

blank working sheet



CAN WE BUILD A MACHINE THAT USES WIND TO LIFT A 50 G WEIGHT?

The kinetic energy of the wind is the mechanical energy held by a particle of air due to its moving speed. It depends on the mass of the moving air and its speed. When the wind blows over a surface, such as a wind turbine wing, it transfers its kinetic energy to that surface, which can then convert it into usable mechanical and electrical energy. The kinetic energy of the wind can be captured and converted into electrical energy through technologies such as wind turbines, which use turbines to capture and convert this energy into electricity. This energy can be used to power buildings, cities and entire electricity grids.

Can you develop a solution to understand the force of the wind and how it can be used to lift a given weight?



Name your team / Name of the participants:



This protocol is part of the TheDexterLab project funded with support from the European Commission through the Erasmus + Strategic Partnership Programme. Its content reflects the views only of the author, and the Commission cannot be held responsible for any use that may be made of the information contained therein. This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.







DEFINE YOUR SCIENTIFIC EXPERIMENT

We invite you through this model to be creative while developing the scientific and technical points to design a unique and motivating experiment! You are free to develop your own solution or to draw on our existing protocols and pre-existing resources you can find on the internet.

OQIENŢĿŢION

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Briefly introduce your experiment, the issues addressed, the learning objectives. Define the problem to be solved, what are the learning objectives?

INTERDISCIPLINARITY

Discipline	Concept addressed through the protocol

CONCEPTUALISATION

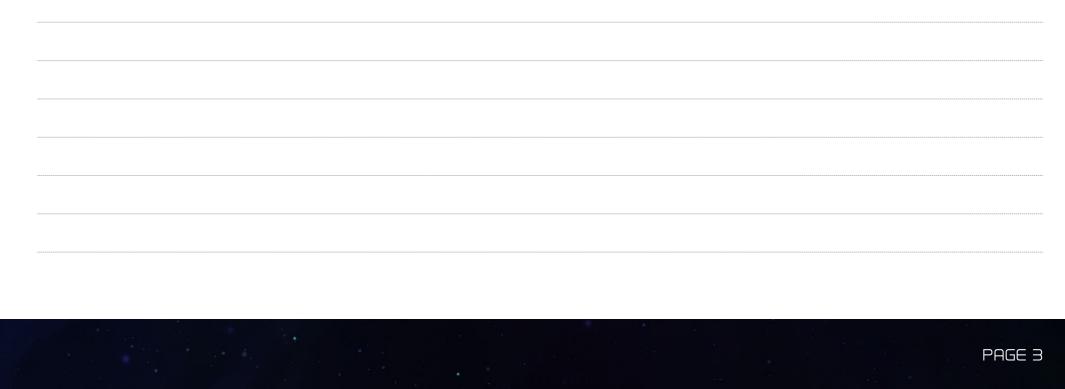
Formulate a hypothesis to answer the given problem.





ΙΛΥΕςτισοτιοη

Describe the steps needed to answer your hypothesis. You could use the following steps as a guide: collect the data and use sensors, display the data, make it accessible, analyse the data and conclude, use the data to propose one or more solutions.





INVESTIGATION - CONTINUED

CONCLUDE, DEBQIEF

Identify the knowledge mobilised during this phase, identify the learnings aquired, reflect on what you have gained as competencies, knowledge and skills.

