

GLOW 

SPACE TRAVELERS

LESSON PLANET PO 5 - 8, VO 1 - 2

Lesson Plan for Teachers: Primary Education Group 1 - 4

GLOW 2024

Introduction: Each year, Cultuurstation supports the organization of GLOW with a special project for schools: GLOW - Next Generation. During the GLOW light festival, light art installations by artists and designers from various countries are showcased. Every year, GLOW adopts a new theme, making the festival a unique “exhibition” each time.

This year, the theme of GLOW Eindhoven is “The Stream.” This theme represents the flow of light, ideas, and stories that move through the city. It emphasizes how everything and everyone is connected, like a river that flows through the city and connects everything. During GLOW, you can see various light artworks that illustrate how this flow brings us all together. “The Stream” symbolizes the movement and energy of people and other beings and highlights our natural power to move and evolve. This theme is not only about water or electricity but also has a cosmic significance. Currents in space and on Earth show how we are connected to each other and to the universe.

The theme of the children’s project “Space Travelers” challenges students to think about planets, our own planet, and the different forms and beings that move through our universe.

Want to know more about Glow 2024?



[GLOW 2023 Ik zie ik zie-hugo vrijdag](#)



SPACE TRAVELERS

All primary schools and the first two years of secondary education are invited to participate in GLOW. The lessons begin with a story about a group of students who call themselves “The Space Travelers.” They embark on a journey through space, searching for the most beautiful planet. Along the way, they encounter aliens and spaceships and see various planets.

Then they see Earth and discover how beautiful and fragile it actually is, much like how astronauts describe the “overview effect” after a journey through space. This effect is an experience that astronauts have when they see Earth from space and realize how fragile and interconnected everything on our planet is. This perspective helps students understand the importance of the environment, international cooperation, and protecting the Earth.

The story describes what every visitor will experience during GLOW at the final artwork in the Rabobank, where everyone becomes a space traveler.



Educational Objectives and Learning Activities:

Concept: “The Earth Overview”

“The Earth Overview” is a concept that shows students how the Earth can be viewed as a whole, often from the perspective of space. This idea is inspired by the “Overview Effect,” an experience that astronauts have when they see Earth from space and realize how fragile and interconnected everything on our planet is. This way of looking helps students understand the importance of the environment, international cooperation, and protecting the Earth.

Goals:

Civic Education for Primary Schools:

- **Identity Formation:** Students learn to recognize and appreciate their own role in the world and understand how they contribute to the larger whole.
- **Society and Diversity:** Students develop an awareness of the interconnectedness of people worldwide and how cooperation is crucial for preserving our planet.
- **Sustainability:** Students understand the importance of the environment and learn to think about their responsibility in protecting the Earth.

Civic Education for Secondary Schools:

- **Democratic Participation:** Students reflect on their role in a pluralistic society and develop skills to actively contribute to the community.
- **Social Responsibility:** Students understand the need for international cooperation and the role of sustainability in maintaining a healthy planet for future generations.
- **Identity Development:** Students explore their own identity and how it relates to global issues such as the environment and sustainability.

Technology:

- **Technical Skills:** Students learn how to connect an LED light to a breadboard and learn what a breadboard is.

Visual Arts:

- **Creative Skills:** Students develop visual skills by using various techniques such as watercolor and pastel chalk.
- **Visual Communication:** Students learn how to convey a message about interconnectedness and sustainability using visual means.

Project Description:

Students create a colorful planet using mixed media techniques to create texture and depth. They also use LED lighting to make the planet glow. These artworks will be displayed during GLOW in the Rabobank Eindhoven, along with 3,000 other planets, creating a fascinating universe.

Lesson Structure:

- **Lesson Duration:** Two lessons of approximately 60 minutes each.
- **Teaching Method:** Classroom instruction and class activities.
- **Subject Area:** Visual Arts, integrated with civic education.

