

Lunar MISSION: MOON PHASES & BEYOND!

Your Lunar Mission Challenge

You are charged with completing this learning mission focused on the phases of the moon. A flight plan has been filed. While the plan is flexible, each task must be completed in order to consider the mission a success. At the end of this mission, you will have documentation proving your mastery and completion. This documentation will be the Mission Report you create and submit.

- You will complete at least one task from each color-coded category shown on the HyperDoc above
- You and your partner will document your learning by creating a collaborative report. Your choices of platform for reporting are: Google Doc or Google Slides. One person will create it and share it with a partner. Both will contribute to complete the Mission.
- Feel free to add a table, images, Google Drawings, etc. to better illustrate your report and make it eye appealing.
- Use the provided Task Instructions, Checklists, and Rubric to guide your work.



Standards

SPI 0607.6.3 Distinguish among a day, lunar cycle and year based on the movements of the earth, sun, and moon.

I Can:

I can explain the processes of rotation and revolution of the Earth and Moon around the Sun.

- Rotation (Period of Rotation/year)
- Revolution (Period of Revolution/day)
- Orbit
- Lunar Cycle(Origination of the Month/Calendar)

Lunar MISSION: MOON PHASES & BEYOND



BIRTHDAY MOON
WHICH MOON PHASE
WILL BE (OR WAS)
VISIBLE IN THE NIGHT
SKY ON YOUR BIRTHDAY
IN 2017? ADD THIS TO
YOUR MISSION REPORT.



MOON PHASES SONG
LISTEN TO THE SONG
AND THEN CREATE YOUR
OWN PARODY ABOUT THE
MOON TO THE TUNE OF
A FAMILIAR SONG. ADD
YOUR NEW SONG TO YOUR
MISSION REPORT. NEED
ANOTHER EXAMPLE?
CHECK OUT [THIS ONE](#).



WHAT'S IN A NAME?
FIND THE NAME OF THE
FULL MOON THAT
OCCURS DURING YOUR
BIRTHDAY MONTH. HOW
DID IT GET THIS NAME?
COMPARE AND
CONTRAST THIS WITH
YOUR HALF BIRTHDAY
MONTH IN YOUR
MISSION REPORT.



MATCHING Game
PLAY THE GAME AT
LEAST THREE TIMES AND
RECORD YOUR BEST TIME
AND FEWEST CARD FLIPS
IN YOUR MISSION
REPORT.



**FEBRUARY 2017 MOON
PHASES AND EVENTS**
WHICH THREE EVENTS
THIS MONTH WOULD YOU
MOST RECOMMEND FOR
SOMEONE TO VIEW IN
THE NIGHT SKY? STATE
THE NAME OF THE
EVENT, WHEN IT OCCURS,
AND WHY YOU WOULD
RECOMMEND IT IN YOUR
MISSION REPORT.



**MOON PHASES DRAG AND
DROP**
USING THE LINK AT THE
TOP FOR HELP, DRAG AND
DROP THE MOON PHASES
AND PICTURES TO
COMPLETE THE
DIAGRAM. IN YOUR
GOOGLE REPORT, DEFINE
EACH MOON PHASE IN
YOUR OWN WORDS AND
ADD A SCREENSHOT OF
YOUR COMPLETED
DIAGRAM.

**start
here!**



MOONLIGHT MADNESS
READ THE INFORMATION
ON THIS PAGE. THEN,
USE THE DROP-DOWN
MENUS UNDER EACH
PICTURE TO NAME THE
MOON PHASES. PUT
THEM IN ORDER TO
COMPLETE THE CHART.
CHECK YOUR ANSWERS
UNTIL THEY ARE
CORRECT. TAKE A
SCREENSHOT OF YOUR
COMPLETED CHART AND
INSERT IT INTO YOUR
MISSION REPORT.



VIDEO VOCABULARY
WATCH THIS VIDEO AND
CREATE A VOCABULARY
LIST - BE SURE TO
INCLUDE THE ONES IN
THE I CAN STATEMENT
ABOVE IN ADDITION TO
THOSE OUTLINED IN THE
VIDEO. ADD YOUR LIST OF
TERMS AND
DEFINITIONS TO YOUR
MISSION REPORT. (YOU
MAY EVEN WANT TO
CREATE A QUIZ USING A
GOOGLE FORM AND LINK
THE FORM IN YOUR
MISSION REPORT!)



THE MOON HAIKU
READ AT LEAST 5 HAIKUS
ON THIS PAGE. THEN,
MAKE TWO OF YOUR
OWN ABOUT THE MOON.
FOLLOW THE 5-7-5
SYLLABLE HAIKU
FORMAT. ADD YOUR
HAIKUS TO YOUR
MISSION REPORT.



**MOON PHASE
CALCULATOR**
CHOOSE FIVE NATIONAL
HOLIDAYS AND THE
MOON PHASE FOR EACH.
INCLUDE THIS
INFORMATION IN YOUR
GOOGLE REPORT.



**Lunar CYCLE
CHALLENGE**
WORK YOUR WAY
THROUGH THE THREE
LEVELS OF THIS GAME.
HOW DID LOOKING AT
THE SURROUNDING
MOON PHASES HELP
YOU? WHAT PATTERNS
DO YOU NOTICE? POST
YOUR ANSWER IN YOUR
GOOGLE REPORT.



**create your own
calendar**
CLICK ON THE CALENDAR
IMAGE ABOVE TO
NAVIGATE TO THE
ACTIVITY INSTRUCTIONS.
FOLLOW THE
INSTRUCTIONS AND POST
THE REQUIRED
INFORMATION IN YOUR
MISSION REPORT.

