

Last Name:

First Name:

Period:

Link: <https://tinyurl.com/yys7yhe4>

Answer Bank

Each "dot" completes the "blanks" of each sentence

- Energy
- Energy
- solid ----liquid----gas-----excited
- -196°C --- 78%
- closer together
- (no) ABSOLUTELY NOT EVER!
- ice----water----water vapor
- take energy
- Weight it!

- move faster-----further and further
- Absolute Zero
- slowly----faster-----fast
- container ---- container----- holds
- Matter
- Solid ---- Liquid ---- Gas
- The freezer removes the energy from the things and releases it into the air around it. It puts heat out into the room! (the room gets hotter)

Note: All questions were taken from the video, word by word, as "The Science Guy" was talking----
Use the "answer bank" to complete each "short video dialogue"

1. The Universe is made of _____

2. Use the first 3-phases of matter to label diagram of question 2

STATE OF MATTER



(Important note: At this point Scientist recognize at least 17 phases of matter

3. Molten steel, melted steel, liquid steel, and solid steel are different because of "the" _____

4. Getting things to change "*phase*" takes _____.

5. If you want to turn a liquid into a solid state you have to take _____ away.

6. Where does the energy go from the things you put into a freezer? (Explain in terms of energy transfer) (*watch the video*) _____

(In other words, why do things get cold or colder when you put them into the freezer?)

7. What do you get when you "heat" ice? A _____ turns into a _____, the liquid turns into a _____. Those are some pretty _____ molecules?

8. How cold is liquid Nitrogen? _____. What percent of our air is Nitrogen? _____.

9. The heat from the air makes molecules _____, they get _____ apart and change from a liquid to a gas.

10. Liquid Nitrogen makes the molecules slow down; the molecules get _____

11. Now you know "the three main phases of matter. Solid like this _____, and liquid like this _____, and gas like this _____.

12. Suppose there was no motion at all; the molecules are absolutely stopped. This is what Scientist call _____. That would be colder than anything you could ever imagine!

13. Can you get "**Absolute Zero**"? (Yes or No) ____
(The electrons are **still moving** around the nucleus of the atom)

14. Solid, liquid and gas; the three main phases of matter. Solids, molecules are moving _____, packed close together. Liquid, molecules are moving a little _____, they are able to flow a little bit. Gas, molecules are moving very _____, they are just wild!

The main three phases of matter!

15. How can you prove that "**invisible**" gas is matter? _____

16. When matter is in the "**gas phase**", it takes the shape of its _____. When matter is in the "**liquid phase**", it takes the shape of its _____. When matter is in the "**solid phase**" it _____ its shape.