

Horse chestnuts

APPLICATION OF THE SCIENTIFIC METHOD TO A PRACTICAL CASE.

Students year 5 primary explore all about the horse chestnuts

The aim is for students to learn the stages of the scientific method by working as scientific researchers do.

It is about students learning following the stages of the scientific method, students worked as scientific researchers do.

Stages of the scientific method:

1. Observation and approach to a problem or question. (to do this we use the project app and map)

Note: The Horse chestnut is changing throughout the year. Flowers sprout from them and they grow and ripen the fruit.

Question: What causes these changes?

2. Development of hypotheses (look for a possible answer to the problem question):

a) The different stages of the life cycle of horse chestnut are influenced by temperature.

b) The duration of the day (hours of light) determines the appearance of flowers and fruits.

It can be with one hypothesis.

3. Experimentation (to check the validity of the hypothesis).

Collection and analysis of data over a period of time sufficient for the stages of the plant to be studied occur. (we'll also use the data we extract from the app, map and big data) Students compare different horse chestnuts looking through Galicia and through the map in different countries

4. Analysis of results.

Construction of graphs with the values of the parameters to be studied and the observation of the phenomena according to different weather and to analyze if a relation is observed.

In a poster students represent different facts like when the leaves appear, the flowers... Students get familiar with data register

5. Conclusion and communication of results.

Students learn about the horse chestnuts in Galicia and Cerceda which is which is 350 m above sea level

After applying the scientific method the teacher propose group year 5 Primary 15 students to do a video collecting all the information about all they know about horse chestnuts.

With this activity we try students learnt to study a plant in depth and share their knowledge with other students through a video

1 Video <https://youtu.be/J5lXPqVYJfI>

The group year 8 Secondary did the same activity. We asked them to register when the leaves appear, when the fruit grows ...

As conclusion they learn to write a sheet about the horse chesnut

<http://www.edu.xunta.gal/centros/cpicruce/system/files/horsechestnuts.pdf>

After this they produce an e-book with all plants of Galicia.

Students (15) produce a file collecting all relevant information about the ornamental trees we can see in Galicia

We try to ensure that students are able to locate relevant information about different trees, do observations and communicate it to their colleagues

These are the results in English and Spanish languages

<https://issuu.com/mitrimir/docs/enflora>

<https://issuu.com/mitrimir/docs/flora6>