Healthy & Learning Lifestyle

Fit Math: Exploring Math through Physical Activity

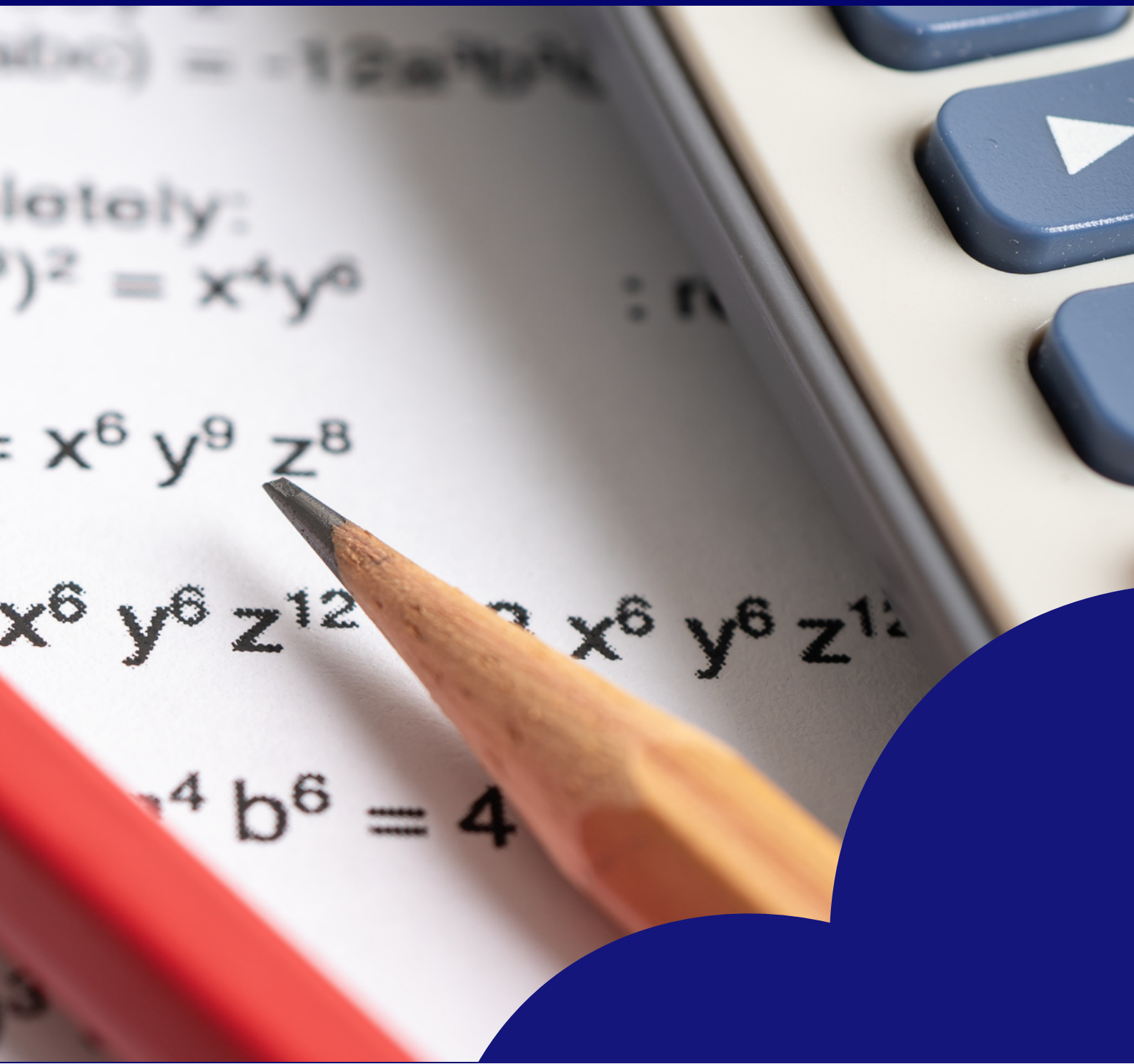
Co-funded by the Erasmus+ Programme of the European Union

