



Grades  
10-12

# STEMpowered Odyssey 2026

## Tuesday Overview

Today, campers explored chemistry, cryptography and the engineering design process. In **“Explore Glow-in-Dark Water”** campers observed fluorescence in tonic water, then they used bleach to create a reduction-oxidation reaction removing the fluorescent properties of their water. In **“Trek Across the Stars”**, campers used ThinkerCAD software to design their own survival device to 3D print. **“Kryptography”** shows campers the applied process of encryption through coding applications. Additionally, campers started their showcase project **“The Odyssey Saga”**, solving a STEM problem of their choice in a team pitch.

## Tell me what you learned!

Here are a few questions to enhance learning:

- What are the components of a Red-Ox reaction?
- How can encryption be used?
- What is the engineering design process, and how is it used?

## Next Steps!

[LINK HERE](#)



What makes neon signs glow?

# STEMpowered Odyssey 2026

## Wednesday Overview

Today, campers explored concepts in coding and microbiology while continuing their project pitch **"The Odyssey Saga"**. In **"High School Musical"**, campers used Arduino software and hardware to make their own music boxes. Through **"Blooming Bacteria"**, campers toured E7 and collected samples of 'clean' surfaces. Later in the week, campers will see how microorganisms are cultured.

## Tell me what you learned!

Here are a few questions to enhance learning:

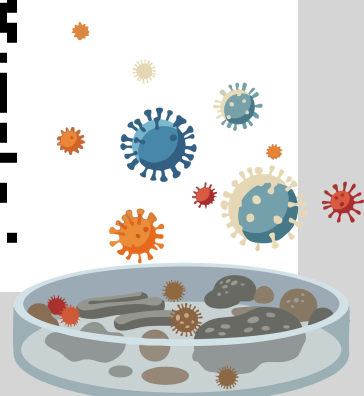
- Why did we have to incubate our bacteria samples?
- How would you add on to your Arduino sound box?

## Next Steps!

[LINK HERE](#)



**All about  
Arduinos!**



# STEMpowered Odyssey 2026

## Thursday Overview

Today, campers explored concepts in biology and machine learning while continuing their project pitch **"The Odyssey Saga"**. In **"Biased Robots"**, created their own machine learning model to observe how AI can carry biases. Through **"Mystery Unsolved"**, campers solved a mystery using gel electrophoresis and bioinformatics to apply forensic techniques to find mystery macromolecules.

## Tell me what you learned!

Here are a few questions to enhance learning:

- In what ways can AI show biases and how do we solve this issue?
- Why is AlphaFold 3 such a breakthrough in scientific research?

## Next Steps!

[LINK HERE](#)



Learn  
about  
luminol!



# STEMpowered Odyssey 2026

## Friday Overview

Today, campers explored Python while finishing up their project pitch **“The Odyssey Saga”**. In **“Turtle Python Art”** campers used the turtle application in Python, using coding to make art pieces. They also presented their pitch projects, showcasing their design prototypes!

## Tell me what you learned!

Here are a few questions to enhance learning:

- What other applications would you use Python for in a creative sense?
- Reflecting on your pitch project, what element would you add to improve your prototype?

## Next Steps!

[LINK HERE](#)



**Generative  
art with  
Python!**

