

**Sharing the Planet**

Fourth Grade

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**Astronomy in Our Lives**

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## **ABSTRACT**

The purpose of our investigation is to make a big impact on the girls, teachers, administrative area, etc., because we know that not many people are conscious about our planet or where we are stood. In our PYP Exhibition Project we want to provide the opportunity to travel through a new topic, one full of mystery and fun. We want to help little girls continue with their curiosity. We want to present this through our actions and incredible blog. We used some attributes like risk takers, open minded, caring, and thinker. In addition, we applied some skills like patience, teamwork, and our communication and listening skills.

## **Introduction**

Astronomy and robotics are especially important to the world because they let us know where we are stand. Second, they make people conscious about the damage we are causing to our blue planet Earth. And third, they show us new planets and galaxies.

Astronomy is a topic full of mystery and learning, the first topics we investigated about were astronomy, since they robotic help us know about many things like the order of planets and what is happening in the galaxy, among others. The first research was about what Astronomy is and, investigating about robots was interesting, to know how those incredible machines help us discover more about space.

## **What is Astronomy?**

Astronomy is the study of all the universe beyond earth atmosphere, which are the things we can see at long distances like the Sun, Moon, stars, and some planets. For the study of astronomy is necessary to use some instruments that help us see space clearly and, other galaxy that we are not able to see with our naked eyes.

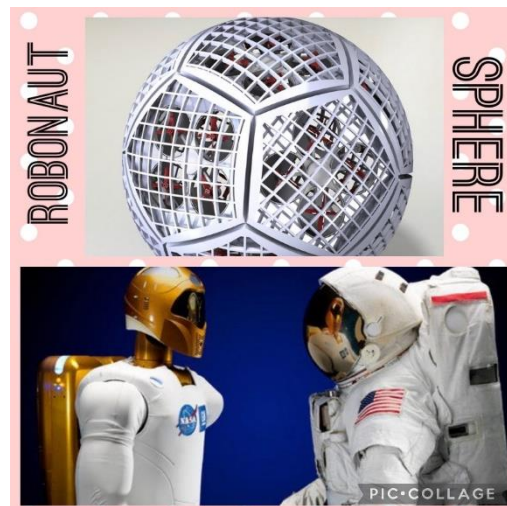
## **The relationship between Astronomy and Robotics**

Astronomy needs Science, Engineering, and Technology because it has produced machines called robots, that substitute for (or replicate) humans' actions. These robots can be used in many ways, such as robots' arms on spacecrafts than can move large objects in space and visit other world, others can fly without a pilot aboard.

People have been exploring new types of robots since they help discover new places like the Moon and Mars. In addition, this is how people manage the robots in space by using computers to send the commands, to the antennas those robots have. Moreover, those robots pick up the message and they do what people tell them to do.

Robots have satisfied people because of their help. Therefore, they have decided to create new types of them that will help astronauts in space like the Robonaut and Sphere. There are two robots that help humans, the robots can work in other planets and spacecrafts. These robots are

made by a company called the NASA that is the National Aeronautics and Space exploration of United States. The NASA gives us a lot of information of the planets by their robots and astronauts.



**Image 1**

### **Some facts about planets**

Let us start with the Sun, the heart of our Solar System it is a yellow dwarf star, a hot ball of glowing gases. Its gravity holds the solar system together, keeping everything from the biggest planets to the smallest particles of trash in its orbit. What about Venus, Venus is the second planet in our solar system, its size and structure are like Earth's one, but there is a radical difference between both. We cannot forget about Mars, only 18 missions to Mars have been successful, some Mars pieces have fallen to Earth, there are signs of water on mars, mars could one day have a ring.