Healthy and Learning Lifestyle is funded under the Erasmus+ programme, Key Action 2: Strategic Partnerships Call 2020 with agreement number: 2020-1-NL01-KA201-064672

Fit Math:
Exploring Math through Physical Activity

SHORT DESCRIPTION	This assignment combines math and physical education to engage pupils in a fun and active learning experience. Using the Lü Playground, pupils will participate in math-based physical activities that require problem-solving, calculations, and critical thinking skills. They will apply mathematical concepts in a real-world context while improving their physical fitness.
PUPIL TARGET	**Secondary school pupils aged 14-16.**
REQUIERED KNOWLEDGE, SKILLS AND COMPETENCES	Basic math skills including arithmetic operations, algebraic concepts, and problem-solving abilities. Familiarity with the Lü Playground system and an interest in combining math and physical activity.

GROUP SIZE AND WAY OF EXECUTION	Small groups (3-4 pupils). The assignment is executed through physical activities using the Lü Playground, collaborative problem-solving, and discussions.
TIMEFRAME	**2-3 weeks.**



FULL DESCRIPTION OF THE ASSIGNMENT

a) Introduction
Provide an overview of the assignment and its objectives. Explain the benefits of combining math and physical activity, and how the Lü Playground will be used as a tool for active learning.

b) Math-Based Physical Activities
Pupils engage in a variety of physical activities using the Lü Playground system. Each activity incorporates math concepts such as distance, angles, speed, or time. Pupils apply their math skills to complete challenges and solve problems while being physically active.

c) Collaborative Problem-Solving
Pupils work in small groups to solve math problems related to the physical activities they performed. They discuss strategies, make calculations, and analyze the results together. The emphasis is on applying math skills in a real-world context.

d) Reflection and Discussion
Pupils reflect on their experiences with the math-based physical activities and collaborative problem-solving. They discuss the challenges faced, the connections between math and physical activity, and the benefits of active learning.

e) Presentation and Showcase
Each group prepares a presentation showcasing their favorite math-based physical activity and the mathematical concepts involved. They present their findings to the class, demonstrating how math can be integrated into physical activity.

MATERIALS NEEDED

Lü Playground system, math problem-solving resources, presentation materials.

LEARNING GOALS

- Apply mathematical concepts in a real-world context.

- Improve physical fitness and motor skills through engaging physical activities.

- Enhance problem-solving and critical thinking abilities.

