

Name: _____

Collisions Username: _____

Class: _____

Ionic Bonding Quest

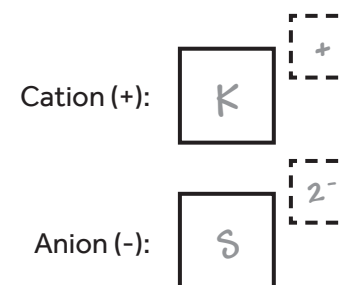
Now that you have completed the Ionic Bonding Challenges, you are ready to conduct this Ionic Bonding Quest.

MISSION 1. GATHER YOUR INTEL

Use your Collisions gameplay experience to gather the following intel:

- Determine the cation in the target.
 - Label the element symbol(s) in the large square.
 - Write the charge in the smaller, dashed box.
- Determine the anion in the target.
 - Label the element symbol(s) in the large square.
 - Write the charge in the smaller, dashed box.

Sample Target



MISSION 2. EXPOSE THE DETAILS

Use your expertise to expose the following information for each target.

Sample Target	
Chemical Formula	K_2S
Compound Name	Potassium Sulfide
Lewis Structure	$[K]^+ [:\ddot{S}:]^{2-}$
Formula Mass (g/mol)	110.27 g/mol

Ionic Bonding - Challenge Level 1

MISSION 1. GATHER YOUR INTEL

Target 1

Cation (+):

Anion (-):

MISSION 2. EXPOSE THE DETAILS

Target 1	
Chemical Formula	
Compound Name	
Lewis Structure	
Formula Mass (g/mol)	

Ionic Bonding - Challenge Level 2

MISSION 1. GATHER YOUR INTEL

Target 1

Cation (+):

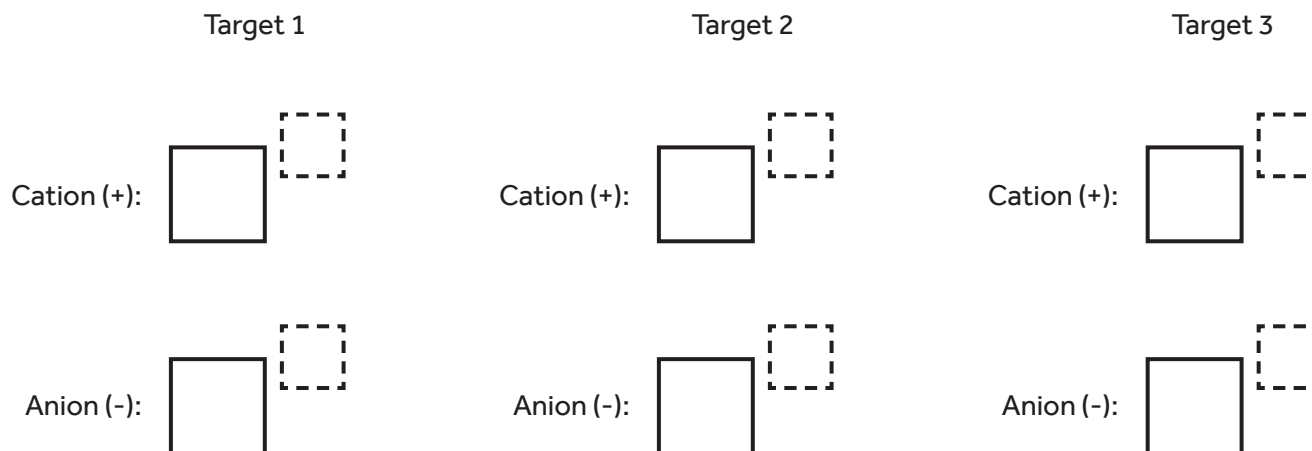
Anion (-):

MISSION 2. EXPOSE THE DETAILS

Target 1	
Chemical Formula	
Compound Name	
Lewis Structure	
Formula Mass (g/mol)	

Ionic Bonding - Challenge Level 3

MISSION 1. GATHER YOUR INTEL



MISSION 2. EXPOSE THE DETAILS

	Target 1	Target 2	Target 3
Chemical Formula			
Compound Name			
Lewis Structure			
Formula Mass (g/mol)			

Ionic Bonding - Challenge Level 4

MISSION 1. GATHER YOUR INTEL

Target 1

Cation (+):

Anion (-):

MISSION 2. EXPOSE THE DETAILS

Target 1	
Chemical Formula	
Compound Name	
Lewis Structure	
Formula Mass (g/mol)	

