

Mission to the Lunar South Pole



Please Note – This category is only open to Years 7-10 and will be supported by Griffith University's School of Information and Technology with a mission video, ask-an-expert online sessions and much more!

The Task:

You have been assigned to co-ordinate and execute a mission to the Lunar South Pole. Explain and communicate the scientific detail around how to survive this space mission to the moon.

What to do:

Scientifically communicate on how you would survive a space mission to the moon under the following **sub-headings**:

1. **What do you need to survive?** E.g. planning supplies, equipment (including protective wear) & communications.
2. **How do you get to your chosen landing destination?** Provide reasoning for where in the lunar south pole you would land? Consider the extremes that you need to travel through and what features would best work to transport you to and back from the moon?
3. **How to survive your first 48 hours on the moon's surface.** Including how you would communicate home (for example – creating a message through morse code).
4. **What do you collect while you're there?** How and why are you collecting these items.

Students must communicate their mission by including both a Scientific Notebook (see Appendix 2) and a Written report (see below):

The Written report should:

- clearly & briefly explain the scientific concept you have chosen.
- include your background research information, references and permission to use copyrighted material (if applicable)
- identify and describe the target audience (examples could be: preschool students, aged pensioners without a scientific background, the general community)
- justify your choice of communication mode for your target audience

Your mission and how you survive it will need to be communicated by choosing one of the following digital modes outlined below (Model, Poster, PowerPoint Presentation, Game, Comic Strip).

Students may work individually or in pairs.

Presentation Options for Digital Communication Mode:

Simulation Model

- 3D representation of a scientific concept including title, labels. This can be an animated drawing, illustration or video.

Animated Cartoon/Comic Strip

- A single or series of cartoons or stop animations which are computer generated and communicate a scientific concept
- The presentation must not exceed 5 minutes
- The cartoons/images must not be subject to copyright or a letter stating that you have received permission to use the work
- The comic strip must be an original piece of work.

Game

- The game may be a computer-generated game which communicates a scientific concept
- The game must be an original piece of work.
- Clear instructions must be included.

Augmented Reality Poster

- A single or series of augmented poster/s with text which communicates a scientific concept
- The poster must be "flat" or 2D two dimensional.
- The poster must not exceed 850mm x 1200mm.
- The images must not be subject to copyright or a letter stating that you have received permission to use the work
- The presentation must be an original piece of work.

PowerPoint Presentation

- A series of slides with/without sound which communicates a scientific space concept – with paper printout of slides
- The presentation must be an original piece of work.
- The images must not be subject to copyright or a letter stating that you have received permission to use the work

Multi-media presentation

- A visual media presentation (eg video) which communicates a scientific principle
- The presentation must be an original piece of work not longer than 2 minutes
- The images must not be subject to copyright otherwise a letter stating that you have received permission to use the work

What makes a winning entry?

RELEVANCE OF TASK	Explanation of mission is original and succinct Status of mission to the broader community is clearly articulated
SCIENTIFIC RESEARCH	Evidence of scientific research (References)
AUDIENCE	Clear explanation of intended audience Communication is appropriate for the intended audience
COMMUNICATION	Communication is concise and effective for the identified audience Entry is communicated through one of the digital options.
OVERALL PRESENTATION	Presentation is informative Presentation uses the chosen digital communication mode in an entertaining way Presentation is effective and clearly articulated
NOTEBOOK	Notebook contains evidence of scientific thought Accurate/ detailed notes of findings, decisions and thought processes are evident
SCIENTIFIC LITERACY	Appropriate use of scientific language Handbook guidelines have been followed Sources have been cited

