equipe de Sophie Blanche
Au Passou 40

RESEARCH QUESTION

Does the warming of our climate influence the intensity of rainfall in our region? How can we prevent rainwater from flooding our vegetable garden (nor our houses)?

SUMMARY OF PROJECT

During the project, we:
-Measured rainfall on the ground with a rain gauge; -Compared our measurements with the measurements taken at other times of the year; -Compared our measurements with measurements from other years; -Performed experiments to understand soil infiltration; -Checked soil moisture; -Observed the operation of a dam; -Learned vocabulary: "flow", "precipitation"; ... -Compared this year's data with older data (global warming) -To do this, we used real ground measurements, analyzing online weather reports and ground maps.

Figure 1: notre potager

MAIN RESULTS

We noticed that there were sometimes heavy rains in targeted regions. Could this be due to global warming? In order to manage these meteorological disturbances, man must adapt. In order to manage water and not be flooded every time it rains hard, man must live and build differently: -No more constructions near riverbeds or in flood-prone valleys. -Higher constructions (like construction on stilts) in flood-prone areas. -Less concrete constructions. -More vegetation on hillsides, which helps slow down water flow.
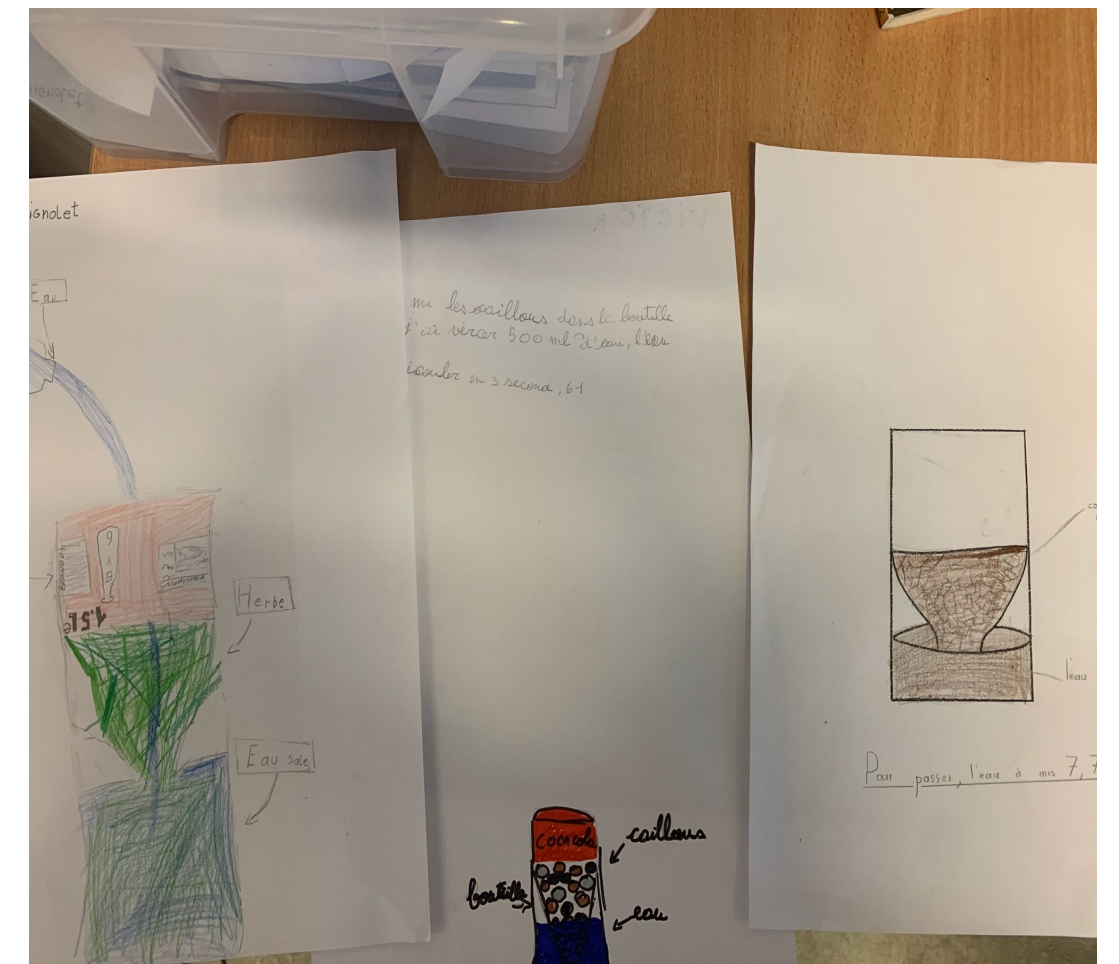

