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Design of a Mars Base

Project particapants :10 – 14 years

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Maša Haramija
Sara Kukman
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Supervising teacher: **Jože Novak** (joze.novak1@guest.arnes.si)

Co - mentors : **Vida Cizl** (visual arts teacher);
mag.Urška Ogrinc (chemistry and biology teacher)

Šmarjeta, november 2005

Process and the contents of the project

There are 28 students joined in the project after the motivational discussion and informational delivery, aged between 9 and 14, who are interested in the space and have the abilities of observation, designing and concluding. In the project are also enthusiastically cooperated the professor of art and professor of biology and chemistry at our school.

I Collecting the Information
We searched the Space literature, surfed on the Net and saw the film about life on Mars. Then we continued with the debates, exchanging information and compromising about different opinions.

II. What and how we approached to the project
We came up with the idea to make a Space model in the school hall that would contain the sand, the stones, the craters, valleys, icebergs, sand hurricanes etc.
On the surface there will be the space bases consisted of many units. The work was divided in groups:

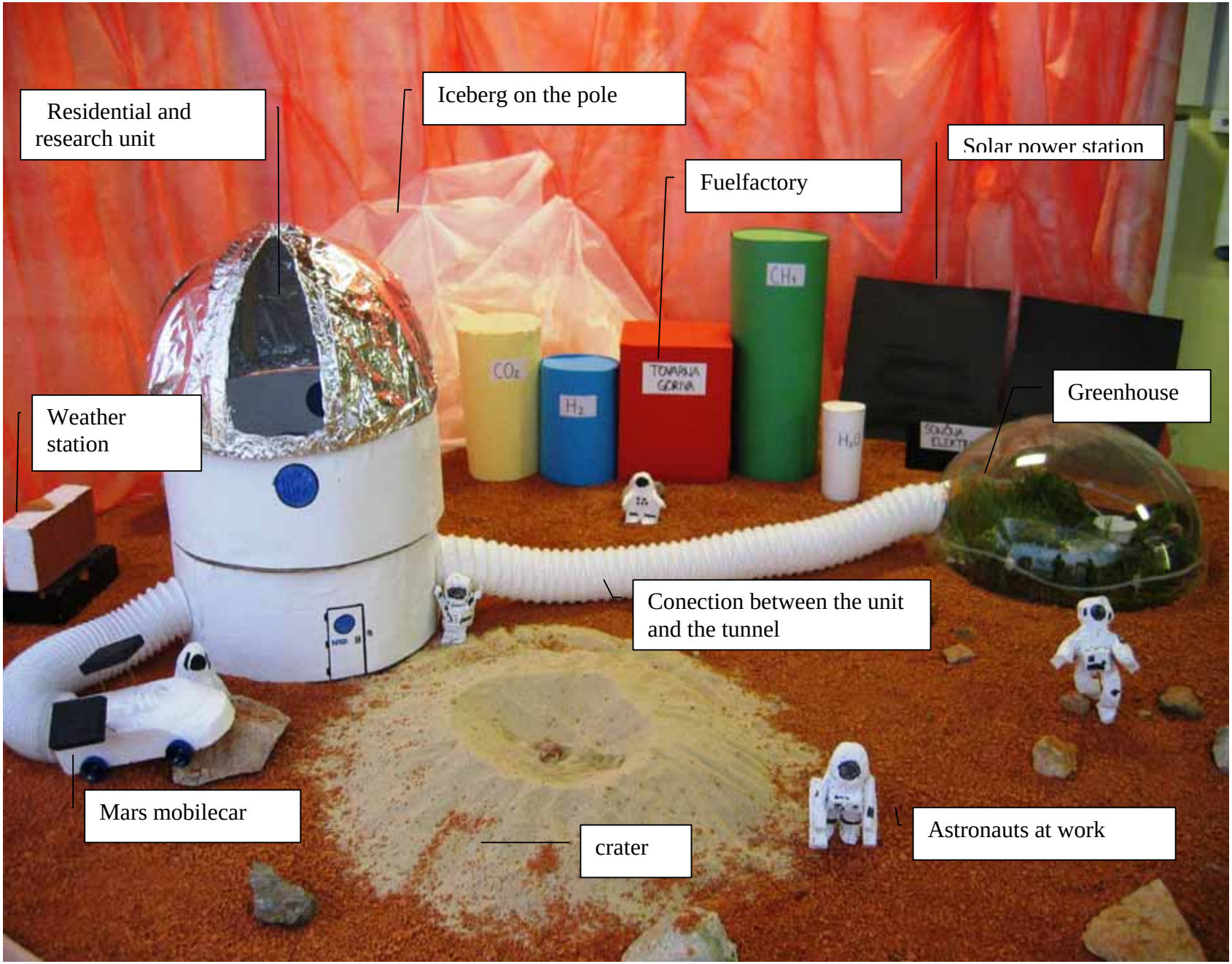
a) Making the relief and putting down the exhibit place.
b) Making the lower part of the living unit.
c) Making the upper part of the living unit.
d) Making the cupola.
e) Constructing the Green house and planting the plants in it.
f) Building the fuel factory for returning back to the Earth.
g) Constructing the Mars mobilecar.
h) Building the Weather Station.
i) Designing the astronaut's figures in the space clothes.
j) The final building of the objects.

