## <u>Topic: Scale & Big Bang Working Document For Direct Instruction</u>

Interact with the vocabulary: DO NOT USE GOOGLE! You can highlight the vocab throughout your notes & add in any word you don't have, make a glossary list, make flash cards...

## **Vocabulary Words:**

- 1) AU
- 2) Light Year
- 3) Parsec
- 4) The Big Bang
- 5) Singularity
- 6) Time Zero
- 7) Doppler Effect
- 8) Red Shift
- 9) Cosmic Background Radiation
- 10) Photon
- 11) Three fates of our universe

## **Direct Instruction & Materials To Do List:**

- Take **notes** from Mrs. Achey's <u>Slideshow</u>
- Optional Reading: Scale of Universe & Big Bang
- Do **Vocab** from above
- Do Worksheet The Scale & Big Bang check the answers
- In-class Activity on Expanding Universe
- **Show** me your notes, vocab, & worksheet
- Quiz

# The Big Bang: 10 points

## This project will focus on the creation of the universe. You can choose between:

- 1) a magazine cover with catchy article titles (made on Google drawing) and a one-page minimum magazine article with pictures and two columns to look like a magazine (made on a google doc);
- 2) a <u>podcast</u> where you explain all the information and provide a transcript (with a partner or alone); **and**
- 3) a beautiful work of art with all the science information on the side in a description like you would see in a museum (I can help you take a pic on your phone).

### SCIENCE

My expectation	Above & beyond
<ul> <li>The Big Bang project must display your knowledge of:         <ul> <li>The steps of The Big Bang</li> <li>With brief explanation of 2 pieces of evidence that The Big Bang happened IN YOUR OWN WORDS!!!!!!</li> <li>The timeframe Big Bang happened</li> <li>Includes one fate of our universe</li> </ul> </li> </ul>	Uses our Free Response podcast to explain in detail one fate of our universe.

#### FINISHING TOUCHES: CLEAR COMMUNICATION

My expectation	Above & beyond
Intro to project: There is a blerp at the top of your project page, introducing it.	Context is lengthy & creative
Learning: project has proper format and is stylistically appropriate	Student choses above age appropriate projects
Technical: Proper spelling & grammar	Spelling and grammar are fluid in such that the project is stylistically enhanced
<b>Mechanics</b> : project is accompanied by visually pleasing extras such as pictures, digital backgrounds, image overlays	Project includes themed transitions
<b>References:</b> Use of credible resources that are listed in APA format either at the end of each project or on a collective reference page. See format below.	References include things other than web-based resources

 $Contributor's \ last \ name, \ first \ name. \ (Last \ edited \ date). \ \emph{Title of resource}. \ Retrieved \ from \ http://Web \ address \ for \ OWL \ resource$