The space and natural Sciences.

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Day after day, we see the ship as more than just a car. First of all, for each of us it is a house. For comfort and safety stay on the ship, we must create all the necessary conditions. To do this, we invited Tatiana from the medical center, which will help us in this matter. Her knowledge of physiology and the environment will help to accurately determine the level and supply of oxygen on Board, comfortable for the human body temperature, water, food, sleep and personal care areas. Specialists from other fields make up the necessary data and information for the life support of each of us, and most importantly for a favorable and successful flight to Mars.

Aims:

- 1.Full internal and external equipment.
- 2.The flight to Mars.

We will use the formula of the great English physicist, mathematician, mechanic and astronomer of Newton Isaac. The formula of universal gravitation. It allows you to calculate the distance between any planets.

Tasks:

Physics

- 1.Flight time.
- 2.Distance.
- 3.Landing.

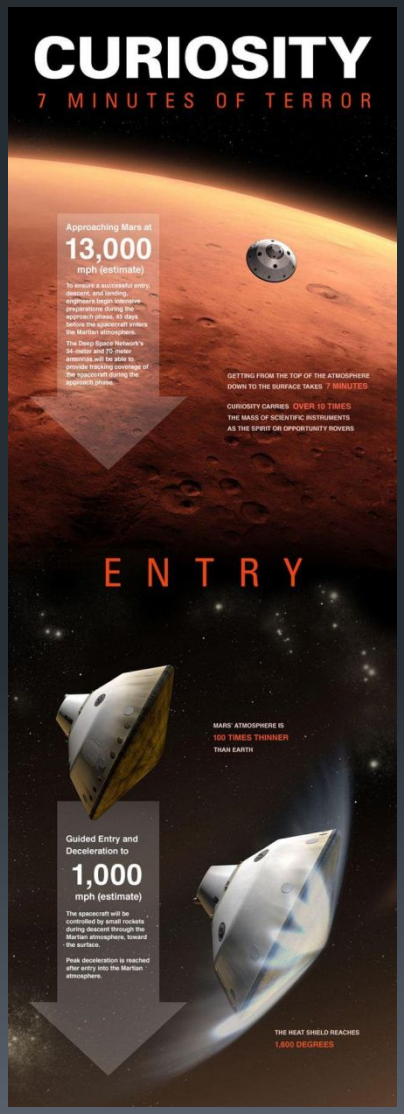
If you dream of one day being an astronaut on the first manned flight to Mars, be prepared for a long trip. Scientists estimate a trip to Mars and back would take 400-450 days. 2) With a speed of 17 km/s, Mars can be reached in the shortest distance in 39 days;

At the middle point distance for 162 days;

With the greatest distance of 289

Soft landing:

- Our group with the help of Alexey, Konstantin and Tatyana are to create armchairs with the regime of comfortable landing. Constantine is to create a program responsible for remote and automatic control of the seats. Tatyana is responsible for their fixation. Alexei and I are responsible for their assembly. Lera is responsible for the purchase.



Physicists and engineers:

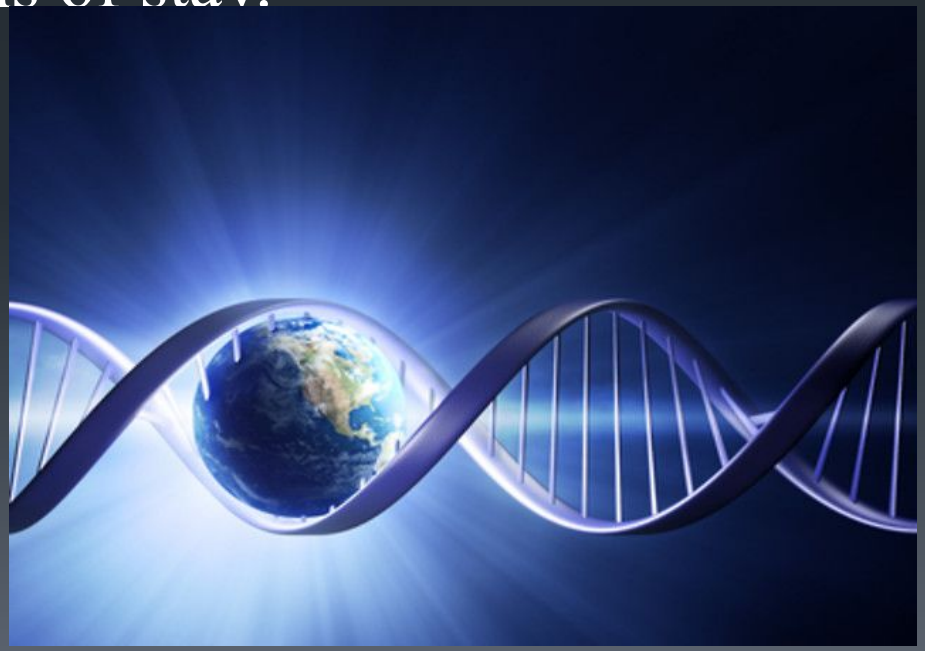
- 1.Vehicle rocket engines running on rocket fuel.

Engineers and it specialists.

