

**Objective:** NCSCOS 5.04

**Unit:** 6- Sun, Earth, Moon System

**Technology Objective:** Gaming// Programming

**Essential question:** Explain what makes the moon/ sun appear to “go in” during the day/ night, Explain what makes the moon appear to glow, Describe what you think it must have been like for the first man to walk on the moon, Determine which you think space explorers can do without- the space rover or the space needle.

**PD#:**

**Materials:** Laptop cart, Comic strips, Internet, Space Astronomy supplement, evaluation forms, rubric

**Duration:** 3 days

## DAY 1

1

**Activating Activity:** K-W-L chart, What are some common Myths/ Knowledge about space? (*ENGAGE the students to draw on their prior knowledge and connection of the world*)

**Guided Practice:** Show examples of Comic Strips of space myths/ knowledge. Animate those comic strips with an Alice world (*this will help scientifically EXPLAIN the sun, moon and earth to fit the knowledge the students already know*).

**Independent Activity:** students will draw/ map out their comic strip of space myths/ knowledge (*they should EXPLORE the concept as they believe it true- according to their personal experiences and phenomena*). With the completed comic strip, students will create an Alice world to compliment/ complete their myth/ knowledge.

**Modification:** students who are less artistic can write out each frame of what they would like to see happen with their comic strip. Students who have an extended vision can do more than one comic strip.

**Summary:** Our solar system has many activities that occur constantly throughout the day and night. Some of those things are fact, others fiction. (*ELABORATE on unique circumstances and give the students enough information and ideas for them to research the concept on their own*).

**Assessment:** Re-visit the K-W-L chart and ask the students to take down anything that maybe a myth and not factual knowledge (*EVALUATE the students who have already picked up on the concept and those that may need more intense clarification*).

**Homework:** students are to complete their comic strips and add extra/ additional information that they may see happen tonight or hear from their parents.

## DAY 2

2

**Activating Activity:** Re-visit the K-W-L chart, remind students of what is fact and what they determined was a myth. Give the students an opportunity to add any additional information that they thought of overnight or may have researched and want to learn/ share with the class (ENGAGE).

**Guided Practice:** with the examples of comic strips that students have created, help them create an Alice world (EXPLAIN how the program works and how to build a basic startup).

**Independent Activity:** students will work on their Alice worlds, using their comic strips as the concrete example for their desired outcome (EXPLORE the program and their concept).

**Modification:** students who are less technology efficient can work with a partner. Students who feel they have more advanced knowledge of Alice and computers at home can do an extended world.

**Summary:** the sun, moon, and earth all work together to create and keep a balance of the universe (ELABORATE on their dependency on one another).

**Assessment:** using their comic strips, make sure that students are on task and are following their blueprint/ comic strip for their Alice world (EVALUATE).

**Homework:** students are allowed to re-make a comic strip or work on their Alice world at home

**Activating Activity:** Re-visit K-W-L chart to find out what students have learned about the concept (ENGAGE)

**Guided Practice:** presentations/ play/ show student comic strips and Alice worlds (students EXPLAIN their work)

**Independent Activity:** students will be able to vote on which student created the best world for the concept and how each world can be made better/ modified (ELABORATE on the successfulness of the concept and world)

**Modification:** partners show their individual ideas, students not completed can show the direction of which they want to complete their world. Afterwards, they are encouraged to complete the assignment independently (EXPLORE).

**Summary:** discuss the students creativity, the concept, the interaction of the sun, moon, earth and space exploration

**Assessment:** short written quiz on concept, sun, moon, earth and Alice program (EVALUATE)

**Homework:** students will journal the concept learned and how they can better use the Alice program for future projects and assignments. Students can also journal any complications they encountered that were with the program, their comic strip or their world