

Chemical Bonding Task Cards

CHEMICAL BONDING

The diagram below shows what type of bond?

- A. Covalent
- B. Ionic
- C. Metallic
- D. Hydrogen



CHEMICAL BONDING

Which atom would become an ion with a 1+ charge?

- A. Beryllium
- B. Magnesium
- C. Chlorine
- D. Lithium



CHEMICAL BONDING

What kind of chemical bond is shown in the picture below?

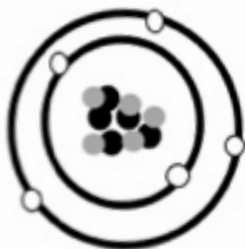
- A. Ionic
- B. Metallic
- C. Covalent
- D. Colloid



CHEMICAL BONDING

How many valence electrons are shown?

- A. 4
- B. 8
- C. 3
- D. 2



CHEMICAL BONDING

In the Lewis-dot structure below, how many electrons are needed for a filled outermost energy level?

- A. 0
- B. 1
- C. 8
- D. 7



Thank You!

Thank you for downloading my Chemical Bonding Task Card set! I hope you and your students enjoy using these task cards. I find them great for reviewing a topic and for enrichment after the topic has been introduced.

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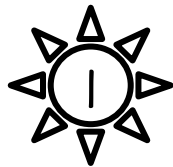
Background art by Rebecca B Designs:

<https://www.teacherspayteachers.com/Store/Rebeccab-Designs>

How to Use This Product

- This packet includes 20 task cards, a student answer sheet, and a teacher answer key.
- Simply print and make copies of the task card pages (pg. 4-8 of this document), and then cut apart. There are two student answer sheets per page (pg. 9 of this document).
- You might also consider laminating the task cards for durability.
- Students can complete the task cards independently, in pairs, or small groups.
- I prefer to have my students work in small groups and simply place the pre-cut task cards in a Ziploc baggie for each group.

CHEMICAL BONDING



A type of chemical bond that is formed from the attraction of an atom that has lost an electron for an atom that has gained an electron is called a(n)

- A. Covalent bond
- B. Ionic bond
- C. Metallic bond
- D. Hydrogen bond

CHEMICAL BONDING



A type of chemical bond that consists of positive ions in a sea of electrons is a(n)

- A. Covalent bond
- B. Ionic bond
- C. Metallic bond
- D. Hydrogen bond

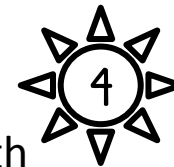
CHEMICAL BONDING



Which two elements have the same number of valence electrons?

- A. Carbon and Aluminum
- B. Boron and Carbon
- C. Nitrogen and Phosphorus
- D. Oxygen and Fluorine

CHEMICAL BONDING



Magnesium is an alkaline-earth metal. What is the chemical symbol for a magnesium ion?

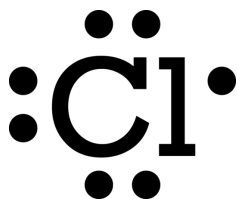
- A. Mg -2
- B. Mg +2
- C. Mn -2
- D. Mn +2

CHEMICAL BONDING

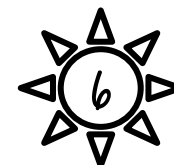


In the Lewis-dot structure below, how many electrons are needed for a filled outermost energy level?

- A. 0
- B. 1
- C. 8
- D. 7



CHEMICAL BONDING



When atoms lose electrons during chemical bonding, they become

- A. Positively charged ions
- B. Negatively charged ions
- C. Neutral ions
- D. Chemically charged ions

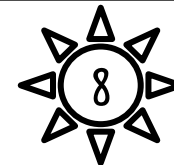
CHEMICAL BONDING



HCl is an example of what type of bond?

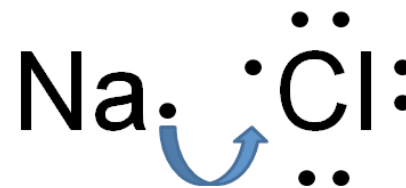
- A. Ionic bond
- B. Covalent bond
- C. Metallic bond
- D. Colloid bond

CHEMICAL BONDING



The diagram below shows what type of chemical bond?

- A. Covalent
- B. Ionic
- C. Metallic
- D. Hydrogen

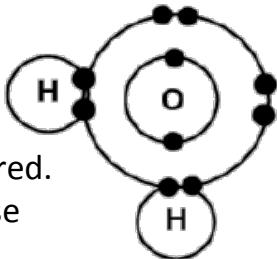


CHEMICAL BONDING

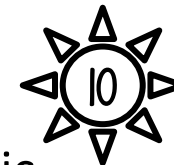


Which statement is true about the picture below?

