

# Smart School for Smart Age





Lesson plan - Erasmus +

Subject:	Mathematics
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Number of lessons: 7

Teachers: Laurinda Barros and Luzia Novais

**Topic:** Notable points of the triangles and the characteristics of these points.

**Key words:** GeoGebra - orthocente - barycenter – circumference – incenter - Kahoot

### **Lessons objectives:**

To know the formation of the notable points of the triangles:

- the orthocenter;
- the barycenter,
- the circumference (center of the circumscribed circumference)
- incenter (center of the inscribed circumference).

know the characteristics of these points in terms of their possible locations (on one side or on one of the vertices of the triangle, in the internal or external region of the triangle) according to the type of triangle:

- -acutangle;
- obtusangle;
- rectangle;
- scalene;
- -isosceles;
- equilateral.

#### Resources

- Computers with internet access;
- Multimedia projector;
- Tablets with internet access;
- Mobile Phones with internet access.

# **Lessons sequence/activity**

- The formation of the notable points of the triangles with *Geogebra* (2 lesson)
- Exploratory stage, in which students will investigate the behavior, mainly regarding the location, of each notable point, as the shape of the triangle changes. (2 lesson)
- Consolidation of learning using the application MILAGE Learning+ (2 lesson)
- Take a quiz with *Kahoot* (1 lesson)

## **Web Tools**

CASA DAS CIÊNCIAS

https://www.casadasciencias.org/recurso/online/8718

Geogebra

https://www.geogebra.org

MILAGE Aprender+

https://milage.ualg.pt/?page\_id=1181



https://kahoot.it/