

QUESTION TEMPLATE

Answer

BING-BING-TOE REVIEW GAME

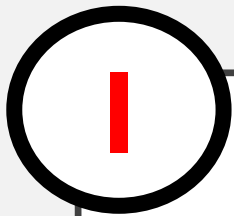
Honors Chemistry:
Naming, Neutral Compounds, and Lewis Dot Structures

BING-BING-TOE GAME RULES

		FREE Space		

BING-BING-TOE GAME RULES

- Even seat # side of room – X
- Odd Seat # side of room – O
- 2 players from each team go head to head (standing by opposite team)
- Team may not help
- First team to hold up board with correct answer gets to play a square.
- Teams lose points for trying to distract the other team or help their team with answers.
- Each BING-TOE = 1 point



HOW MANY VALENCE
ELECTRONS DOES
ALUMINUM HAVE?

3 valence electrons

2

HOW IS A COVALENT BOND FORMED?

Electrons are shared

3

WHAT IS THE NAME GIVEN
TO THE ELECTRONS IN THE
HIGHEST OCCUPIED ENERGY
LEVEL OF AN ATOM?

Valence electrons

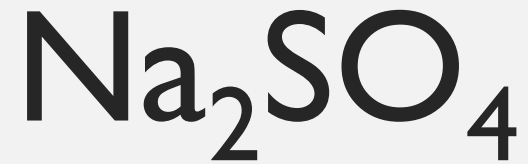
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WHAT DOES CALCIUM DO
IN ORDER TO FORM AN
IONIC BOND?

It gives up two electrons

5

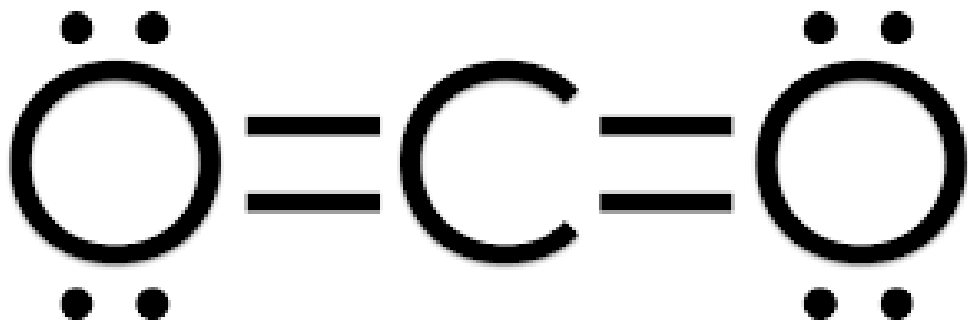
WHAT IS THE FORMULA
FOR SODIUM SULFATE?



6

DRAW THE LEWIS DOT
STRUCTURE FOR CARBON
DIOXIDE AND HOW MANY
LONE PAIRS DOES IT HAVE?

Lewis Structure for CO₂



4 lone pairs

7

WHAT IS THE ELECTRON
CONFIGURATION FOR
STRONTIUM?

$1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2$

8

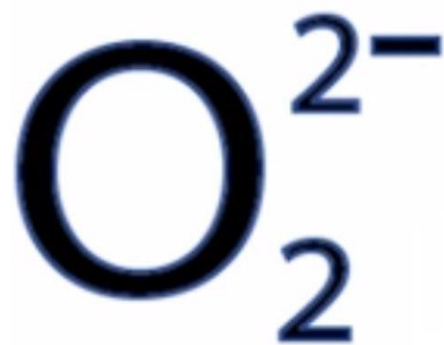
WHAT IS THE NAME OF THE
FOLLOWING COMPOUND:



