



Song, Poster, and Presentation day!

You will work in groups to write and perform a song about what we've learned in astronomy so far.

Ms. Williams will assign your group one of the following topics. Requirements for the project are on the other half of this page. Good Luck!

TOPICS: Use the boxes as a checklist to make sure you include everything!

Topic 1: How the Universe began

The song must include **and explain** the following subtopics:

- 1) Characteristics of atoms and elements
- 2) Covalent Bonding
- 3) Ionic Bonding

Topic 2: The Big Bang Theory

- 1) Big Bang Theory
- 2) How stars and galaxies form

Topic 3: The Milky Way Galaxy

The song must include **and explain** the following subtopics:

- 1) 4 main types of galaxies
- 2) Barred Spiral galaxy
- 3) Description of the Milky Way Galaxy

Topic 4: The Sun

The song must include **and explain** the following subtopics:

- 1) How the sun produces energy (nuclear fusion)
- 2) Temperature at the core
- 3) Nuclear Fission

Topic 5: Energy Transfer

The song must include **and explain** the following subtopics:

- 1) Definition of heat
- 2) Conduction
- 3) Convection
- 4) Radiation

Topic 6: Electromagnetic Radiation

The song must include **and explain** the following subtopics:

- 1) Electromagnetic Radiation description
- 2) Types of Electromagnetic radiation
- 3) Electromagnetic Spectrum

Topic 7: Light

The song must include **and explain** the following subtopics:

- 1) Explain wavelength and frequency
- 2) Explain and describe light
- 3) Describe visible light and the different wavelengths for (Red, Orange, Yellow, Green, Blue, Violet)

Topic 8: Doppler Effect

The song must include **and explain** the following subtopics:

- 1) Explain the Doppler Effect
- 2) Blue Shifts and Red Shifts

Song, Poster, and Presentation Requirements and Checklist

Song Requirements

- 2-3 Verses
- 1 Chorus

Tips: Use the melody of a familiar or popular song!

Poster Requirements

- Title of song
- Song Chorus (if it follows the melody of a popular song, include the title of the popular song)
- 2 pictures (in color!) that represent the topic

Performance Requirements

- Everyone must sing or say something
- The performance must address and include **EVERY** subtopic