

Astronomy Final Project

Look over the list below and choose one topic for your final astronomy project

Arts-Based Assessments

- Collage
 - Create a collage of nebulae
 - Create a collage of galaxies
 - Create a collage of the history of space flight
- Docudrama
- Storyboard
 - Create a commercial advertising the latest space mission
 - Create a commercial advertising a space/moon hotel for tourists
- Tableau
- Brochure
- Poster
 - Create an educational poster on a given [topic](#)
- Bulletin board design
 - Design and create a bulletin board for the classroom
 - Design and create a public bulletin board for [★ Astronomy Week](#)
- Scrapbook
 - Choose a [topic](#) and create a scrapbook of articles, pictures and commentary on that topic
- Encyclopedia
 - Create an astronomy encyclopedia, including definitions, historical references and images
- Model-making
 - Build a scale model of the solar system
 - Build a scale model of a cross-section of the Sun or Earth
- Music
 - Compose a piece of music based on the characteristics of the planets
 - Design and create a CD (choose music and design the CD cover) of astronomy music

Activity-Based Assessments

- Debate
 - Recreate a historical debate
 - Debate whether Pluto is a real planet
 - Debate whether there is life on Mars
 - Debate the existence of extra-terrestrial life
- Observing
 - Complete a level of the [★ Canadian Junior Astronomer Program](#)
- [Build a telescope](#)

Thinking Skills Assessments

- Case study
- Concept mapping
 - Create a concept map of the terms and concepts learned in this unit
- Map making
 - Create a map of the solar system for an interstellar traveller; use city maps as a source of ideas
- Media analysis
 - Comment on the portrayal of astronomy in the media (articles, advertisements)
- Visual/Graphics organizer
- Creative writing
 - Write a work of fiction on the first human trip to Mars
 - Create a poetry anthology on the planets in the solar system

- Reading response
 - Read a scientific article on a given [topic](#) and write a response
- Response journal
 - Write a daily response journal on the [Astronomy Picture of the Day](#)
 - Write a daily response journal on the [Earth and Space Science Picture of the Day](#)

Technology & Media-Based Assessments

- Internet technologies
 - Create a webpage
 - Complete a [★ webquest](#) based on a previously-made webpage
- Multi-media presentation
 - Create a powerpoint presentation based on research [topic](#)
 - Create a presentation which includes visual effects, audio effects and a physical demonstration
- Media production
 - Create an instructional video on a [topic](#) for younger grades
- Graphic applications
 - Design the next space station
 - Design the next space shuttle
 - Create a Flash animation of as astronomical process (ie. planets orbiting the Sun)

Inquiry & Research Assessments

- Historical
 - Research the biography of an astronomer or astronaut
- Mathematical problem solving
 - [Testing the General Theory of Relativity](#)
- Problem-based models
 - Can we live on Mars? The Moon?
 - Can we travel to other star systems?
 - Can people be born in space?
 - Can we grow food in space?

[top](#)

Possible Topics:

Canadiana:

- [★ Canadian astronomer biography](#)
- [🇨🇦 Canadian astronaut biography](#)
- [★ Canadian contributions to astronomy](#)
- [★ Canadian contributions to space exploration technology](#)
- [★ Canadian observatories](#)

Historical:

- [Great debate of 1920 on the scale of the universe](#)
- Copernicus' contributions to the field
- Galileo's contributions to the field
- Kepler's contributions to the field
- Einstein's contributions to the field
- Hubble's contributions to the field
- Astronomer biography
- The history of space exploration
- The history of the telescope

Components of the universe:

- Components of the solar system
- Compare terrestrial planets to gas planets
- Life cycle of stars
- Unusual stars: binaries, pulsars, white dwarfs, variable stars
- Eclipses: fact and myth
- Galaxies: classification, morphology
- Our place in the Milky Way Galaxy
- Extra-solar planets
- Measuring the universe

Formation Processes:

- Formation of the solar system
- Formation of the Earth
- Formation of the universe
- Comparing theories on the formation of the Earth
- The fate of the universe

Earth and Space Science:

- Impact of space debris on the Earth
- Impact of meteors and comets on the Earth
- The fate of our solar system
- A day in the life of an astronaut in orbit
- Space experiments
- The effects of solar activity on the Earth (sunspots, radiation, etc.)
- The effects of the Moon on the Earth
- The importance of seasons on the Earth
- The formation of aurorae

Miscellaneous:

- Extra-Terrestrial Life (see SETI.org)
- [The science of Star Trek](#)