

# Space Holidays

## Purpose

The purpose of these activities is to practice reading comprehension and basic measurement skills, as well as to practice creative communication skills and to review learned scientific concepts regarding motion.

Students will be able to

1. Read and summarize selected texts.
2. Communicate creatively about Space, using the holidays as a guiding idea.
3. State and apply Newton's Three Laws of Motion.
4. Review measurement and conversion.

## Important Vocabulary

Space	holiday	Newton	motion	force
action	reaction	cup	liter	teaspoon
degrees	metric	Celsius	Fahrenheit	measure
convert				

## Space Holidays

Students read and summarize (orally and/or in writing) selected texts about holidays celebrated in Space. (Note: Selected readings can be taken from any source; below are some resources that provide a variety of articles/excerpts.)

## Santa Claus and Newton's Three Laws of Motion

[http://www.education-world.com/a\\_tsl/archives/04-1/lesson037.shtml](http://www.education-world.com/a_tsl/archives/04-1/lesson037.shtml)

This lesson from the "Education World" website calls for students to review and apply Newton's Three Laws of Motion to three basic scenarios involving Santa Claus. *Extension:* For greater review/demonstration of understanding, students write two to three of their own scenarios for each Law of Motion.

## Munchy Math

[http://www.thursdaysclassroom.com/index\\_09dec99.html](http://www.thursdaysclassroom.com/index_09dec99.html)

This activity from the "Thursday's Child" website's "Interplanetary Christmas" lessons calls for students to revise the recipe for Santa's favorite cookies, as a review of basic measurement and measurement conversion skills. *Extension #1:* Students can build on this activity by working in small groups to create their own recipes. *Extension #2:* If an oven is available and appropriate safety measures provided for, the students can make batches of their cookies to share. (Note: Extension #2 provides greater exposure to measurement, as actual measurement tools will be used; this will allow for a more solid understanding of measurements for those students that find it somewhat abstract and difficult to grasp.)

## Celebrations

Students write and illustrate short stories about celebrations that occur in space. This activity can serve as a reflection/journaling activity, or can be used in conjunction with review lessons on elements of a short story/adjective use/the writing process/etc.

## **Helpful Resources**

The following resources might be helpful in conjunction with the activities presented above.

1. [http://science.nasa.gov/headlines/y2001/ast21dec\\_1.htm](http://science.nasa.gov/headlines/y2001/ast21dec_1.htm) (Story entitled “Space Station Christmas”)
2. <http://www.firstscience.com/site/articles/christmas.asp> (An excerpt from Roger Highfield’s book CAN REINDEER FLY?)
3. <http://www.leeds.ac.uk/media/current/reindeer.htm> (Press release about the necessary wing span of flying reindeer)
4. [http://www.nasa.gov/vision/space/livinginspace/Christmas\\_in\\_space.html](http://www.nasa.gov/vision/space/livinginspace/Christmas_in_space.html) (About Christmas in Space, from a NASA website)
5. [http://www.nasa.gov/vision/space/livinginspace/Space\\_Thanksgiving.html](http://www.nasa.gov/vision/space/livinginspace/Space_Thanksgiving.html) (About Thanksgiving in Space, from a NASA website)
6. <http://www.namibian.com.na/2002/November/world/029C7E6E23.html> (Space walking on Thanksgiving)
7. <http://www.sciencedaily.com/releases/2003/11/031125072148.htm> (Thanksgiving 2003 space food story)
8. [http://www.bjela.org/content\\_display.html?articleID=41475](http://www.bjela.org/content_display.html?articleID=41475) (Jewish astronaut celebrates holidays in Space)