|  |
| --- |
| **Formation of the Solar System NOTES** |
| **Warm-Up Quiz:**   * How do stars form? * Give two reasons supernova are important for life to be possible in the universe. |
| **Recipe for a Solar System**  What do we need to make a solar system?   * **Ingredients:**   + 1. A cloud of billions of billions tiny particles of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.     - Make sure to include a variety of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_     - I suggest: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.   + 2. A dash of **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** * **Cooking Time:**   + Approximately \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **Formation of Our Solar System**  A very long time ago, a huge star exploded in a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  http://upload.wikimedia.org/wikipedia/commons/5/50/Landscape_Carina_Nebula.jpg  The \_\_\_\_\_\_\_\_ made from the star were \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in all directions over a huge distance.   * This expanse of gas and elements is called a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   This nebula was made up of all the elements we find on our planet today. |
| **The force of Gravity**   * over the nebula, gravity pulled the dust together, forming \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of matter smashing against each other. * Large \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ began to take shape. * Built from heavy elements from the supernova, and assembled by gravity, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ were being constructed. |
| **Formation of the Sun**  At the same time, millions of miles away from the infant planets, at the center of the solar nebula, the pressure was even more intense!!   * Under incredible pressure, the center became so **\_\_\_\_\_\_\_\_\_** that the atoms started to **\_\_\_\_\_\_\_\_\_\_\_\_\_\_** together.   + A new star, the **\_\_\_\_\_\_\_\_\_\_**, was born. * The **nuclear fusion** in the sun released **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** into the solar system. |
| **Formation of Planets**   * The radiation sent from the Sun began to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the nebula. * Any small chunks of rock in the nebula were \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. * The remaining heavy chunks of rock and gas leftover cooled to form \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. |
| **Summary of the Solar System Formation**  **A)**  **B)**  **C)**  **D)**  **E)** |
| Independent Research   * You must research the **Major & Minor Bodies of the Solar System**: * **Major Bodies**:   + Planets   + **Minor Bodies**:   + 1) Moons   + 2) Comets   + 3) Asteroids   4) Meteoroids  For EACH: What are they? How many are there in the solar system?  How do they move through the solar system? Anything interesting about them?  We will go over your answers in 15-20 minutes |
| **Major Bodies of the Solar System**   * **Planets:**   What are they?  How many are there in the solar system?  How do they move through the solar system?  Something interesting about them.  **Minor Bodies of the Solar System**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | What are they? | How many are there in the solar system? | How do they move through the solar system | Something Interesting about them. | | Moons |  |  |  |  | | Comets |  |  |  |  | | Asteroids |  |  |  |  | | Meteoroids |  |  |  |  | |
| **Assignment:**   1. Independent Research 2. Formation of the Solar System WS |