### Space Systems Standard(s): HS-ESS1-2

Task: After watching the video "Back to the Beginning" (link button on website), you will create a children's storybook that has at least 10 pages plus a cover, that illustrates the big bang theory and it's results. Start with a informational page that cites your sources. Include evidence such as microwaves, light spectra, and the motion of galaxies in your book. You can have words, a large flip book, a comic book ect.

Materials: Paper, markers, pens, watercolor, staples... Restrictions: supplies are limited to what the school has available, please be conservative.

## Space Systems Standard(s): HS-ESS1-1

Task: You will create a storybook or comic strip about a photon. Possible storylines could be: How is a photon created and what happens when it gets to Earth, How does "Space Weather" affect it's travels, How solar flares affect the energy on Earth, Is a photon a wave or a particle, or a storyline of your choice. You will read your book to class when done (or ask the teacher to).

Materials: Paper, markers, pens, watercolor, staples... Restrictions: No student in the same class may have the same storyline.

# Space Systems Standard(s): HS-ESS1-1, HS-ESS1-3

Task: You will create 4 different "star cards," kind of like baseball cards or X-men cards, that shows others the "stats" of that star. Include the lifespan, mass, and what elements are being emitted from it. Explain what evidence proves your stats. Your cards should have photos or illustrations of the stars. All sources must be cited.

Materials: Internet access, large index cards, colored pencils, ect.... Restrictions: You cannot use the same star as any of your classmates. You must obtain permission to use computers in this class or to go to another classroom.

Space Systems Standard(s): HS-ESS1-4

Task: After playing with the "My Solar System" simulator (link button on website), you will create an informational poster that shows what happens to the gravitational pull of satellites (moons or man-made) when different variables are changed. Present your poster to the class when finished.

Materials: poster board, markers, compasses, Spirograph(?) Restrictions: Be conservative with supplies (test on scratch paper) and obtain permission to use computers in this classroom or another room.

#### Space Systems

Standard(s): HS-ESS1-1, HS-ESS1-2, HS-ESS1-3, or HS-ESS1-4

Task: After carefully reading the appropriate NGSS section, you will research a lesson plan and adapt it for this classroom's use. The task card may cover multiple standards.

Materials: Large index cards, pencils, whatever decoration you like

Restrictions: instructor must approve your task card for class use.

## **Space Systems** Standard(s): HS-ESS1-1, HS-ESS1-2, HS-ESS1-3, or HS-ESS1-4

Task: After carefully reading the appropriate NGSS section, you will highlight any scientific terminology and google the definition of it. You will then use the cross word puzzle maker on the class website to create and print a puzzle for the class to use. Other puzzle topics can be used if they are within the parameters of the standards, such as the types of stars, ect.

Materials: Internet access, printer/copier

Restrictions: instructor must approve your puzzle for class use.

# **Space Systems** Standard(s): HS-ESS1-1, HS-ESS1-2, HS-ESS1-3, or HS-ESS1-4

Task: After carefully reading the appropriate NGSS section, you will create a music video or cartoon that explains the topic of your choice. Share your finished product with the class.

Materials: Internet access, Animoto or Powtoon account access

Restrictions: You must obtain permission to use computers in this class or to go to another classroom. Your work cannot disrupt other's. Music must be appropriate for the BGC to use.

Space Systems Standard(s):

Task:

Materials:

**Restrictions:**