, technology, and logistics.