

Mars Habitation

Lesson #15 - Mars Calendar & Holidays



Objectives:

- Students review the time and season differences on Mars
- Students put their creative ideas into words
- Students expand their vocabulary with latin roots
- Students will understand the creation of words using their original roots

Time: 1 Hour 15 minutes

Materials:

- Computer
- Board
- Markers/Writing Utensils
- Construction paper (Put # here)
- Decorations

Prepare:

- <https://mars.nasa.gov/allaboutmars/facts/#?c=inspace&s=distance>
 - Here's some quick facts about Mars time and seasons
- <https://www.scholastic.com/teachers/articles/teaching-content/religious-commemorations-around-world/>
- <https://www.hercampus.com/school/minnesota/6-holidays-holiday-season-besides-christmas>

Activity (step by step):

STEP 1: Discuss Time and Seasons on Mars

1. Discuss the differences between the time on Mars and on Earth
 - a. Earth has 23 hours and 56 minutes per day, Mars has 24 hours and 37 minutes (Pretty close)
 - b. Earth is a lot warmer: Avg Earth Temperature is 57 Degrees Fahrenheit, Average Mars Temperature is -81 Degrees Fahrenheit
 - c. Earth has 365.25 days and Mars has 687 days. (This is the most important fact).

STEP 2: Making the Calendar

1. Discuss how many months Mars would have compared to Earth.
 - a. Earth has 365.25 Days
Mars has 687 Earth Days
To Figure out how many months would be on Mars, cross multiply
$$\frac{365.25 \text{ days}}{12 \text{ months}} = \frac{687 \text{ days}}{x \text{ months}}$$

You should get that Mars has about 11 more months than Earth.
2. Give the kids instructions that they will be adding 11 more months on between Earth's months to the Earth Calendar to make a Mars Calendar.
 - a. Students will consider the origins of the names of the months in the Earth calendar
 - b. They will then choose words that they feel reflect the community and landscape of Mars as well as their own community on Earth
3. Gather the students into the computer lab in the computer lab and translate the words that they came up with into Latin.
4. They'll then make a list of each month that they came up with.
5. Assign each child a month (or two depending on how many children there are)
6. Have them create their months on a construction paper

- a. 20 months should have 30 days and 3 months should have 29 days.
7. Have them decorating the calendars to reflect the season, community and landscape of that month.

STEP 3: Holidays

1. Explain that to add on to the fun and culture of their Mars community, the students will be adding holidays to their new calendar and making their own Martian holidays.
2. Have them discuss and make a list of their favorite holidays
3. Discuss why these holidays are important to them
4. Introduce them to a few holidays from around the world that they might not be familiar with using the second and third link above under "prepare".
 - a. Discuss why they are important to people of certain cultures.
 - b. Some popular holidays around the world are Kwanzaa, Hanukkah, and Lunar New Year.
5. Have the students research other holidays from around the world that they would like to add to their list of holidays to have on Mars.
6. On another paper, have the students brainstorm different holidays that they can have on Mars based on the landscape, what they've previously learned, and the community and culture they have established there.

STEP 3: Recap

1. Explain the importance of having an accurate calendar to keep up with important dates in history as well as martian holidays in order to express their culture and beliefs and celebrate cultural diversity.

STEP 4: Writing

Remember that you can write your book however you want. These writing lessons are to provide structure if they students do not know where to start.

- If you are writing a narrative think about how we have holidays to commemorate all kinds of things both happy and sad. We have New Year's and Memorial Day. Why have you chosen to create this holiday? What season is it? Does the weather affect your celebration? How often do you have this holiday? Once a Mars year? Once an Earth Year? Monthly? Seasonally? If you are writing a book of maps, write a map of your holiday. Think about the decorations, the rituals or things you do. Include your feelings on the map.
- If you are writing letters, what season is it on Mars? What does that look like? Sandstorms, Wind, Heat, Cold? What season is it on Earth and what are they doing? Are you celebrating a holiday? Is it a new Mars holiday? A transplanted Earth holiday? Are you missing a holiday on Earth? Talk to your Talk to your Earth pen pal about what feelings you have about your community and its name.
- If you are writing an ABC book try using the first letter of the names of holidays like N for New Years Day, or I for Independence day. Maybe you would like to write about the seasons – try W for winter or S for summer or even Y for the long Martian year.