Figure 2: nous expérimentations sur les sols
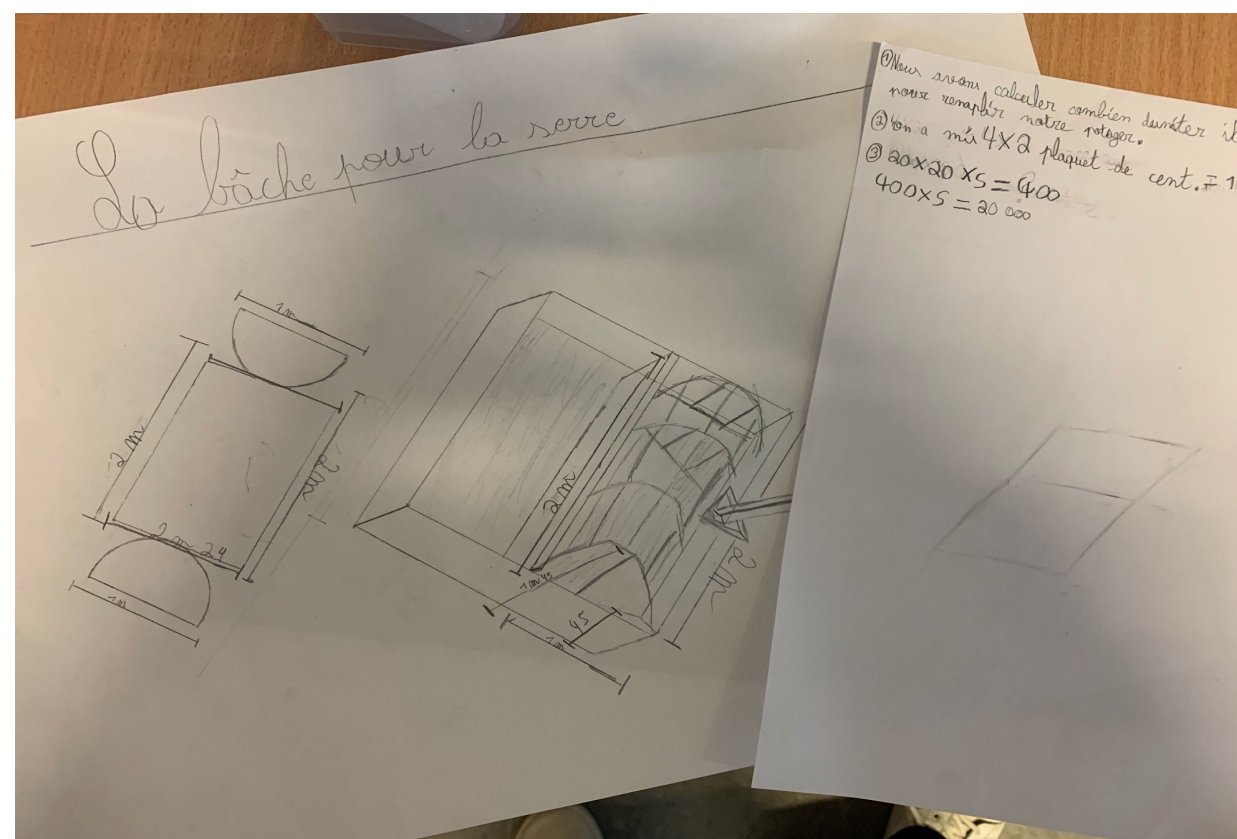
ACTIONS TO HELP LESSEN TO THE PROBLEM

Figure 3: construire un potager qui en tenant compte de la pluie...

After realizing the power of nature and water and after having observed climate changes, we decided to build our vegetable garden in a reasoned way. Indeed, we cannot act on the installations of our commune nor on the dwellings. On the other hand, we can act in our school.
We are creating a green space in the yard that will be accessible to children (which was not the case before) and we are attentive to the permeability of your soil in our vegetable garden so that it does not flood. We want also add a system to check the humidity of the soil thanks to a computer program (Arduino). We also want to add a system to check soil moisture through a computer program (Arduino).