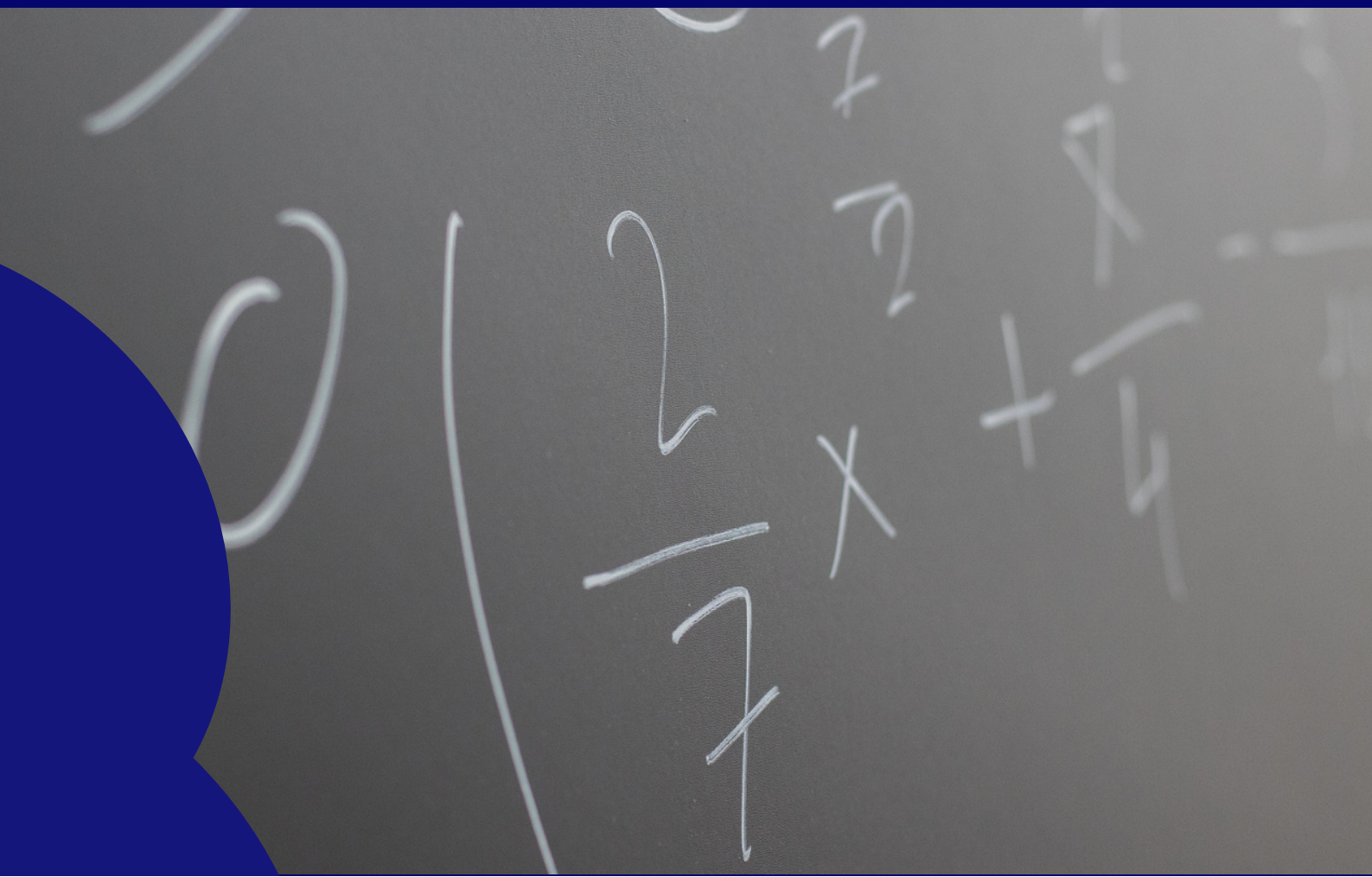
- Foster teamwork and collaboration skills.

SCHOOL SUBJECTS COVERED

Math, Physical Education.

HASHTAGS

#FitMath #ActiveLearning #MathInMotion



FOLLOW-UP ASSIGMENT

Global Math Challenge: Active Problem Solving

DESCRIPTION OF THE ONLINE ASSIGNMENT

In this online collaborative session, secondary school pupils from different countries come together to participate in a math challenge that combines problem-solving and physical activity. Building on the "Fit Math: Exploring Math through Physical Activity" assignment, participants will engage in math-related physical challenges, share their solutions, and collaborate on global problem-solving activities.

ORGANISATION AND WAY OF EXECUTION

Participants will be divided into small groups comprising individuals from different countries. Using online collaboration tools, they will discuss the math challenges they encountered during the "Fit Math" assignment and share their problem-solving strategies. Each group will present their favorite math challenge and its solution to the whole group for further discussions and comparisons.

LEARNING GOALS

- Foster cross-cultural understanding and collaboration on math problem-solving activities.

- Apply math skills in physical challenges.

- Enhance teamwork and communication skills in a multicultural setting.

- Reflect on the importance of math in everyday life and physical activities.

HaLL

www.healthy-lifestyle.school

Co-funded by the Erasmus+ Programme of the European Union

Healthy and Learning Lifestyle is funded under the Erasmus+ programme, Key Action 2: Strategic Partnerships Call 2020 with agreement number: 2020-1-NL01-KA201-064672