As an attachment, you received a PowerPoint divided into two lessons. You will go through the PowerPoint with the students. The questions posed in it provide you, as a teacher, with guidance to walk through the lesson. The lesson is built from process-oriented didactics and is supported by the didactic model for visual arts and aligns with the way of working from the Cultural Drawer and the development of cultural abilities. The questions are structured from the various phases of cultural abilities, as developed from the Cultural Drawer. There is always room to ask additional questions or respond to questions from the students. Use your own knowledge of the group to determine whether some parts need extra or less attention.

Submitting the Artwork:

The materials provided by GLOW to make the planets are packed in paper bags. Each bag contains enough materials for 10 planets. Once the students have made the planets and the final result is evaluated, they should be placed back in the paper bags in sets of 10.

On **November 4th and 5th**, the planets can be submitted between 9:00 AM and 7:00 PM at the Rabobank in Eindhoven. You will receive the exact location by email.

Lesson 1: Wondering / Orientation and Exploration:

Lesson Goal:

Civic Education Goals for Primary and Secondary Education: Students develop an awareness of their place in the universe and how everything is interconnected. They learn about the importance of cooperation and responsibility for the Earth.

Visual Arts: Students explore the appearance of planets and use different techniques to represent this visually.

Learning Activities:

- Explore the universe and the concept of “The Earth Overview.”
- Gain insight into the interconnectedness of everything on Earth.
- Diverge through mind maps and sketches.
- Create a planet on a flat surface using watercolor, pastel chalk, and colored pencils, giving the impression of a spherical shape.

How to Proceed:

Follow the slides in the PowerPoint, which explain step by step how the planets are made. In addition, information is provided about the overview effect, planets, art, and technology. Contemplative questions are formulated for each topic. Students cannot give wrong answers here. As a teacher, you have the freedom to come up with additional questions.

Material:

- White A4 drawing paper
- Pencil
- Scissors
- Stapler
- Paper plate (GLOW package)
- Watercolor or aquarelle paint + brushes

Discussion:

Reflect with the students on how they translated their ideas into images and how this relates to the larger whole of Earth and the universe.

Would you like extra help formulating reflective questions? Click on the following link, where the cultural abilities are outlined as a handout, and questions are formulated that you can ask when reflecting on artistic work.



Lesson 2: Execution and Evaluation

Lesson Goal:

Civic Education Goals for Primary and Secondary Education: Students deepen their understanding of cooperation and responsibility by technically completing their artwork and reflecting on the process.

Visual Arts: Students connect their visual creations with technical elements (LED lighting) and evaluate their work.

Learning Activities:

- Connect the flat base with the tower-like protrusion, as explained in the PowerPoint.
- Assemble the LED lighting so that it illuminates.
- Reflect on the creative process and the result.

Hoe te werk?

Volg de slides in de PowerPoint, waarin beschouwingsvragen zijn geformuleerd. De leerlingen kunnen hierbij geen foute antwoorden geven. Als leerkracht heb je de vrijheid om extra vragen te bedenken.

Material:

- Paper plate in cone shape and planet (from lesson 1)
- Scissors
- Glue
- Pastel chalk and (colored) pencils
- Glue gun
- LED, breadboard, cable (GLOW package)

Presentation and Evaluation:

Discussion:

Students present their work during GLOW and evaluate and reflect on it in the classroom. You can use the reflective questions provided in the PowerPoint for this.

PLANET



Lesson 1: The students start with white A4 drawing paper, a pencil, scissors, a stapler, and paper plates.



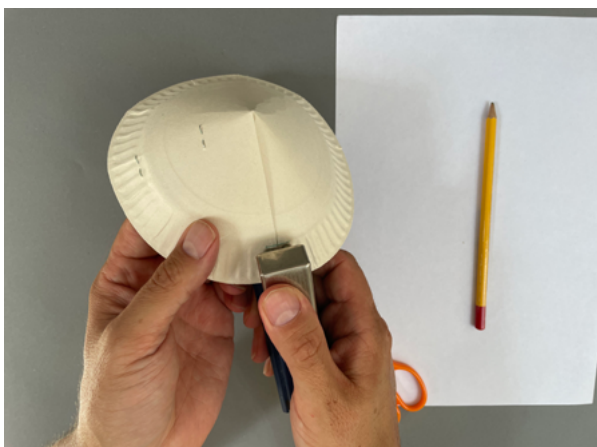
Let the students choose a plate.