- 1.Modern equipment with the use of it technologies

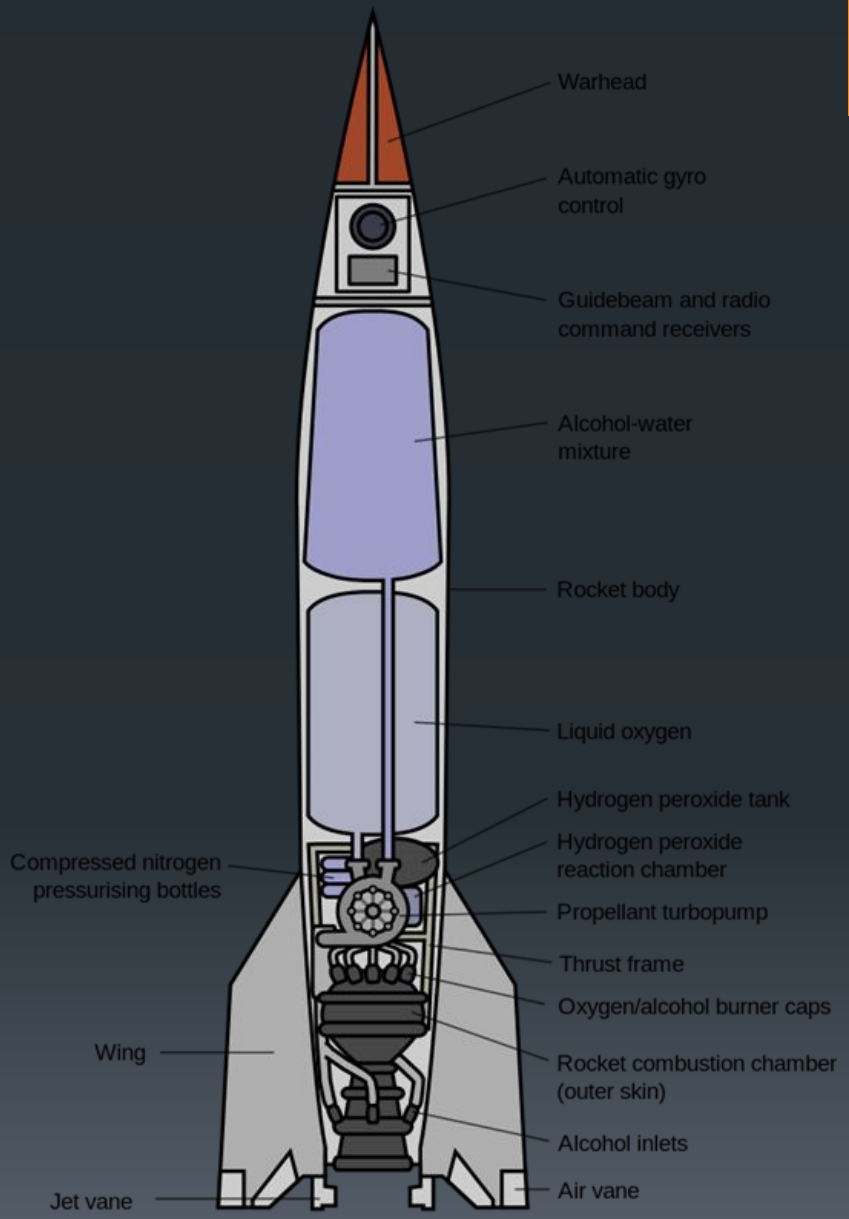
Physics and medicine:

- 1.The supply of oxygen.
- 2.Reserves of water.
- 3.The calculation of the food ration for 1 person.
- 4.Temperature maintenance.
- 5.Conditions for sleep, personal hygiene and comfortable conditions of stay.



- A particular danger is failure of the rocket engine, so we need to have on board a backup engine. In the normal functioning of the body a person needs per day to about 1000 g of oxygen, 2200 g of water (for drinking), about 500 g of dry food and about 1800 g of water for sanitary purposes — all together it is around 5.5 kg. This means that the annual supply of these substances for one astronaut will be about 2 tons. The weight of the life support system, based on

- The lack of gravity is the main reason why you have to fasten themselves with seat belts. To sleep standing up is not too nice. But even worse-to feel your body in constant wobbling. Unrecorded hands will certainly Wake up an already sensitive sleeping astronaut, because it is



Physics

- Space flight - hard to carry and responsible work. Well-qualified and physically trained specialists are capable of it. To this end, we have provided such an important detail as a comprehensive training of astronauts for space flight. We have designed a training center in which we will monitor the health and physical fitn ut.

AIM

- The training of astronauts to fly into space.

TASKS

- To build a training center.
- Equipment.
- Medical laboratory.
- Control over the physical condition of astronauts.

<u>Physicists Specialists:</u>

Borisov Alex

Sadovnikova Valeriya

Igor Volkov

<u>Assistants:</u>

Obronova Daria

Burmantova Alena

- Training for cosmonauts falls into three phases: General Space Training, Group Training, and Crew Training. General Space Training lasts about two years and consists of classes, survival training, and a final exam which determines whether a cosmonaut will be a test or research cosmonaut. The next year is devoted to Group Training where cosmonauts specialize in the Soyuz or ISS as well as professional skills. The final phases, the Crew Training phase, lasts a year and a half and is d
procedu
e.

- Training primarily takes place at the Yuri Gagarin Cosmonaut Training Center. The center facilities have full size mockups of all major Soviet and Russian spacecraft including the ISS. As with the ISS astronauts, cosmonauts train in the USA, Germany, Japan, and Canada for spec

Overall results.

After a few months of studying, designing, mass calculations, detailing the ship and its full equipment. Thanks to the work done, our team has achieved the creation of three products:

- 1. Flight calculations(time, speed, distance), important conditions directly related to the laws of physics.
- 2. Full equipment of the ship: honey equipment, zones of stay (zones of sleep, hygiene, food, rest, development, etc.), supplies of water, food, electricity and oxygen.
- 3. Training room for the training of astronauts to fly into space. Control of health status.


The End.
Thank you for attention.