- A. The bond is ionic because electrons are being shared.
- B. The bond is ionic because electrons are being transferred.
- C. The bond is covalent because electrons are being shared.
- D. The bond is covalent because electrons are being transferred.



CHEMICAL BONDING



What family on the periodic table is unreactive?

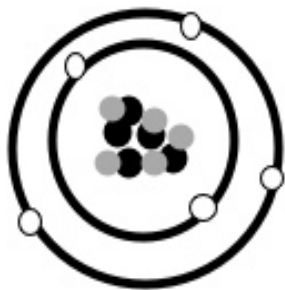
- A. Halogens
- B. Noble Gases
- C. Alkali Metals
- D. Alkaline-Earth Metals

CHEMICAL BONDING

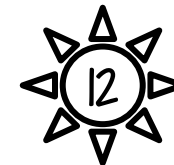


How many valence electrons are shown?

- A. 4
- B. 8
- C. 3
- D. 2



CHEMICAL BONDING



What do the following items have in common: pizza, cup of water, soup, puppy?

- A. They are all solids
- B. They are all liquids
- C. They are all alive
- D. They are all made of atoms

CHEMICAL BONDING



What is true about the circled elements?

- A. They are nonmetals.
- B. They are halogens.
- C. They will become negative ions.
- D. They have one valence electron.

Periodic Table of Elements																	
IA	IIA		III A to VIII A										VIIA	VIIIA			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
H	He	Li	Be	B	C	N	O	F	Ne	Na	Mg	Al	Si	P	S	Cl	Ar
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
Cs	Ba	Lanthanides	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
87	88	89-103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118
Fr	Ra	Actinides	Rf	Db	Sg	Bh	Hs	Mt	120	121	122	123	124	125	126	127	128

CHEMICAL BONDING



This diagram shows a way of representing...



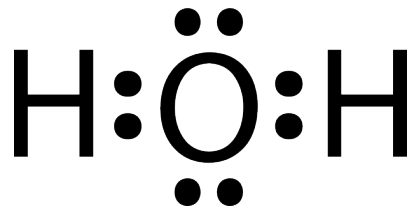
- A. The number of electrons bromine has
- B. The number of valence electrons bromine has
- C. The number of protons bromine has
- D. The number of neutrons bromine has

CHEMICAL BONDING

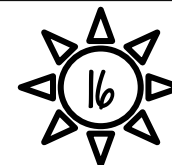


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- C. Covalent
- D. Colloid



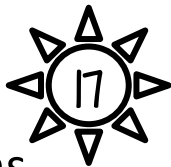
CHEMICAL BONDING



Which element from period 3 has the lowest atomic mass?

- A. Sodium
- B. Scandium
- C. Argon
- D. Aluminum

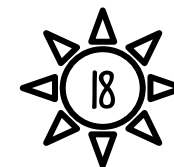
CHEMICAL BONDING



How many valence electrons do the Halogens have?

- A. 1
- B. 2
- C. 7
- D. 17

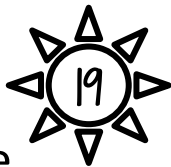
CHEMICAL BONDING



Which of the following is held together by an ionic bond?

- A. CO_2
- B. H_2O
- C. SO_2
- D. CaCl_2

CHEMICAL BONDING



Which atom would become an ion with a 1+ charge?

- A. Beryllium
- B. Magnesium
- C. Chlorine
- D. Lithium

CHEMICAL BONDING



How many valence electrons does the Chlorine atom need to gain to have a full outer energy level?

- A. 0
- B. 1
- C. 7
- D. 8

Name: _____ Period: _____

Chemical Bonding Task Cards

Directions: Use this sheet to fill out your answers to the 20 task cards.

1.	2.	3.	4.
5.	6.	7.	8.
9.	10.	11.	12.
13.	14.	15.	16.
17.	18.	19.	20.

Name: _____ Period: _____

Chemical Bonding Task Cards

Directions: Use this sheet to fill out your answers to the 20 task cards.

1.	2.	3.	4.
5.	6.	7.	8.
9.	10.	11.	12.
13.	14.	15.	16.
17.	18.	19.	20.

Chemical Bonding Task Cards (Multiple Choice)

Answer Key

1. B – Ionic Bond	2. C – Metallic Bond	3. C – Nitrogen and Phosphorus	4. B – Mg +2
5. B – 1	6. A – Positively charged ions	7. B – Covalent bond	8. B - Ionic
9. C – The bond is covalent because electrons are being shared	10. B – Noble Gases	11. C – 3	12. D – They are all made of atoms
13. D - They have one valence electron	14. B – The number of valence electrons bromine has	15. C – Covalent	16. A – Sodium
17. C – 7	18. D – CaCl ₂	19. D – Lithium	20. B – 1