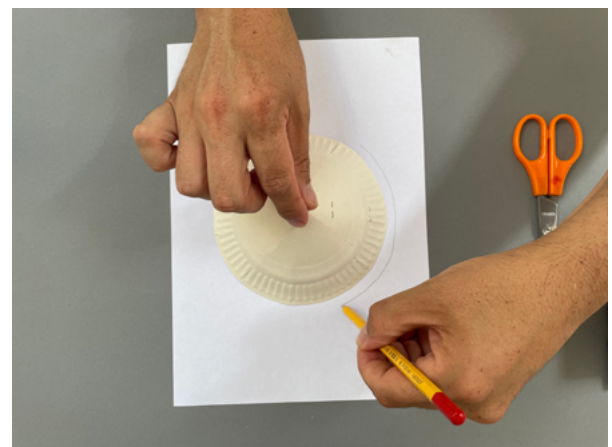
Determine the center of the plate and draw a line to the edge.



Cut the plate to the center.



Fold a cone from the plate and staple the ends together.



Place the cone on the white A4 drawing paper and draw a line around the cone, half a centimeter larger than the diameter of the cone. **Tip: let the students create multiple planets so they can choose the best one.**

PLANET



Prepare the watercolor or aquarelle paint, water, and brushes.



Color the planet with various bright colors of paint. Do not use too much water.



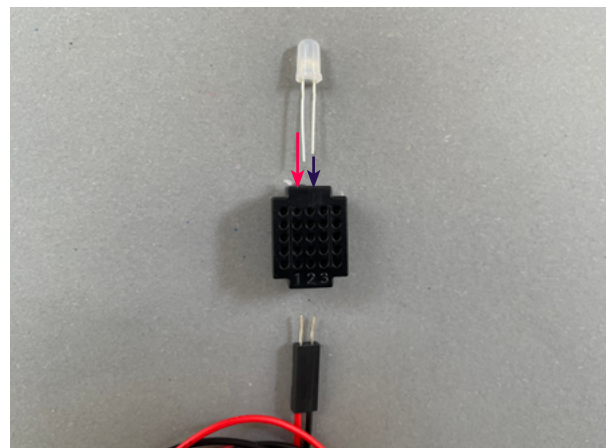
Use pastel chalk to give the planet more shape. The parts with chalk are less light-permeable, which gives a nice effect when the planet lights up.



Add more detail to the planet with colored pencils.

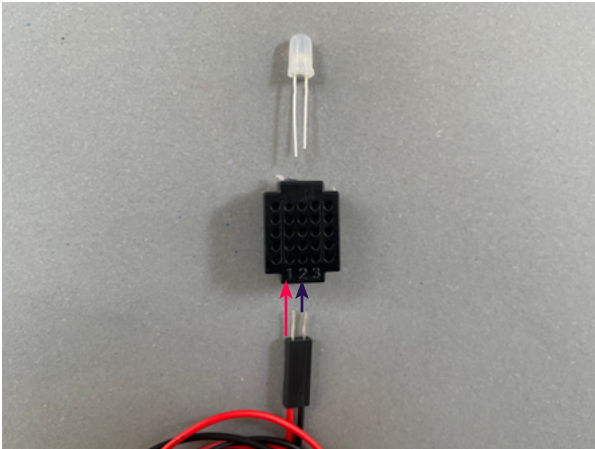


Cut out the best planet. Test which planet gives the best light with the LED if necessary.

