

## Goals:

### Process Skills:

- Developing scientific inquiry mindset
  - Questioning observed phenomena
  - Developing methods/process to answer a question
  - Comfort in using various methods/materials to answer a question
- Working effectively in a group
- Presentation skills
  - Creating an organized poster / presentation
    - Use of images
    - Limit word content
      - Bulleting
      - Summarize critical information
  - Communicating effectively in front of an audience
    - Using time efficiently
    - Speaking loud and clear
    - Avoid use of scientific lingo
  - Working within time limits

### Content:

- Understanding color and light
  - Components of light
  - Light is a spectrum of many colors/types
- Filters and light collection
  - Different color filters given different information
    - Usefulness in terms of telescopes (connection made during synthesis)
    - Combine/subtract colors to learn different properties

### Attitude:

- Comfort with inquiry process / self-learning
- Confidence in solving problems / answering questions (on their own)
  - Sense of ownership
- Respect for materials
- Respect for others' ideas

### Diversity:

- Working with students from different backgrounds (culture and education)