2015-2016

OUT OF THIS WORLD!

THIRD GRADE GIFTED UNIT ON THE STUDY OF THE SOLAR SYSTEM

# Enduring understanding

Students will understand the Sun’s composition and classification as a star. Students will be able to identify the 8 planets of the Solar System, and classify Pluto as a dwarf planet. Students will be able to demonstrate the orbit and relative positions and distance of each planet around the Sun. Students will become familiar with the orbit of the Moon around the Earth. Students will demonstrate understanding of the characteristics of the planets in our Solar System.

## 2. ESSENTIAL QUESTIONS

### A. How would you explain the Earth’s location to somebody who was unfamiliar with our Solar System traveling here from another planet?

### B. What is the Sun made of?

### C. Name the eight planets of our Solar System. What is Pluto?

### D. Describe the orbit of the planets around the Sun. Of the Moon around the Earth.

# 3. Performance tasks

Students will use various search engines to complete charts and a scavenger hunt of the Solar System. Students will create a PowToon or StoryBird on the Solar System. The product will be assessed with a Rubric. Students will complete a graphic organizer on the characteristics of the Solar System, following instruction on reading for information and note taking. Students will submit a proposal for an independent study on the Solar System (planet, dwarf planet, comet, moon, etc.). Students will conduct research on their topic, create a visual product, and prepare a presentation (including technology) to orally present to the class. Independent Studies will be scored with a rubric. Throughout the unit, students will complete various challenges/small group activities.

##  Weeks One and Two: Introduce the Solar System as a whole. Use Padlet to survey “What I Think I Know” and “What I Want to Know”. Research the solar system using search engines (Discus, KidRex, etc.) to complete two charts. Take students on a scavenger hunt to answer questions about the Solar System.

## Week Three: Using previously gathered information; create a PowToon or StoryBird on the Solar System. Students will share their presentations, which will be scored with the included rubric.

## Week Four: Complete the graphic organizer on the Solar System. Teach students about reading for information, using highlighters, and taking notes on graphic organizers and notecards. Teach students how to set up a simple bibliography.

## Weeks Five and Six: Students will submit a proposal for completing an independent project on the solar system. Once approved by the teacher, students will research their topics taking notes on notecards, organizing information in graphic organizers, and recording sources on a bibliography. Each project should include a product, which can be chosen from the included list of suggestion.

## Week Seven: Instruct students on presentation guidelines. Share rubric for scoring and allow students the opportunity to practice presentations with you. Other students can be making any finishing touches on projects.

## Week Eight: Students will present their independent study projects on the Solar System including: a) research, b) product, c) technology presentation.

## \*\*Include challenges/small group activities as desired. All activities stretch creative thinking, so they can be done during that time of your day.

#  assessment

## Students will be formatively assessed throughout this unit by teacher observations, questioning, and discussions. Students will complete peer evaluations following challenges/small group activities. The teacher will conduct summative assessments through Kahoot!, rubrics, and product evaluations.

# Resources

## kidsastronomy.com

## usno.navy.mil

## <http://quest.nasa.gov/index.html>

## www://space.ipl.nasa.gov/

## <http://www.youtube.com>

## streamingdiscoveryeducation.com

## Kahoot!

## Padlet

## PowToon

## StoryBird

## Discus

## KidRex