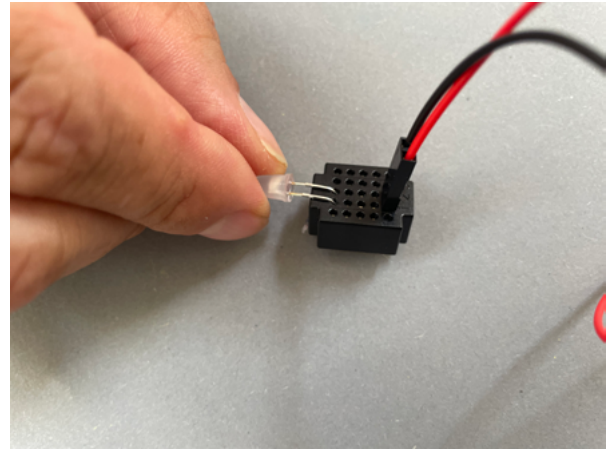


Insert the longest pin of the LED light into the top of the row where 1 is marked. The shorter pin goes to the right in the row where 2 is marked.

PLANET



Insert the plug into the bottom of the breadboard. The red cable goes in the row where 1 is marked, and the black cable in the row where 2 is marked.



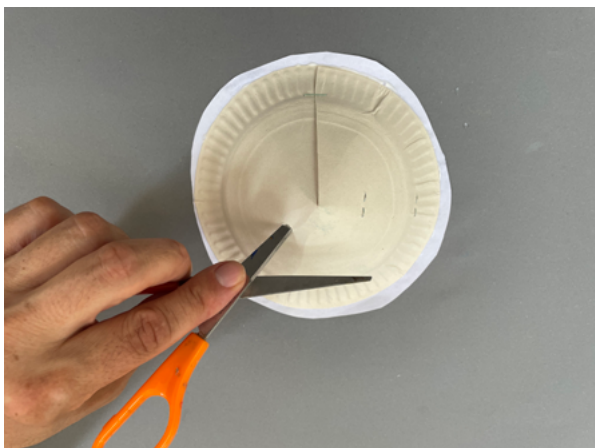
Bend the LED light 90 degrees. Test if the light turns on.



Attach the planet to the cone. If the planet is not completely round, you can carefully reshape it.



Press the two parts together to make sure they are securely attached.

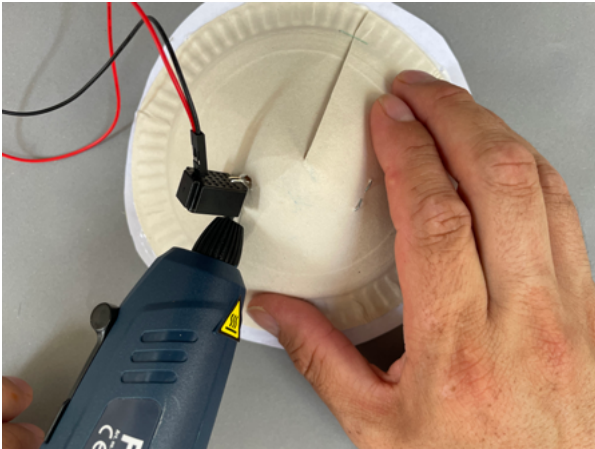


Poke a hole in the cone with the tip of a pair of scissors, about 1.5 cm below the tip.

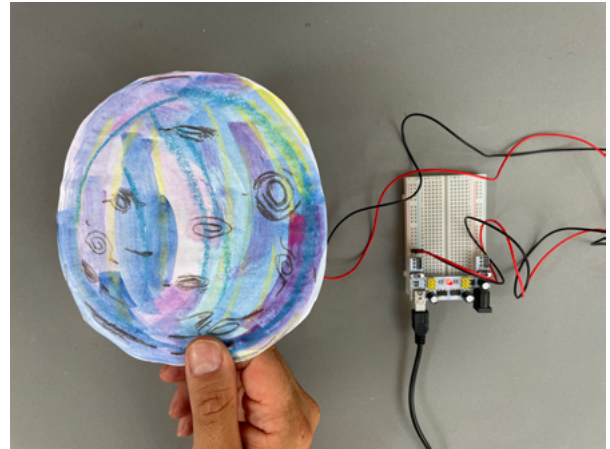


The hole should be just large enough to insert the LED light through it.

