

EVALUATION FILE

Pupil:

I)

1. Draw, as best you can, as when you try to explain to someone who does not know anything about this, the map that you follow going from home to school

2. Assuming the sphere is a geographic globe with radius r , knowing that the average radius of the Earth is R (~ 6371 km) calculate by direct proportions the real distance (on the Earth surface) between the two geographical objects and the center angle α .

Note that this operation is equivalent with the finding of the scale factor for our ball as a model of the Earth.

II)

Choose one of the answers to the questions below (**Kahoot**).

1. Convert $45,5^\circ$ Decimal Degrees in Grades-Minutes-Seconds

- a. $45^\circ 30' 0''$
- b. $45^\circ 25' 30''$
- c. $45^\circ 50' 0''$

2. What is the scale at which we represent distances on a ball with a radius of 100 cm, if we know the radius of the Earth is 6371 km?

- a. 1:637.100
- b. 1:63.710.000
- c. 1:6.371.000

FISE PENTRU ACTIVITATI SUPLIMENTARE

Pupil:

I)

To see how well we can draw the map from home to school, open on a PC the map at a scale encompassing both location - home and school (using for example "Google Maps"). Capture the image from the screen by pressing "Print Screen" and then copy the image (" Ctrl + V ") in a graphic editing program – something like "Paint" in Windows. Use now some lines and text (using the tools of the program) to mark the road and save the map as an image ("map.jpg").

Let's compare our initial map with the one we've got now!

II)

Use the sites below to calculate the distances between different points of interest (in a straight line and along the streets), the surface of the school sports centre, or the height of different known locations.

<https://www.freemaptools.com/measure-distance.htm>;

<https://www.freemaptools.com/area-calculator.htm> ;

<https://www.freemaptools.com/elevation-finder.htm>

III)

Seek applications ("apps") for mobile phone or tablet to be based on the use of databases defined by geographical coordinates. Using them to locate those points of interest found in [11] <http://www.cimec.ro/>;
<http://patrimoniul.gov.ro/ro/>