

8. What does the word hygroscopic mean?
9. What compound is found in limestone, chalk, marble and the shells of snails & sea creatures?
10. What gas is released from this reaction?

## Station 4

<b>How Do you know a Chemical Change Has Happened?</b>

11. What type of compounds smell like rotten eggs?
12. What gas is being formed by mixing iron with an acid?
13. Name two places in mother nature that produce iron sulfide?

A.

B.

14. What is the acid name for vinegar?

## Station 5

<b>How Do you know a Chemical Change Has Happened?</b>

15. What type of reaction is when two different materials react in solution to form an insoluble product?
16. Only \_\_\_\_\_ compounds in solution can form a precipitate.

## Station 6

<b>How Do you know a Chemical Change Has Happened?</b>

17. What is the name of this reaction?

## Station 7

<b>How Do you know a Chemical Change Has Happened?</b>

## Video: The Science of Glow Sticks

18. Glowsticks are powered by a process called \_\_\_\_\_.
19. The hydrogen peroxide solution in the vial of a glow stick is called the \_\_\_\_\_.
20. What does the hydrogen peroxide react with?
21. \_\_\_\_\_ temperatures will make the glow stick glow brighter but for a shorter time.

## Video: What Makes some Animals Glow?

22. What two chemicals create bioluminescence?
23. Give two examples of why animals use bioluminescence.

A.

B.

## Station 8

### Video: 7 Signs a Chemical Reaction is Taking Place

<https://www.youtube.com/watch?v=q76UNX3otvA>

24. List the 7 signs a chemical reaction is taking place (in the order they appear in the video)

- |    |    |
|----|----|
| 1. | 5. |
| 2. | 6. |
| 3. | 7. |
| 4. |    |

25. Fill in the blanks on the following statements from the video:

\_\_\_\_\_ changes are difficult to reverse. \_\_\_\_\_ changes are usually easier to

reverse. In chemical changes atoms are rearranged into \_\_\_\_\_ substances.

**Identifying Physical or Chemical Changes:** Look at the pictures on the reference sheet. Identify each picture as a Chemical or Physical change by putting a C in the box for Chemical and a P in the box for Physical.

1.	2.	3.	4.
5.	6.	7.	8.
9.	10.	11.	12.
13.	14.	15.	16.
17.	18.	19.	20.

## Station 9

<b>How Do you know a Chemical Change Has Happened?</b>

26. What animal is this reaction named after?
27. What colors does it change to?
28. What type of reaction is the chameleon reaction?
29. What two words combine to make up the word "redox?"
30. New compounds are formed when one chemical takes \_\_\_\_\_ from another chemical.

## Questions:

31. List the evidence of a chemical change that you observed.
  - a.
  - b.
  - c.
  - d.
  - e.
  - f.
  - g.
32. What cross cutting concept (CCC) did you use in the lab?
33. What science and engineering (SEP) practice did you use in the lab?