PLANEET



Attach the breadboard with a drop of hot glue. Help the students when working with the glue gun.



Test if the planet works by inserting it into the larger breadboard. The red cable must align with the red stripe.

Information on Process-Oriented Didactics

In process-oriented didactics, children take charge of their own development. It is the task of adults to create an environment that makes this development possible. Not an environment where it is predetermined what and how you should learn, but one where openness and freedom prevail to discover that for yourself, based on everyone's own (im)possibilities.

In this lesson, we focus on process-oriented didactics for developing artistic creativity in students. Discovering, experimenting, and trying out are important components. The focus is not on the final product but on the process. For many teachers, process-oriented didactics is not self-evident; their role shifts from leader to guide.

We guide teachers in organizing learning processes so that children have the opportunity to further develop and strengthen their creativity, innovative capacity, and entrepreneurship. Teachers themselves can learn and experience how to stimulate creativity: offering inspiring examples, showing possibilities, and asking challenging questions that make one think.

We work in the four steps of a creative process: amaze - investigate - shape - present. We have linked four key questions to a creative design, which essentially describes a process-oriented didactics.

Lesson 1

- What should I do to amaze children with the topic we want to address?
- What should I do to enable children to investigate the raised questions?

Lesson 2

- What should I do to give children the opportunity to shape the results of their research into a possible answer to the posed questions?
- What should I do to allow children to engage in dialogue about the solutions found?
The phases of process-oriented work are integrated into this lesson series and align with the way of working from the Cultural Drawer learning lines.

The structure of process-oriented didactics is as follows:

1. Orientation / wonder
2. Research
3. Execution
4. Evaluation

ATTACHMENT

If you are curious about the method from the Cultural Drawer, click on the active link.

<https://www.cultuurstation.nl/kenniscentrum/kennis-delen/culturele-ladekast/>

Visual education aims to make students 'visual literate.' The goal is for them to understand visual communication and also learn to use it. Students should become aware of the role they themselves (can) play, so they become well-informed, active, and creative participants in our ever-changing, but always visually rich culture.

The starting point for this learning line is that students become familiar with their own and others' visual actions. In this way, dealing with images and visual language becomes a part of themselves, giving them the ability to give meaning to the world around them. It is not only about developing visual understanding, learning to think about and in images, but also about developing their own visual ability.

The cultural abilities are discovered in the structure of the lesson. The questions and assignments formulated in the PowerPoint provide guidance for developing cultural abilities. All abilities are integrated into the assignment. A brief explanation of each ability:

Receptive Ability In receptive ability, the student learns to open up to cultural expressions. The focus is on "perceiving" and "experiencing": feeling, listening, watching, experiencing, remembering, recognizing, moving, and discovering. The emphasis is on self-perception.

Creative Ability In creative ability, the student thinks, creates, and produces creatively. The emphasis is on "making/shaping" and on self-imagery.

Reflective Ability In reflective ability, the student learns to analyze, interpret, and appreciate cultural expressions of themselves and others. It involves giving meaning, naming, telling, formulating, classifying, and judging. The student is encouraged to think about their choices, the expressiveness of a work, or the materials and techniques used. Reflection is both on the product and the working process. The emphasis is on self-conceptualization.

Analytical Ability In analytical ability, the student learns to search for, absorb, and apply information about cultural expressions in their own work. Connections can be made with other subjects, other events, etc. It involves dissecting, explaining, evaluating, interpreting, understanding, and researching. The student can better identify their own position and thus gain more self-knowledge. The emphasis is on "knowing" and self-analysis.