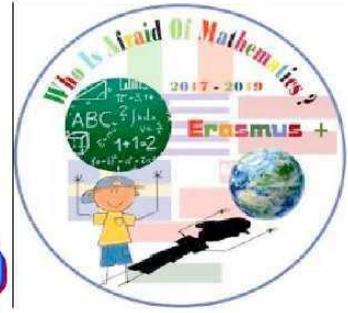


# LESSON PLAN

## Who is Afraid of Mathematics?



Category: **MATHS in NATURE and GEOGRAPHY**

Title of the activity:

**“ What are LATITUDE and LONGITUDE?”**

Year Group: Grade 4 (9 years old)

Teacher: LALLI MAURIZIA

### Learning Objectives:

- to interpret and read maps of different types and scale
- to use map grids in order to learn how to calculate longitude and latitude of any place in the world
- to learn English vocabulary and structure linked to the topic (numbers, cardinal points, degrees, angles, etc...)
- to work in small groups or in pairs in support of each other

### Success Criteria:

- CLIL strategies
- TPR (Total Physical Response) activities
- Pair games (Battleship)
- Cross-curricular approach

game, drawings, maps and an English song called ' Latitude and Longitude song '. Body language, helping pupils to remind North, South, East, West. The easy interaction among different school Subjects, used to reinforce the notions . The Students usually worked in pairs or in small groups, so they get used to help one another.

-

### Resources:

Maps and grids, IWB, Video song, books, worksheets, pencils and crayons

### **Differentiation:**

Group activities, peer - learning and tutor-students can support every children but in particular pupils that show more difficulties.

### **Lesson Description:**

After the introductory activities, the focus moves to the definition of latitude and longitude and how they divide the Earth in two halves, but differently. They are angular distances and they are measured in degrees. To introduce the concepts of latitude and longitude, children learn an English song “ Longitude and Latitude” <https://www.youtube.com/watch?v=MjDqhLUzCpE> . Children watch the video, reflect and discuss about the pictures. By miming the key parts of the song, children learn the text and its meaning.

With the use of modern technologies, as GPS and Google Earth children understand how to orientate. By using a compass, the Rose of Winds, position of Polar star in the sky, children experience how ancient mariners and travellers used to find places on the maps. The real challenge is the calculation of longitude and latitude of a specific country and a specific town, with the use of maps in different size and scale, children discover the position of places by playing battleship. Moreover, after the pupils understand that there are imaginary lines that divide the Earth in cells like a virtual grid, the teacher introduces the concept of Time Zones and practice them with games and worksheets.

### **Introduction:**

Children get more familiar with the use of grids, the concepts of angles and degree.

They review the names and concept of cardinal points and learn their names in English.

By using maps and a globe, children realize that the Earth is round and divided in horizontal and vertical lines.

### **Main Lesson:**

In classroom, pupils play in pairs and small group (battleship, surveys, etc..) working with maps, globes, worksheets, copybooks in order to practice orientation and calculation of position of places in a map-grid. Furthermore, they draw pictures and prepare activities to show during the project visit of some teachers from the partner countries.

### **Plenary:**

With all the activities children have realized that Maths is everywhere and it is necessary in lots of situation, even when you want to describe the position of places in the world. Children have experienced that Maths is not simple calculation and dealing with numbers. As final activity to sum up the learnt concepts, children prepare a poster to be displayed in classroom.

# PHOTOS

