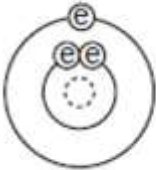
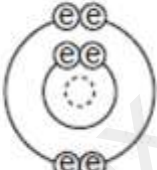
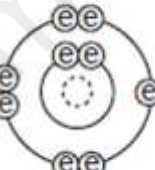
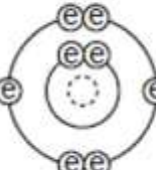
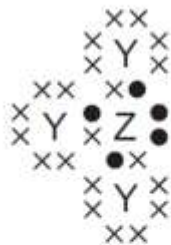


No:	COVALENT AND IONIC BONDS-SET-1															
1	<p>Covalent bonds are formed when electrons are .....1..... . Covalent compounds have .....2..... electrical conductivity.</p> <p>Which words correctly complete gaps 1 and 2?</p> <table border="1" data-bbox="329 447 753 699"> <thead> <tr> <th></th> <th>1</th> <th>2</th> </tr> </thead> <tbody> <tr> <td><b>A</b></td> <td>shared</td> <td>high</td> </tr> <tr> <td><b>B</b></td> <td>shared</td> <td>low</td> </tr> <tr> <td><b>C</b></td> <td>transferred</td> <td>high</td> </tr> <tr> <td><b>D</b></td> <td>transferred</td> <td>low</td> </tr> </tbody> </table>		1	2	<b>A</b>	shared	high	<b>B</b>	shared	low	<b>C</b>	transferred	high	<b>D</b>	transferred	low
	1	2														
<b>A</b>	shared	high														
<b>B</b>	shared	low														
<b>C</b>	transferred	high														
<b>D</b>	transferred	low														
2	<p>The diagrams show the electron arrangements in the atoms of four elements.</p> <p>Which element does <b>not</b> form a covalent bond?</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p><b>A</b></p>  </div> <div style="text-align: center;"> <p><b>B</b></p>  </div> <div style="text-align: center;"> <p><b>C</b></p>  </div> <div style="text-align: center;"> <p><b>D</b></p>  </div> <div style="margin-left: 20px;"> <p>key</p> <p>ⓔ electron</p> <p>⦿ nucleus</p> </div> </div>															

3

The diagram shows the outer shell electron arrangement of compound J that contains the elements Y and Z.



What type of compound is J?

- A an alloy
- B a macromolecule
- C covalent
- D ionic

4

In which compounds are pairs of electrons shared between atoms?

- 1 sodium chloride
- 2 methane
- 3 lead bromide

- A 1 only
- B 2 only
- C 1 and 3
- D 1, 2 and 3

5

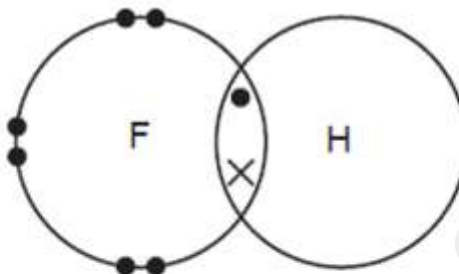
In which compounds are pairs of electrons shared between atoms?

- 1 methane
- 2 lead bromide
- 3 sodium chloride

- A 1 only
- B 2 only
- C 1 and 3
- D 1, 2 and 3

6

The diagram shows a molecule of hydrogen fluoride.



In the molecule hydrogen fluoride, HF,

- A the hydrogen and fluorine share a pair of electrons.
- B the hydrogen and fluorine share a pair of protons.
- C the hydrogen gives the fluorine an electron.
- D the hydrogen gives fluorine a proton.

7

Which statement about gaseous hydrogen chloride and solid potassium chloride is correct?

- A Hydrogen chloride is covalent but potassium chloride is ionic.
- B Hydrogen chloride is ionic but potassium chloride is covalent.
- C They are both covalent compounds.
- D They are both ionic compounds.

8

The table shows the electronic structures of four atoms.

atom	electronic structure
W	2,1
X	2,7
Y	2,8,4
Z	2,8,8

Which two atoms combine to form an ionic compound?

- A** W and X      **B** W and Y      **C** X and Y      **D** X and Z

9

The following statement is about chemical bonds.

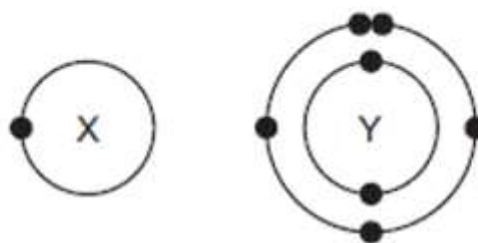
Covalent bonds are formed by the ...1... of electrons. Covalent substances have ...2... electrical conductivity.

Which words complete the statement?

	1	2
<b>A</b>	sharing	high
<b>B</b>	sharing	low
<b>C</b>	transfer	high
<b>D</b>	transfer	low

10

The electronic structures of atoms X and Y are shown.



X and Y form a covalent compound.

What is its formula?

**A**  $XY_5$

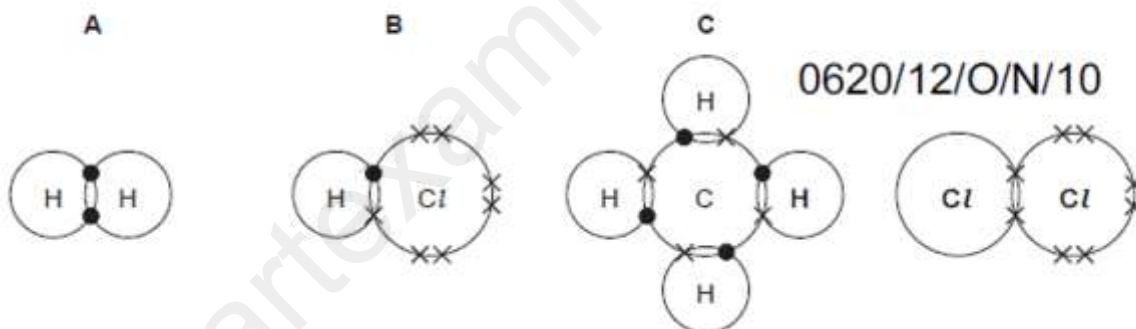
**B**  $XY_3$

**C**  $XY$

**D**  $X_3Y$

11

Which diagram does **not** show the outer shell electrons in the molecule correctly?



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