

# GALACTIC LIVES

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## WEBSITE

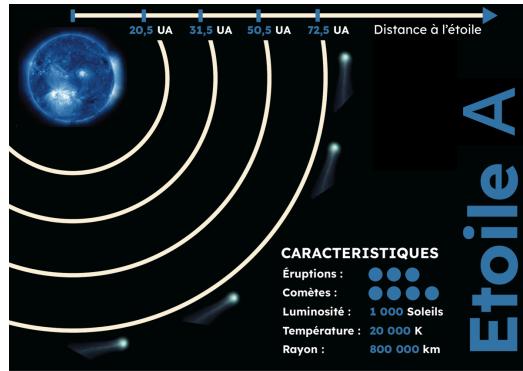
[viesgalactiques.com](http://viesgalactiques.com)

## GAME PITCH

The emergence of life is not an easy process. In teams, you will create your own planetary system and develop it to increase the chances of life appearing on your planets. Collect matter points during mini-games that pit you against other teams, and use them during decision-making periods to create conditions conducive to the emergence of life. Will you manage to make life appear before the others?

## A GAME OVERVIEW

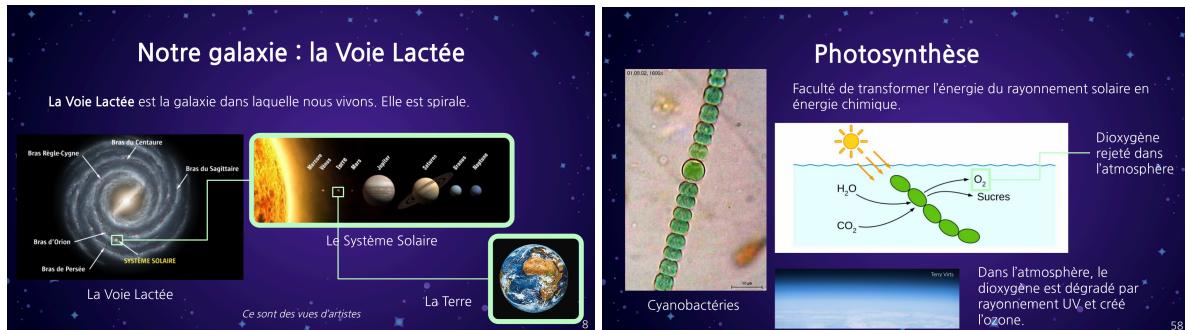
This activity is suitable for **middle school students, high school students, and beyond**. Each group must manage their own planetary system. The goal of the game is to make life, as we know it, emerge on one of their planets. To do this, they need to earn the most **Prosperity Points (PP)**. The teams will have the mission to find the orbit that is in the habitable zone, to make liquid water appear on their planets, and to protect them from cosmic threats.



Here's an example of a planetary system that a team must manage to make life emerge.

The game is divided into 3 recurring phases: presentation, mini-game, and decision-making.

- Presentation:** the game master presents scientific concepts such as the definition of a galaxy, a star, the Earth-Moon system, the emergence of life on Earth... They have a slideshow at their disposal (see below).
- Mini-game :** teams compete in various mini-games to earn **Matter Points (MP)** which will be useful for forming their planets, water, atmosphere, etc.
- Decision-making:** in teams, players have a few minutes to decide on their actions. This is when they can form their planets, take time to calculate the right orbit, decide which card to buy at the Shop... but also attack other groups! Indeed, it is possible to buy some attack cards that make other teams lose PP (Prosperity Points).



Previews of the slideshow for presentations

**Etape II**

### Planète gazeuse + Lune

Planète composée en grande partie d'hydrogène et d'hélium, accompagnée de sa lune. En dessous d'une certaine épaisseur, sa matière est liquide ou solide.  
Placement : ne peut être placé que sur l'une des deux orbites externes

**8 PM**    **+ 2/6** en esquive de « Astéroïde »  
Vie formable sur la Lune

**Etape III**

### Champ magnétique fort

Établit un fort champ magnétique en créant des mouvements de convection très profondément dans la planète (noyau métallique).  
Cible : planète au choix

**6 PM**    **+ 3/6** en esquive de « Rayons cosmiques »  
+ 3 PP si le champ magnétique nécessaire atteint

**Etape IV**

### Couche d'ozone

Partie de l'atmosphère composée en grande partie d'ozone. Elle absorbe une grande partie des rayons ultraviolets provenant de l'espace dangereux pour les êtres vivants.  
Cible : planète au choix

**1 PM**    **+ 3 PP**

**Attaque**

### Astéroïde

Corps céleste composé de roches et de métaux dont la taille varie de quelques centimètres à plusieurs kilomètres.  
Si non évité : s'écrase sur la planète tellurique / la lune la plus excentrée.  
Cible : une équipe au choix

**1 PM**    **- 3 PP**

Examples of cards that can be purchased at the Galactic Shop

The first team to reach 30 Prosperity Points (PP) wins. If they don't have time to finish, the team with the most PP will win.

# **EDUCATIONAL OBJECTIVES**

To engage and impart knowledge: this is the primary goal of this game. Every effort should be made to ensure that the scientific content is accessible to students and that they acquire new knowledge. The aim is to popularize without oversimplifying. This is why a clear and playful slideshow has been developed. Also, students should notice that the game addresses multidisciplinary scientific concepts (Biology, Physics-Chemistry, Mathematics). Finally, the game mechanics are as realistic as possible, in order to "experience" the behavior of nature.

Avoid dropouts: within a team, it's important that all students are engaged and not just a few while others give up. To prevent this, roles have been established. These roles give each student a responsibility towards the group and specific tasks to accomplish.

Movement: It's important to avoid students sitting through a static lecture. This is why some mini-games require certain students to move around the classroom. This allows for better student involvement.

Competition: When students compete against each other, the stakes are clear and more important to them. It's no longer simply about listening to a presentation of abstract knowledge, but understanding and using it to make the best choices in order to defeat other teams. This can motivate students who are reluctant to discuss science. This aspect is amplified if we give a reward to the winners.

Team spirit: It's interesting to emphasize teamwork in this game. Indeed, thanks to the different roles, everyone has a part to play and it is essential to know how to communicate within the team to coordinate decisions.

Reflection: The game should be neither too simple nor too complicated. The decision-making phases should be a moment of real reflection in order to find the best strategy for one's team. There are several strategies to achieve victory, allowing for a certain freedom and autonomy for the teams, as well as a wider choice of possible scenarios. The objective of this game is to make students active participants in their learning.

# **TECHNICAL DETAILS**

- The activity lasts 2 hours.
- Requires the use of a computer connected to the Internet per team and a video projector.
- From 5 to 35 players.

# **CONTACT**

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# THEY'VE ALREADY TRIED IT OUT!



Raymond Naves high school, Toulouse



French high school of New York



Claude Nougaro high school, Caussade-Monteils