Lunar Mission Flight Plan

Task 1



1. Discuss with your partner and decide how you will report your learning. Will you use a Google Doc or a set of Google Slides as your Mission Report?
2. One member of your team should create a Doc or Slide.
3. Share it so that anybody in WCS can view.
4. Now share it with your partner, providing editing rights and sending him/her an email with the link.
5. Ask your partner to check email and open your shared report.

Task 2



The first and most important part is to post a link to your Mission Report to our class Padlet.

1. Go to the blue Share button in the top right corner and Get shareable link.
2. Open the Padlet for your class and double-click to get a sticky note.
 - Academic 1
 - Academic 2
 - Academic 3
 - Academic 4
3. Enter your team names as the Title.
4. Paste the link in the space where it asks you to Write something. (Left-click and choose paste)
5. Begin your Mission Report by adding your name and the name of your partner. Feel free to add color to your report, a table, and a photo of you and your partner if you would like.

Task 3



1. Go to the yellow Start square and begin the mission.
 2. To create a partial screenshot with a Chromebook, click:
-
3. Use your cursor to draw around the portion of the screen you want to capture in an image.
 4. Your image will be automatically saved to your Google Drive.
 5. To add the image to your Mission Report, click on **Insert** and **Image**. When you get a pop-up box, choose **Google Drive**. Then, choose **Recent**. Your image should be at the top of the list; click on it and choose **Select**. Click on the image to select it and move it or resize it. Resize it by clicking on a corner and dragging it to the desired size.

Tasks 4-7



1. Choose one of the other options – dark grey, dark blue, light grey, light blue. Follow the

instructions to complete at least one task in each color category.

2. Be sure to add your documentation and creations and/or links to your Mission Report!
3. Use the checklist and rubric below to guide you toward mission success.
4. If time permits, feel free to continue on to a second option in each color-coded category and add it to your Mission Report.

Task 8



1. Double-check your work to make certain you have successfully completed your mission plan. (Use the checklist and rubric to perform a self-evaluation!)
2. Post a link to your Mission Report to our class Padlet.

Lunar Mission Report Checklist/Rubric

Criterion	☒	Score
Mission Report		
Mission Report (Google Doc or Slides) is shared to give partner editing permission		
Shared so that Anyone at Williamson County Schools who has the link can view		
Mission Report includes names of team members		
Limited errors in punctuation, capitalization, and spelling		
Demonstrates depth of knowledge and learning		
Work is collaborative and unique		
Representative of grade level expectations		
Efficient use of time allotted		
Submitted on time		
Is attractive, pleasing to the eye, simple, and easy to read and understand		
Moonlight Madness Task		
Chart phases are labeled correctly		

Chart phases are in correct order		
Screenshot of correct chart is included in Mission Report		
Chart is labeled or identified in Mission Report as: Moonlight Madness Chart		
Dark Grey – Creativity Options		
Moon Phases Song Option		
Is an original parody		
Is factual and accurate		
Is entertaining and appropriate		
Clearly identifies the tune it parodies		
Song (or a link to it shared and) is posted in Mission Report		
Video Vocabulary Option		
Includes terms from I Can Statement		
Includes comprehensive list from video		
Includes clearly-worded, easily-understood definition		
Terms are spelled correctly		
Is presented in a unique and innovative manner (illustrations, Google Form, etc.)		
List (or a link to it shared and) is posted in Mission Report		
The Moon Haiku Option		
There are two Haikus		
5-7-5 Format is followed in Haikus		
Both Haikus are unique and original		

Both are factual and accurate		
Both are grade-level appropriate		
Both (or a link to them are shared and) is posted in Mission Report		
Dark Blue – Reading Reporting Options		
What's In A Name Option		
Birthday month is identified clearly in Mission Report		
Full moon named is accurate for birthday month		
Origin of name is identified		
Comparison to half-birthday is clearly related		
Information is posted in Mission Report		
February 2017 Moon Phases and Events Option		
Three events are stated clearly		
Time of occurrence is stated clearly		
Recommendation is clearly and completely conveyed		
Information is posted in Mission Report		
Light Grey – Gaming Options		
Matching Game Option		
Game is attempted at least 3 times		
Best time is reported		
Fewest card flips is reported		
Information is posted in Mission Report		

Moon Phases Drag and Drop Option

Diagram is completed accurately

Each moon phase is defined in your own words

Screenshot of completed diagram is included

Lunar Cycle Challenge Option

Three levels of game completed

Explanation of how looking at the surrounding moon phases helped you is included

Patterns you noticed are included

Information is posted in Mission Report

Light Blue – Calculating Options

Birthday Moon Option

Birthday is clearly identified

Moon phase on your birthday is accurately calculated

Moon phase on your birthday is clearly identified

Is presented in a unique and innovative manner

Moon Phase Calculator Option

Five national holidays are clearly identified

Moon phase for each is clearly identified

Is presented in a unique and innovative manner

Create Your Own Calendar Option

Model of your calendar is at least 90 days

Explanation for your choices addresses the questions listed		
Tables, images, and/or Google Drawings to help illustrate calendar and clarify explanation are included		
Calendar and information is posted in Mission Report		

Once you have submitted your Mission Report, click on the image at right and complete your reflection:



If you would like to know more...



- [Sun and Moon Data for One Day](#) - create timelines for your team's birth dates
- [Hidden Figures: How Black Women Did the Math That Put Men On The Moon](#) - NPR article and podcast
- [Riddle: Why do we always see the same side of the moon?](#)
- [Google Earth](#) - video which previews how to use Google Earth to tour various aspects and artifacts on the moon (Note: Google Earth and YouTube do not work on a Chromebook.)