And now, Jupiter. The favorite planet of many people, Jupiter cannot support life as we know it but, some of Jupiter's moons have oceans beneath their crusts, that might support life, nine spacecraft have visited Jupiter. Seven flew by and two have orbited the gas giant. Juno, the most recent, arrived at Jupiter. And Saturn, a lot of robots have travel to Saturn, they have discovered

what is the width of Saturn rings they are 400.000 kilometers, that is amazing because is the same distance between Earth and the Moon. Saturn has a moon that is very incredible for humans, because they found a big atmosphere and they have hope to find life.

### **Making people conscious about where we stand**

From all these amazing facts we have inspire to choose our action. Our action consists about interacting and inviting girls to know about the Solar System exploration. We invited Montessori girls to be with us for make some cute masks giving them a significant impact so they can start learning about places and location and where they are stand. The day of the action was so excited.

Our action with Montessori was making masks of Planets the day of the action was on April 29th, we divide our team in three because there were three groups of Montessori. The day of the action the girls were ready and excited for the activity, they have all the materials ready to start the activity but before, we showed them a video with information about each of the eight planets in our Solar System after we started making the mask. At the end, the girls were happy with their mask, and we finished taking a photo with their mask on.

**Image 2**



Image 3



Image 4

Our action with Second grade was to make the Mars Perseverance with food, any kind of food such as candies, fruits, etc. The day of the action was May 7th, we divided our team in two because we managed the whole grade, when we entered the meeting, the girls were happy and excited to make the Mars Perseverance with food. Before starting the activity, we showed the girls a presentation to teach them about what is the PYP, what is Mars, what is the Mars Perseverance and what we were going to do. After the presentation we started the activity; and at the end we asked the girls if they liked the activity and some of their answers were: I liked it, I learn about the Mars Perseverance and we liked that at the end we could eat it, after that, the girls take photos to their Perseverance and we chose the winners to receive a prize.



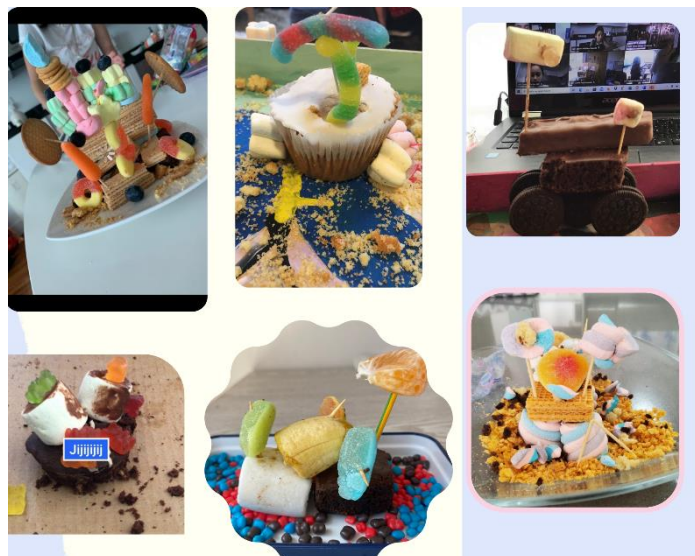


Image 5

## **Conclusion**

In all our investigation process we learned many things about the topic astronomy and robotics. Now we know where we are stood, we made many girls conscious about the damage of our Earth. Astronomy is a topic full of mystery and fun and, it left us things in our mind that are going to make a significant impact on our lives. The things we researched were awesome; we loved to investigate about the planets, of how to make masks and to make Perseverance robot models with food, these things help us not only learn many things to be more knowledgeable but also help us in the rest of our life.

## Bibliography

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## Table of Images

### Image 1:

<https://media.metrolatam.com/2018/01/30/r2300x274.jpg>

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<tbn0.gstatic.com/images?q=tbn:ANd9GcTf4xeeNYQanaoWRN1XwGGYCqPmgxPnM2x29g&u>

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### Image 2

Montessori 01 action masks

### Image 3

Girls of Montessori 02 with their masks

### Image 4

Girls of Montessori 03 action

### Image 5

Making the Mars Rover Perseverance with food