**Script**

**COSMIC LIFE, OR HUMANS IN SPACE**

General Objective:

To learn the main information about the shape, size, and position of the Earth in the Solar System.

Operational Objectives:

* Identify the planets of the Solar System.
* Present the main evidence for the Earth's sphericity.
* Explain the meaning of concepts: star, planet, asteroid, meteor, meteorite, comet.
* Differentiate between a star and a planet, recognize types of celestial bodies in pictures.
* Understand the importance of space exploration.
* Understand the necessity of physical activity in space.
* List the characteristics of astronauts' diet.

Lesson Description:

To obtain the energy necessary for life, the body must be nourished. Nutrition involves many processes related to digestion, absorption, and utilization of food for structural needs, as a source of energy, and as a regulator of reactions occurring in the body's cells. Humans consume various nutrients in their diet, categorized into three groups based on their role in the body:

- Structural – proteins, minerals.

- Energetic – carbohydrates, fats.

- Regulatory – vitamins, minerals.

During the lesson, we will focus on the topic of human life in space. We will answer the question of how a person traveling in space must take care of their health. Will our daily diet also be suitable in space?

I. Introduction:

1. Solar System - nature documentary, excerpt.

 - Names of planets.

 - Important concepts: star, planet, moon, asteroid, comet, dwarf planet, galaxy.

2. Planets of the Solar System.

 - Mention of Nicolaus Copernicus.

II. Development:

1. Tardigrades - discussion of common, very small invertebrate animals, which embarked on their latest journey into space on June 3, 2021.

2. Space Rocket - building a vehicle from various cardboard, boxes, rolls, etc. - group work.

 - Before starting the rocket construction, students will familiarize themselves with topics they will research (Internet):

 - Who is an astronaut?

 - Space exploration.

 - Astronaut's suit.

 - How does a rocket work?

 - What do astronauts eat?

 - Physical activity in space.

 - What is gravity?

3. Rocket construction - based on personal ideas.

4. "Astronauts' Diet in Space" article.

 - Based on the article, children will list what astronauts can and cannot eat.

5. Based on the prepared list of products from point 4, children will develop graphic symbols for these products - individual work.

 - Comparison of the symbols made; are the symbols similar?

 - Which ones are similar?

III. Summary:

1. Do astronauts need to exercise daily? (Extraterrestrial fitness)

Independent Work:

1. Sketch the Solar System - mark rocky planets and gas planets. Come up with your own planet names. 😊

2. Read the article titled "Space Kitchen" and explain the meanings of terms:

 - Lyophilization,

 - Sterilization,

 - Vacuum packing,

 - Spices.

3. Develop a label template for products that are lyophilized and vacuum packed.