Lab Safety in Chemistry

Essential Question: _____

Questions/Main Ideas

1. The chemical on the first slide might be what chemical? Why?

2. Toxic Chemical Learning Targets

Understand the hazards of working in a chemistry lab, and how to prevent injury to yourself and others.

1.

2.

3.

4.

5.

6.

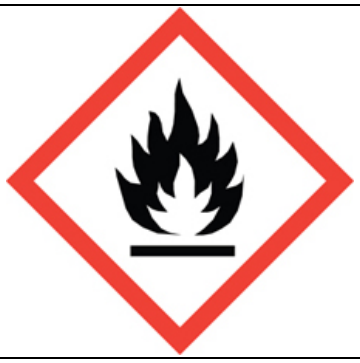
7.

3. What is a Toxic Chemical?

Any chemical which,

Hazard Pictograms from HCS (Hazard Communication System)

4.

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	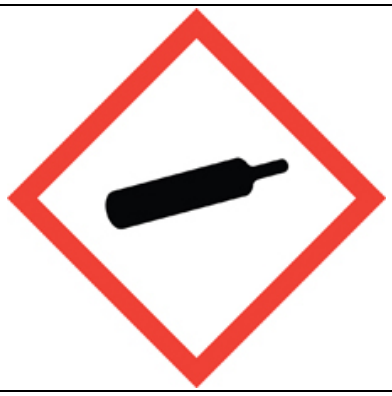

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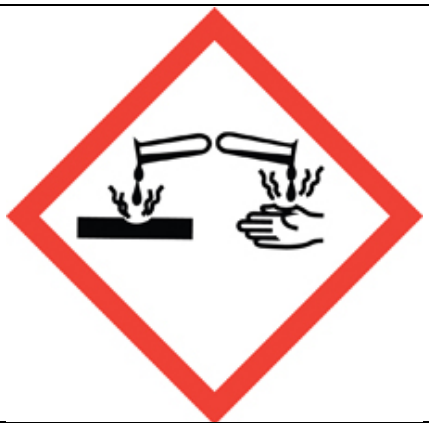	

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	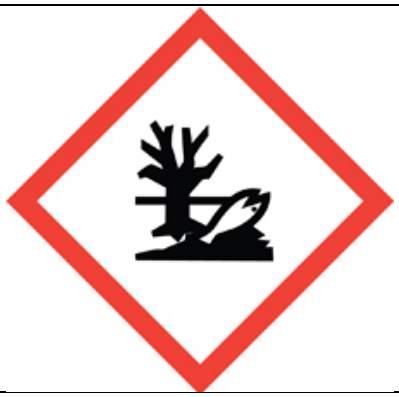

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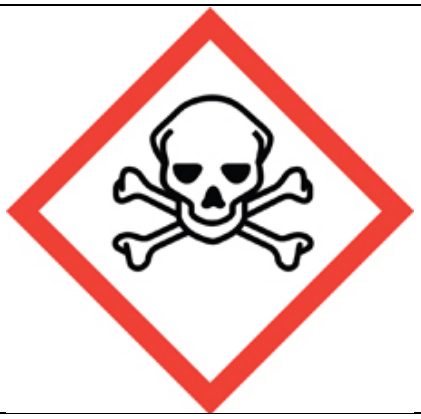

9. **Routes of Entry**

Term				
10. How it happens				
How to prevent				

11. PPE is the abbreviation for _____.

    Goggles are worn whenever _____, _____, and

    _____ are present.

12. Three types of damage caused by chemicals, and examples:

-

Example:

-

Example:

-

Example:

13. Damage can be Local or Systemic

Local –

Systemic –

14. Acute or chronic?

Acute –

Chronic –

15. Toxicity, LD_{50}

- Lethal Dose, 50% kill
  -
  -
  -
  -

- Correlating rat-doses to human – doses:
  -

Solution to the problem above:

16. Measuring Toxicity, TLV

- TLV =
-
-
-

17. Variables Affecting Toxicity

-
-
-
-
-
-
-

18. Safety Data Sheets

Information found on SDS:

-
-
-
-
-
-

19. First Aid:

Toxic Chemicals Name _____

Write a summary of your learning today.

Include each of these concepts, used correctly, to receive credit:

- Toxicity
- Pictogram symbols
- Routes of entry and prevention
- PPE and when to wear it
- Damage to structure and function
- Local or systemic
- Acute or chronic
- Factors affecting toxicity