

5-2 IONIC BONDS

Name _____

Per _____ Date _____

Ions (pgs. 185-186)

1. An atom or group of atoms that has an electric charge is called a(n)

_____.

2. When an atom loses an electron, it becomes a

- a. positive ion
- b. negative ion

3. When an atom gains an electron, it becomes a

- a. positive ion
- b. negative ion

4. Ions that are made of more than one atom are called

_____.

5. Use the table in your book.

NAME	CHARGE	SYMBOL or FORMULA
Sodium		
Magnesium		
Chloride		
Sulfate		

6. Is a carbonate ion positive or negative? (CO_3^{2-}) _____
How many electrons does it have? _____7. What kind of ion does a sodium atom become? _____
What kind of atom does a chlorine atom become? _____
(positive or negative)

8. What is the definition of ionic bond?

9. Give an example of 2 ions that can form an ionic bond. _____

CHEMICAL FORMULAS AND NAMES (pg. 187)

10. What is the definition of a chemical formula? _____

11. The ions will come together in a way that _____ out the charges.

12. For $MgCl_2$ what is the 2 called? _____
What does it mean? _____
(number of atoms or number of molecules)

13. Which comes first in a name - positive ion or negative ion?

14. If negative ion is single, the name will end in _____

PROPERTIES of IONIC COMPOUNDS (pgs. 188-189)

15. What are three properties of ionic compounds?

16. What is a crystal? _____

17. In an ionic compound, which ions are attracted to each other?

18. Why do ionic bonds have high melting points?

- The ionic bonds are strong.
- The ionic bonds are weak.

19. All ionic bonds are _____ at room temperature.
(solid, liquid, gas)

20. Ionic compounds conduct electricity when _____
in water.

7-3 Evolution

A Variety of Species (pg. 242)

1. List 2 ways that genetic variations might occur.

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2. Species with a lot of _____ in their gene pools can adapt better to changes in the environment.

How Do New Species Form? (pg. 243)

3. TRUE or FALSE When a group of individuals remains isolated from the rest of its species long enough to evolve different traits, a new species can form.

4. What are 3 ways that isolation can occur?

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Inferring Species Relationships (pg. 244-5)

5. TRUE or FALSE The more closely related species are, the more similar their DNA sequences.

Extinction of Species (pg. 245-6)

6. Why can changes in the environment cause extinction? _____

7. Name 2 ways that an environment can change.

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8. How could a change in climate lead to extinction?

9. TRUE or FALSE Environmental changes always lead to extinction because organisms do not have the traits to help them survive.