Copper (IV) Sulfate

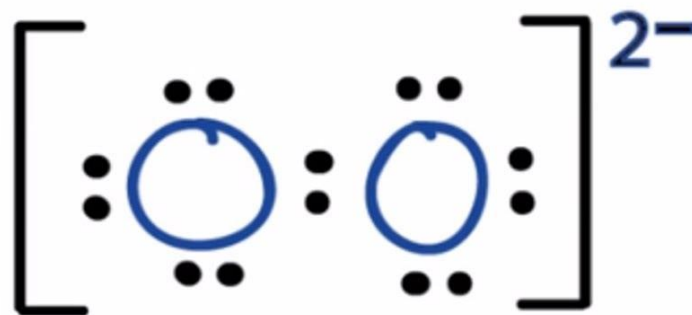
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DRAW THE LEWIS DOT STRUCTURE FOR PEROXIDE



$$6(2) + 2 = 14$$

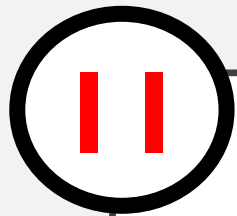
Peroxide Ion



10

WHAT IS THE CHARGE ON
THE COMPOUND SODIUM
SULFIDE?

Neutral!



WHICH IS MORE
ELECTRONEGATIVE –
OXYGEN OR CARBON?

Oxygen

12

WHAT KIND(S) OF
ELEMENTS DO YOU (USUALLY)
NEED TO FORM AN IONIC
COMPOUND?

A metal and a non metal

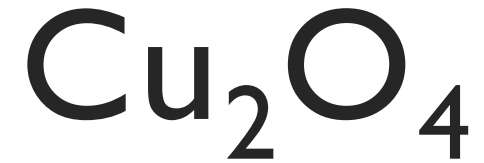
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WHEN CAN YOU FORM AN
IONIC BOND WITHOUT
HAVING A METAL PRESENT?

When you have polyatomic ions

14

WHAT IS WRONG WITH
THE FOLLOWING FORMULA?



It isn't reduced!!!

15

FILL IN THE BLANKS: IONIC
BONDS FORM WHEN ONE
ATOM HAS _____ ELECTRON
AFFINITY AND ONE HAS
_____ IONIZATION ENERGY

High

Low

16

HOW MANY e- DOES
BARIUM GIVE UP TO ACHIEVE
A NOBLE GAS CONFIG.?
WHAT IS THAT CONFIG. IN
NOBLE GAS FORMAT?

2 electrons $[\text{Kr}]5s^24d^{10}5p^6$

17

WHAT TYPE OF ELEMENTS
DO YOU NEED TO FORM A
COVALENT BOND?

Non metals

18

WHAT TYPE OF BOND IS IN
COPPER AND DESCRIBE
HOW THE e^- 's BEHAVE IN
THIS TYPE OF BOND?

Metallic. Sea of e^- s, delocalized e^- s,
mobile e^- s, detached e^- s, free
flowing e^- s, etc etc etc

19

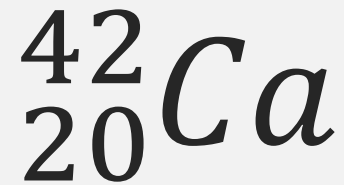
WHAT IS THE NAME OF THE
FOLLOWING COMPOUND?



Chromium (II) phosphate

20

COMPLETE THE
FOLLOWING RXN AND
NAME THE TYPE OF RXN.



Beta emission

21

DO COVALENT BONDS
EXIBIT HIGH OR LOW
ELECTRONEGATIVITY
DIFFERENCES?

Low

22

NAME THE DIATOMIC ELEMENTS.

$\text{H}_2, \text{N}_2, \text{O}_2, \text{F}_2, \text{Cl}_2, \text{Br}_2, \text{I}_2$

Don't forget,

Horses Need Oats For Clear Brown Eyes (I)!

23

WRITE THE FORMULA FOR
POTASSIUM NITRATE.



24

DRAW THE LEWIS DOT
STRUCTURE FOR BERYLLIUM
FLUORIDE.



