

The Lunar Education Module: A Document and Video Guide

- 2.1 Engagement Lessons: These lessons are intended to engage students in exploring the Moon.
 - 1A. Requirements for Sustaining Life (TG 1A)
 - 1 Lesson PDF (TG) with student activity handout: Student readings included
 - 1B. Student Observations of the Moon (TG1B)
 - 1 Lesson PDF (TG) with student activity handout: Student Observation logs included
 - 1C. Why Go Back to the Moon? (TG 1C)
 - 1 Lesson PDF (TG) with student activity handout: Articles included
 - 2 Supporting videos:
 - 1C_Space Exploration_2.1_SR.mov
 - 1C_New Spacecraft_2.1_SR.mov
 - 1D. Challenges for Returning to the Moon with Humans (TG 1D)
 - 1 Lesson PDF (TG) with student activity handout: Articles included
- 2.2 Earth Environment Lessons: Earth Science background
 - 2A. Multiple Activity Lesson PDF (TG: 2A: Pre-Requisites in Earth Science)
 - 2B. Solar Energy (TG 2B)
 - 1 Lesson PDF (TG) with student activity handout
 - 7 Supporting videos:
 - 2B_And_4B_CME_IMPACT_SR_2.2.MOV
 - 2B_And_4B_SPARKLE_SR_2.2.MOV
 - 2B_AURORA_SR_2.2.MOV
 - 2B_GOODRICH_SR_2.2.MOV
 - 2B_Magne_Earth_Goodrich_2.2_SR.mov
 - 2B_Magnetospher2_2.2_SR.mov
 - 2B_Sun_Layers_1.MOV
 - 2C. Identification of Life Sustaining Properties and Resources (TG 2C)
 - 1 Lesson PDF (TG) with student activity handout
 - 14 Supporting videos: The water cycle videos are strongly suggested videos.
 - 2C_Water_Cycle_Notext_2.2_SR.mpg
 - 2C_WATERcycle_Text_2.2_SR.mpg
 - 2C_Air_Temp_2.2_SR.mov
 - 2C_biosphere_HD_2.2_SR.mov
 - 2C_Biosphere_seawifs_2.2_SR.mov
 - 2C_Cloud_Cover_2.2_SR.mov
 - 2C_cloudalbedo_2.2_SR.mov
 - 2C_Cryosphere_2.2_SR.mov
 - 2C_Ice_Albedo_2.2_SR.mov
 - 2C_ozone_2.2_SR.mov
 - 2C_Precip_2.2_SR.mov
 - 2C_Seasons_2.2_SR.mov
 - 2C_SST#1_2.2_SR.mov
 - 2C_SST#2_2.2_SR.mov
- 2.3 Lunar Environment Lessons
 - 3A. Basic Characteristics and Properties (TG 3A)
 - 1 Lesson PDF (TG) with student activity handout

- 3B. Motions in space (TG 3B)
 - 1 Lesson PDF (TG) with student activity handout
- 3C. Origins of the Moon (TG 3C)
 - 1 Lesson PDF (TG) with student activity handout
 - 2 Supporting videos:
 - 3C_solarsystemscomp_2.3_SR.mpg
 - 3C_collision_Theory_2.3_SR.mpg
- 3D. Lunar Mapping (TG 3D)
 - 1 Lesson PDF (TG) with student activity handout: Lunar location documents included
- 3E. Solar Energy and the Moon (TG 3E)
 - 1 Lesson PDF (TG) with student activity handout: Articles on radiation included
- 3F. Lunar Environment (TG 3F)
 - 1 Lesson PDF (TG) with student activity handout: Science articles included
 - 2 Supporting videos:
 - 3F_Dusty_To_Moon_Buggy_SR_2.3.mpg
 - 3F_Gravity_Drop_2.3_SR.mpg
- 3G. Identification of Life Sustaining Resources on the Moon (TG 3G)
 - 1 Lesson PDF (TG) with student activity handout: Lunar Resource Maps included
 - 2 Supporting videos:
 - 3G_am_reflect1.2.3_SR.mpg (satellite swathing)
 - 3G_vmoon1_2.3_SR.mpg

2.4 Earth/Moon Comparative Analysis Lessons

- 4A. Comparisons of the Earth and Moon (TG 4A)
 - 1 Lesson PDF (TG) with student activity handout: Moon and Earth images included
 - 1 Supporting video:
 - 4B_and2B_CME_2.4_SR.mov
- 4B. Identification of possible locations for a lunar colony (TG 4B)
 - 1 Lesson PDF (TG) with student activity handout: Communications activity included

2.5 Habitats (TG 5)

5A. This teacher guide has many independent activities for the development of a safe human habitat on the Moon keeping in mind the things that are necessary to support life.

- 6 Supporting videos:
 - 5_bathroom in space_2.5_SR.mov
 - 5_Food_2.5_SR.mpg
 - 5_NASA_Bite_nose_2.5_SR.mov
 - 5_sleeping_2.5_SR.mpg
 - 5_spacesuit mechanics_2.5_SR.mov
 - 5_vomit comet_2.5_SR.mov