**Script: GAIA Project (Part 1)**

**Title: GAIA Project**

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**1st teaching period**

***1st Activity: Introduction***

Time: 15’

Type of activity: Introduction – Watching a video

Class organisation: whole class

Actions/Tasks: Students will pretend they belong to a scientific group from a planet called Arteta, in the Linux system, in Andromeda galaxy. Their own planet is polluted, so they will have to find a new one. They have found a blue planet in the Milky Way galaxy with appropriate life conditions. So, they will have to collect information about the planet to send it to Arteta’s Superior Council. To do so, they will watch a [Youtube video](https://www.youtube.com/watch?v=d8y8kc317EE) about the Earth and the Solar System.

***2nd Activity: Mission 1.1. Milky Way***

Time: 50’

Type of activity: Answering questions based on the previous video

Class organisation: Individually

Actions/Tasks: Students will have to answer specific questions about the Solar System and the Earth on a Word document.

* In which galaxy is the Solar System?
* What shape does our galaxy have?
* What size is it, approximately?
* How many stars does it have?
* Apart from stars, what can we find in the galaxy?
* How do earthlings call the theory of the Universe’s origin? What is it about?
* When was the Universe created?
* How is the Earth’s star called?
* How is the Solar System structured?
* Name all the planets in the Solar System.

**2nd teaching period**

***3rd Activity: Mission 1.2. Astronomical distances and size***

Time: 50’

Type of activity: Searching for information on the Internet and answering questions

Class organisation: Individually

Actions/Tasks: Students will have to search for information about astronomical units on the internet and then answer some questions.

* What is the distance between the Sun and the Earth?
* If our planet Arteta is located 50,000 billion km from the Sun, how many astronomical units are there between the Sun and Arteta?
* Given that our spaceship’s speed is 10,000 kph, more or less; how long would it take the spaceship to arrive at the Sun if it leaves from Arteta?
* Given that the speed of light in space is 300,000 kph, how long would it take the sunlight to get to planet Arteta?