we the curious
Planetarium

Life in the Universe 2D/3D

KS2; duration: 30 minutes; presenter-led

Join us in the search for extra-terrestrial life! Fly to distant worlds, learn how astronomers search for planets, and debate whether humans are ready to meet aliens – how the show ends will depend on what you decide!

Key Words:

Aliens. Space. Earth. Planets. Exoplanets. Solar System. Galaxies. Life. Exploration.

Learning objectives. Students will:

Learn about the planets within our own Solar System.
Learn that radio is the best way currently known to send signals over great distances in short amounts of time and that scientists use radio to send messages into space.
Learn what factors make a planet a likely candidate for life and why planet Earth is an ideal place for life to develop and thrive.
Consider examples of different environments and how a life form might adapt to survive in a particular environment.
Consider the ethical implications of making first contact with alien life.
Feel empowered to decide how humanity will face change and tackle adversity in the future.
Develop a deeper understanding of the size and scale of our Solar System and our galaxy – the Milky Way.
Enjoy the sensation of flying through space.
Be inspired by the immersive setting of the Planetarium to continue their learning of astronomy and space.

Content:

Choose a destination in the Solar System from a selection of three to explore the potential for alien life.
Discover how far into space our radio signals have travelled in the past century.
Discover some of the factors that make Earth such an ideal place for life to develop.
Discover how exoplanets - planets orbiting distant stars - are discovered.
Create a brand-new planet by deciding how big it is and how long it takes to orbit its star, view the new planet on the Planetarium dome, and consider whether it might be a suitable place for life to develop.
Consider how forms of life adapt to suit their surroundings on Earth and imagine what kind of alien life might exist on a water world, a high gravity world, a gas giant, and a ring world.
Observe some hypothetical examples of alien life.
Imagine that aliens have visited a future Earth and offered to help us solve climate change. Consider the implications of accepting their help and decide whether humanity says yes or no.
There are four different endings to the show, depending on what the audience decide. Our computer will decide whether there is a positive or negative outcome to that decision.

Curriculum Links:

Year 3 & 4: Working scientifically
Making systematic and careful observations
Using straightforward scientific evidence to answer questions or to support their findings
Year 3: Light
Recognise that shadows are formed when the light from a light source is blocked by an opaque object
Year 4: Living things and their habitats
Recognise that environments can change and that this can sometimes pose dangers to living things
Year 5: Earth and space

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Describe the movement of the Earth and other planets relative to the Sun in the Solar System
Describe the Sun, Earth, and moon as approximately spherical bodies
Learn that the sun is a star at the centre of our solar system and that it has 8 planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune

Potential Hazards and accessibility

There are no specific hazards associated with this show.

Related activities

Exhibits *Ground floor exhibits under the theme "Is there another me in the Universe?"*
Workshop *Earth, Sun and Moon, KS2 Destination Space*