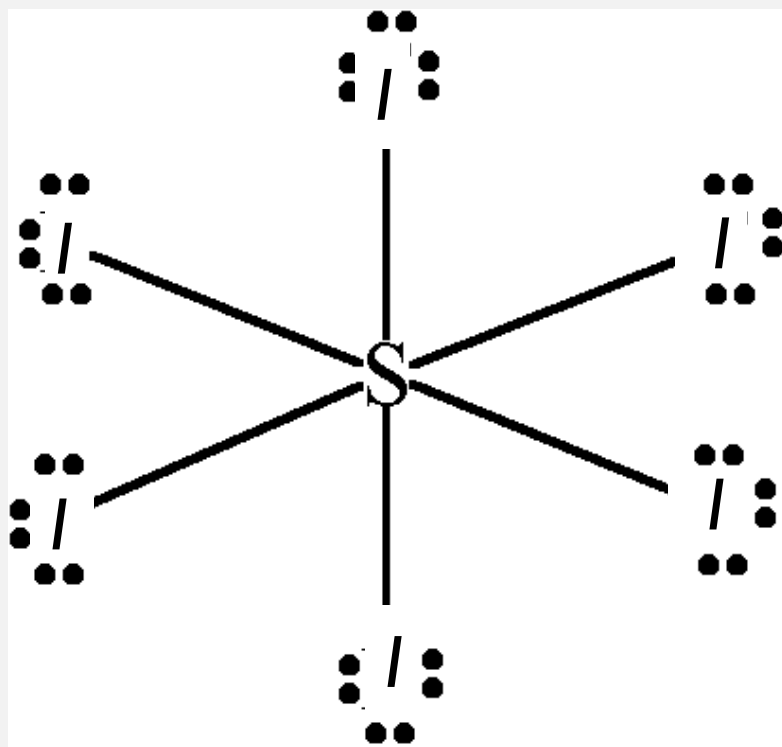
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WHAT IS THE FORMULA
FOR CH₄?

Carbon tetrahydride

26

DRAW THE LEWIS STR. FOR
SULFUR HEXAIODIDE.



27

WHAT IS THE NAME OF
THE COMPOUND Si_2Br_6

Disilicon hexabromide

28

WHAT IS THE NAME FOR
THE FOLLOWING
COMPOUND?



Tetraphosphorous decoxide

29

WHAT IS THE FORMULA
FOR SILVER NITRATE?



30

WHAT IS THE FORMULA
FOR POTASSIUM CHLORITE?



31

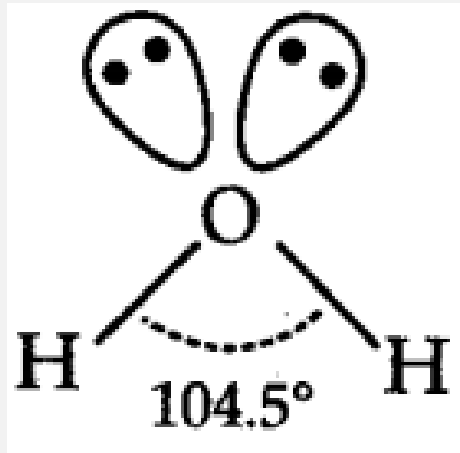
WHAT IS THE FORMULA
OF THE COMPOUND
STRONTIUM PHOSPHITE?



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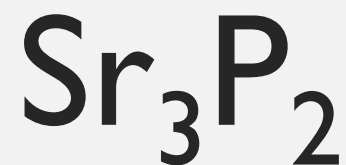
WHY IS A WATER
MOLECULE BENT? DRAW ME
A PICTURE!

It has lone pairs that distort the shape



33

WHAT IS THE FORMULA OF
THE COMPOUND
STRONTIUM PHOSPHIDE?



34

HOW MANY ITEMS ARE IN A
MOLE?

$$6.02 \times 10^{23}$$

35

WHAT IS THE NAME OF
THE POLYATOMIC ION NH_4^+ ?

Ammonium