

Science, Technology and Art challenge

2025-2026

« Funny air-powered vehicle »



This scientific, technological and artistic challenge is for students between 3 to 11 years old students in the Savoie department, with an international dimension via e-Twinning. It offers teachers the opportunity to work with other classes in Europe.

The primary goal is to implement a scientific approach with the students. Specifications are adapted to each age group. All projects will be considered, even if they do not fully comply with the general rules.

This challenge is an opportunity for students to experiment, invent, build, and discuss a concrete scientific and technological problem within the framework of the programs. The challenge allows them to develop language skills and give meaning to scientific concepts, while exploring the links between arts and science.

Let's go!

General Rules



Scientific and technical aspects

The land vehicle rolling or sliding must move on a horizontal surface using a device that utilizes the properties of air.

It will not be possible to push, throw, or blow on the vehicle.

The use of fans, hair dryers, or other electrical devices will not be permitted.

It must be made primarily from recycled materials.

Each class participating may submit only one vehicle from among all those made in class.

- **Cycle 1** : 3-5 years old

Design and build a land vehicle powered by a device that uses the properties of air, on a horizontal surface. The vehicle must have a name that characterizes it.

- **Cycle 2** : 6-8 years old

Design and build a land vehicle powered by a device that uses the properties of air, whether onboard or not, on a horizontal surface **and covering a distance of at least 1 meter**. If not onboard, the device must remain on the starting line. The vehicle must have a name that characterizes it.

- **Cycle 3** : 9-11 years old

Design and build an autonomous land vehicle with an on-board system that uses the properties of air, on a horizontal surface and **over a minimum distance of 2 meters in a straight line in a 60 cm wide corridor**. The vehicle must have a name that characterizes it.



Validation criteria

Category	Cycle 1	Cycle 2	Cycle 3
Dimensions	The vehicle's dimensions must be approximatively : 22 x 26 x 30 cm		
Materials	Use recycled materials and, if necessary, educational materials.	Use of recycled materials	
Representation of the propulsion system	Drawing	Diagram	Diagram
Name	The vehicle must have a name that characterizes it.		

Technical constraints	<ul style="list-style-type: none"> - The vehicle is neither launched nor pushed. - Movement on a horizontal surface. 	<ul style="list-style-type: none"> - The vehicle is neither launched nor pushed. - Onboard or offboard propulsion system. - If offboard, the device must remain on the starting line. - Movement on a horizontal surface. - Movement over a distance of at least 1 meter. 	<ul style="list-style-type: none"> • The vehicle is neither launched nor pushed • Onboard propulsion system • Movement on a horizontal surface • Movement over a distance of at least 2 meters • Movement in a straight line in a 60 cm wide corridor
Video	<ul style="list-style-type: none"> - A video of the vehicle in motion. - Please note: no recognizable faces should appear in the video. 	<ul style="list-style-type: none"> - A video of the vehicle in motion showing the distance traveled. - Please note: no recognizable faces should appear in the video. 	



Artistic aspect

The jury will award a special prize for the artistic aspect of the vehicle, with an emphasis on creativity.

It will be awarded based on the following design criteria: production related to a theme, name of the vehicle, attention to the materials used, overall presentation, staging of the production.

In Cycle 1, it will be based on domain 3 “Acting, expressing oneself, and understanding through artistic activities ».

In cycles 2 and 3, it will focus on the crossovers between disciplines, “The visual arts in cycle 2 can be easily combined with other subjects to consolidate skills and transfer knowledge within the framework of interdisciplinary project-based teaching.” (cycle 2, 2020 programs);

“The importance given in visual arts to experimentation and a taste for research intersects with that of science and technology” (cycle 3, 2020 programs).



Submission of digital productions



➤ a logbook with :

- the **name** of the vehicle,
- a **picture** of the vehicle
- a list of **materials** used,
- the students' **experiment notebook** (drawings, diagrams, observations, captioned photos, etc.)
- a written **explanation** of the **investigative approach** implemented, which will highlight trial and error and the different steps of the project.
- a **representation** of the propulsion system,
- **instructions** for using the vehicle.



➤ - A short video in which students present their class, their scientific approach and their vehicle.

- **In mother tongue or english**
- **4 min maximum.**

Visual aids can facilitate comprehension (captioned pictures, drawings, flashcards, or gestures).

The videos, pictures and logbooks will be uploaded to Savoie Educ via the submission form.



The documents, pictures and videos must be identified as follows:

- Documents in pdf format :

Student's Age_country-town_class_teacher_.pdf (ex: 10_England_London_Year6_MrsGreen.pdf)

- Videos in mp4 format :

Student's Age_country-town_class_teacher_.mp4 (ex: 10_England_London_Year6_MrsGreen.mp4)



Final

The steering committee of the Science, Technology and Art Challenge will organize a final in France to check the criteria and to validate the productions. Be part of the jury !

Watch other classes' videos online and participate in the jury to award the international prize for each cycle.



How to register

Registration is online until January 7, 2026 on [savoie.educ](https://savoie-educ.web.ac-grenoble.fr/defi-sciences/inscriptions-au-defi) by following this link:

<https://savoie-educ.web.ac-grenoble.fr/defi-sciences/inscriptions-au-defi>



Provisional timetable for the 2025-2026 challenge :

Dates	Events
From January 7, 2026	Registration for the challenge - experimentation
Until May 4, 2026	Deadline for submission : Picture, logbook, video (4' maximum, in mother tongue or english)
From 13 to 22 May 2026	- Watch other classes' videos & check the criteria (online on Savoie Educ) - Vote to award the international prize.
May 26, 2026	Final in France
June 2026	Virtual exhibition of works
June 2nd, 2026 - 9:15 to 10 am	Virtual class meeting – Visualizer or tablet welcome
June 2026	Publication of results. Final images posted online and diplomas sent out.



Resources

To support teachers : <https://savoie-educ.web.ac-grenoble.fr/defi-sciences/ressources-defi>