

Name: _____

THE MYSTERY OF MATTER: UNRULY ELEMENTS

Answer the following questions while we watch the video. If you need to go back and watch the video again it can be found at <http://www.pbs.org/video/mystery-matter-episode-2-unruly-elements/>

1. What is one of the oldest tricks in a Chemists toolbox? _____
2. Why did this test become less useful over time?
3. How many elements were know at this time? _____
4. How did Robert Bunsen and Gustav Kirchhoff perfect this test?
5. Who created the Periodic Table? _____
6. Give a brief description of Dmitri Mendeleev's life.
7. How did the French geologist suggest the elements be arranged?
8. How did the English chemist suggest the elements be arranged?
9. How many elements did Mendeleev cover in his first textbook? Why was this a problem?
10. Describe the process by which Mendeleev first began to organize the elements into families.
11. Why did Mendeleev leave blanks in when he was organizing the elements?
12. What bothered Mendeleev about iodine and tellurium?
13. What does the periodic law allow us to do?

14. Describe the discovery of gallium.

15. Why did Mendeleev first think that argon was not an element?

16. Describe how the noble gases got added to the periodic table.

17. Describe Marie Curie's path to becoming a scientist.

18. Why did Marie Curie decide not to study X-rays? What did she decide to study instead?

19. What word did Marie Curie coin to describe the elements she was studying? _____
20. What was surprising about pitchblende?

21. What were the names of the two elements the Curies discovered?

22. How long did it take the Curies to get a sample of Radium big enough to be recognized? _____
23. Why did Marie think the radium samples glowed?