III. Work Analyses
During the work we discussed about the importance of individual units and parts.
We realized that the flight and living on the Mars is a very difficult and risky activity that allows no mistakes. We spent the practical material and the plan was regularly fulfilled and definitely enjoyed in unique solutions.

IV. The public presentation and participating in International project
We are satisfied with the work done, because of having new experiences and knowledge that could be discussed and shown public ally. With the public and media presentation we plan to transform all these to other pupils, parents and all those who are interested in space. We hope that a part of the literature will be presented on www.unoosa.org.

A project coordinator
and mentor,
Joze Novak

View on the exhibition space : space base, Mars relief, iceberg, sandstorm, crater


Residential and research unit
Iceberg on the pole
Solar power station
Fuelfactory
Greenhouse
Weather station
Conection between the unit and the tunnel
Mars mobilecar
crater
Astronauts at work

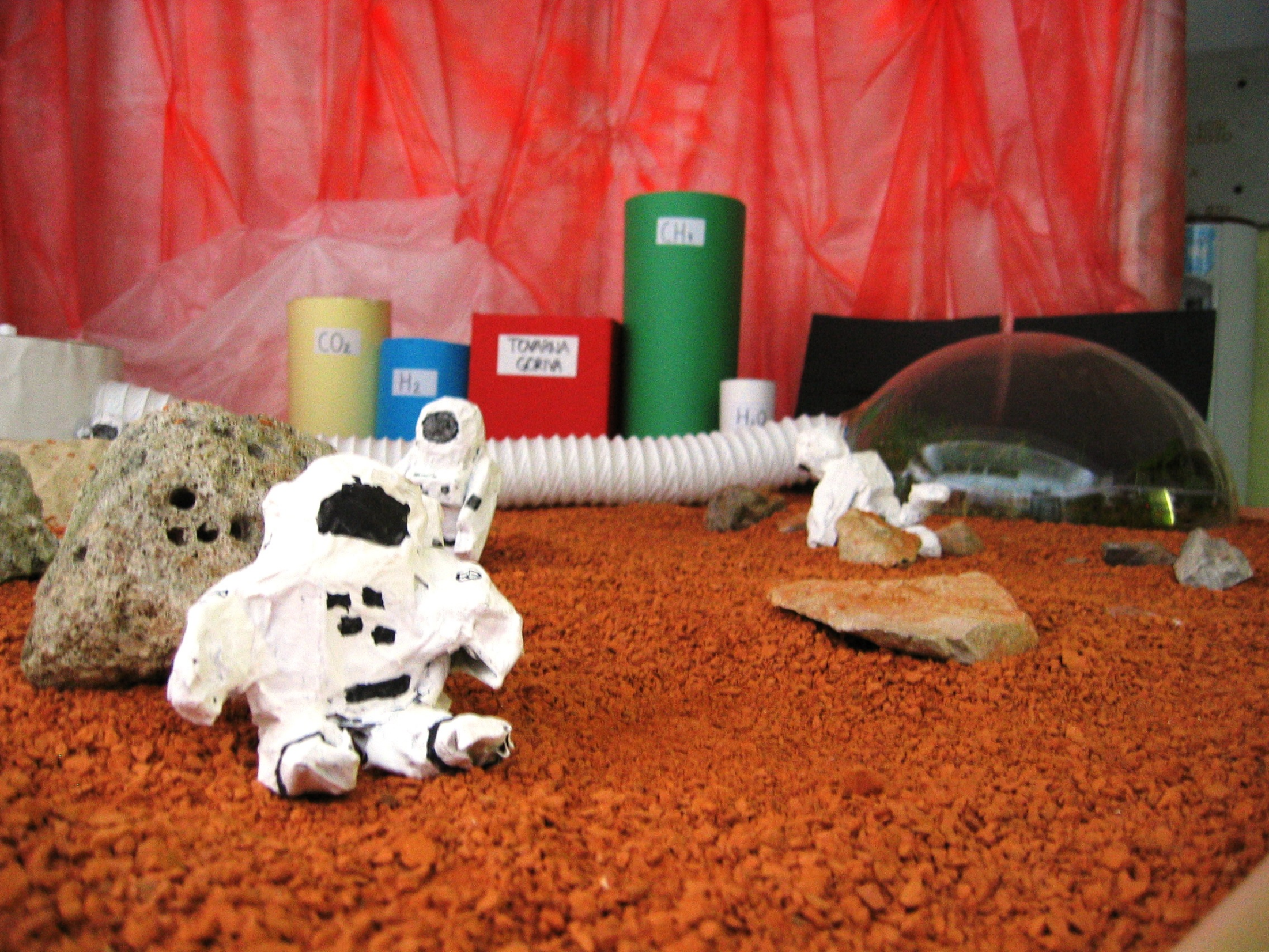
Lower residential unit: medical room, air blockade , exit, device warehouse to exit the base, wardrobe, passage blockade to access the mars mobilecar and additional security doors, service workshop for fixing clothes and other devices, lab for sample researching , intermediate blockade to access the greenhouse, ladder to access the upper level

View on the lower residential unit with a passage to the greenhouse and access to the mars mobilecar

Upper residential unit: communication centre of the base, computers for their free time, living room, kitchen, table, sleeping cabin, rooms for personal items, personal working corner, bathroom with a shower

Greenhouse: Natural filtration of water, producing food, producing oxygen, natural habbitat for small organisms

A working day on Mars:: maintaining devices, ground researching, , weather, keeping fit…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