EARTH SCIENCE NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

DATE \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Naked Science: “Birth of the Solar System” Video Worksheet -** Fill in the blanks as you watch the video.

1. Our own nebula began its collapse \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ years ago.
2. It is likely that the nebula had been slowly spinning in space ever since its creation. But as its material collapsed, it began to spin \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. When the clump reached 18 million degrees Fahrenheit, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ kicked in.
4. Four and a half billion years ago, our \_\_\_\_\_\_\_\_ was born.
5. When compressed enough, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ would start to have an effect and the cloud would begin to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. Tiny particles of dust begin to clump together in a process known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
7. At first, all the matter around our young star is so hot that it is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ form.
8. All of the gas compounds condense much further out, but before this zone is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
9. Beyond the asteroid belt is an invisible but critical border called the frost lin. Beyond the frost line, the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ planets take shape.
10. Colder than -100⁰F, compounds like water, methane, and ammonia are able to condense, and there are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of tons of this material available in the early solar system.
11. Since gas makes up 90% of their mass, they are also known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
12. Uranus and Neptune are different from Jupiter and Saturn and probably should more accurately be called \_\_\_\_\_\_ giants rather than gas giants.