

Science 7 - The Basics of Chemistry

Where to find the answers:

Go to: The Core 7 Website

Choose: *Chemistry Unit*

Click on: *'Boundless Chemistry Text Book'*

Click on: *'Overview of Chemistry'*

Read: *'The Study of Chemistry'*

Answer the following questions (from the "Key Terms" section under "KEY TAKEAWAYS"). (2 marks – 1 mark each)

1. What is matter? _____

2. What is matter? _____

Go back to the *'Boundless Chemistry Textbook'*

Click on: *'Classification of Matter'*

Read: *'Three States of Matter'*

3. What are the three states of matter? (3 marks – 1 mark each)

Scroll down-Watch the video 'Phase Changes' (you will need your headphones)

4. What are these processes called? (4 marks – 1 mark each)
- Change from solid to liquid _____
 - Change from liquid to gas _____
 - Change from gas to liquid _____
 - Change from liquid to solid _____

Name: _____

5. Draw a diagram or illustration to help you remember these phase changes. (4 marks)

6. What do you add to go from a solid to liquid to gas, and remove to go from gas to a liquid to a solid? (1 mark)

7. By changing their _____, we change how _____ / _____ the particles in a substance are moving. (2 marks – 1 mark each)

Go back to the **Core 7 Science Chemistry Page**

Click on: 'Elements, Compounds, and Mixtures Textbook'

Read: Everything except the 'Investigations' and the 'Understanding and Inquiring' questions.

Section - 7.1

8. What particles are all substances made of? (1 mark) _____

9. What were old-fashioned scientists called? (1 mark) _____

10. What 12 important substances were discovered during those ancient times by ancient scientists? (6 marks – 1/2 mark each)

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Name: _____

11. Ancient scientists discovered that these 12 _____ could not be _____ into other substances. (2 marks – 1 mark each)

12. They gave the name _____ to the substances that could not be broken down. (1 mark)

13. Over time, they discovered that _____ elements exist naturally. (1 mark)

Section - 7.2

14. Give a simplified definition for atom. (1 mark)

15. We now know that each element is made of its own particular kind of _____. (1 mark)

Inside the Atom:

16. It is now known that all atoms are made up of smaller _____. (1 mark)

What's in a name?

17. As new elements were _____, scientists found it important to agree on what to call them. (1 mark)

18. Each new element was given a name and a chemical

Name: _____

_____. (1 mark)

19. What are the symbols for: (4 marks – 1 mark each)

Oxygen: _____

Nitrogen: _____

Carbon: _____

Hydrogen: _____

20. When there is already an element starting with the same capital, letter, the new element has a _____ added after the capital. (1 mark)

21. What is one example of a different element and its symbol? (1 mark)

Section - 7.3

22. Make a simplified definition for the following terms. Use point form, not full sentences. Give an example of each. You can get more information for these definitions from the homepage as well. (6 marks - 2 marks each)

a. element- _____

example: _____

b. compound- _____

example: _____

c. mixture- _____

Name: _____

example: _____

Section - 7.5

23. Scientists began to discover that some elements had things in

_____. (1 mark)

24. They decided to organize these elements into _____. This

organizational system led to a chart of elements called the

_____. (2 marks – 1 mark each)

Go back to the **Core 7 Science Chemistry Page**

Click on: Video Titled, 'What is an Atom – Basics for Kids'
(You will need headphones)

25. What does the word 'atom' mean? (1 mark)

26. Everything is made up of molecules, but _____

are made up of _____. So _____ are the smallest

units of everything. (3 marks – 1 mark each)

Name: _____

If you have any time left, your job is to use it to search the Weebly for new and interesting information. Enjoy!

27. Then...make a list of at least 3 new things you learned from working on this Chemistry Assignment. (6 marks – 2 marks each)

1.

2.

3.