

STEM EDUCATION

Communal Educational

"Secondary Specialized Comprehensive School No9" Dnipro City Council

Lomakina Arina

Scientific supervisor: G. G. Povolotska

STEAM education is crucial to meet the needs of a changing world.

STEM is an approach to learning and development that integrates the areas of science, technology, engineering and mathematics. Through STEM, students develop key skills including: problem solving. STEM education is a teaching approach that combines science, technology, engineering and math. STEAM is designed to encourage discussions and problem-solving among students, developing both practical skills and appreciation for collaborations.

Our teachers get us to solve problems with STEM education, catch our attention. They inspire Scientific Curiosity in the younger generation.

If sensory materials are involved, we can touch and see 3D models related to what we are learning, our sensory memory is activated, which means we will easily retain the knowledge for a much longer time. If teamwork in small groups is promoted, we will be more involved in the whole learning process, which of course also helps us to acquire the knowledge.

Today space theme is very popular in the STEM education. Now space is everything that exists outside the Earth's atmosphere. Such a concept of outer space assumes its infinity.

Scientists conventionally divide the universe into several parts. So, there is space

* distant (interstellar space; intergalactic space)

* close (near-Earth outer space; interplanetary space)

I would like to describe some interesting facts about space and planets:

- Jupiter can hold a thousand planets the size of our Earth. But at the same time, the Sun is larger than this giant, although if we compare our main luminary with other stars in the universe, it will turn out to be incredibly tiny. For example, the Big Dog star is one and a half thousand times larger than the Sun.
- One day on Venus lasts 224 "Earth" days, that is, more than 7 months. Venus is also the only planet in the solar system that rotates counterclockwise
- You wouldn't be able to walk on Jupiter, Saturn, Uranus or Neptune because they don't have a solid surface.
- The highest mountain known to man is located on the asteroid Vesta. It is 22 km high. Asteroid Vesta is the second most massive body in the asteroid belt between the orbits of Mars and Jupiter.
- The universe is probably about 15 billion years old, but scientists' estimates vary.
- 98% of the mass of all objects in the Solar System is the mass of the Sun.

- The duration of a total lunar eclipse is 104 minutes, while a total solar eclipse lasts no more than 7.5 minutes.
- A black hole is the brightest object in the universe. Inside it, the force of gravity is so great that even light cannot escape from it. It would be logical if we did not see a black hole in the sky at all, but during the rotation of the hole, in addition to cosmic bodies, gas clouds are also absorbed, which begin to glow.
- The sunlight we see every day is about 30,000 years old. It was then that the energy that we receive from this celestial body was formed, because photons cover the path from the core of the Sun to the surface in exactly 30 thousand years. But after "liberation" they need only 8 minutes to reach the Earth.
- When we look at the most distant visible stars, we see them as they were 14 billion years ago. Light from them flies through space at a speed of 300,000 km / second and reaches us after many billions of years.

Unknown facts about the Earth

- Every minute the Earth flies 19,300 kilometers.
- More than 8,000 pieces of space debris orbit our planet.
- Scientists believe that every sixth star has Earth-like planets. This means that there may be about 33 billion habitable planets in our Galaxy alone.
- If the Earth revolved around the Sun in the opposite direction, the year would be two days shorter.
- The moon itself does not shine. The glow that we observe at night is the light of the Sun reflected by the Earth's satellite.

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At the moment, it is very topical to take part in various projects. Not so long ago a new project "New Horizons of STEM-education" started in our city. Our school joined this project, and students of the ninth grade created with their own hands two models dedicated to space, for which they received an award.

Pupils presented their work at the Global exhibition. Creating the device was part of a project for management team class "which is our homeroom." This is the first time the homeroom class has done a project like this.

Join us in inspiring the next generation of explorers!

Reference:

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