Ionic Bonding - Challenge Level 5

MISSION 1. GATHER YOUR INTEL

	Target 1	Target 2
Cation (+):	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
Anion (-):	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>

MISSION 2. EXPOSE THE DETAILS

	Target 1	Target 2
Chemical Formula		
Compound Name		
Lewis Structure		
Formula Mass (g/mol)		

Ionic Bonding - Challenge Level 6

MISSION 1. GATHER YOUR INTEL

	Target 1	Target 2	Target 3
Cation (+):	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
Anion (-):	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>

MISSION 2. EXPOSE THE DETAILS

	Target 1	Target 2	Target 3
Chemical Formula			
Compound Name			
Lewis Structure			
Formula Mass (g/mol)			

Ionic Bonding - Challenge Level 7

MISSION 1. GATHER YOUR INTEL

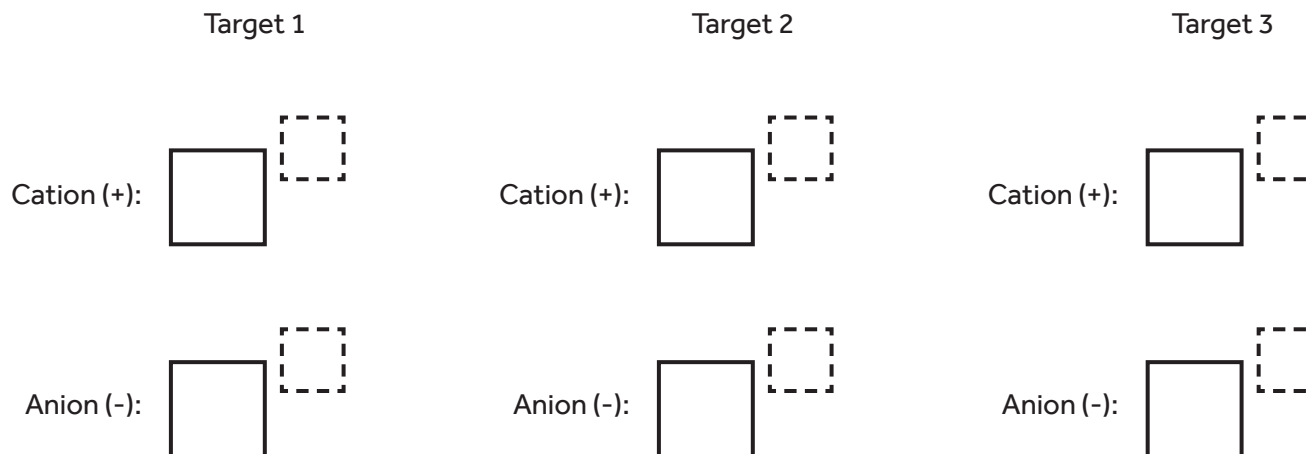
	Target 1	Target 2	Target 3
Cation (+):	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
Anion (-):	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>

MISSION 2. EXPOSE THE DETAILS

	Target 1	Target 2	Target 3
Chemical Formula			
Compound Name			
Lewis Structure			
Formula Mass (g/mol)			

Ionic Bonding - Challenge Level 8

MISSION 1. GATHER YOUR INTEL

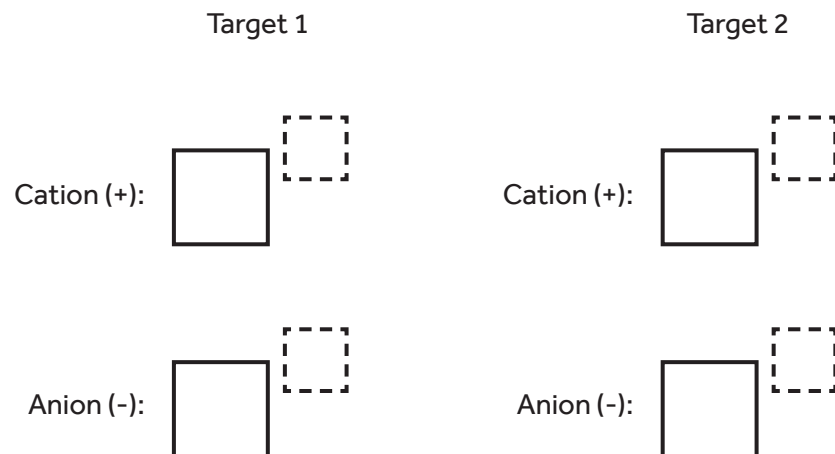


MISSION 2. EXPOSE THE DETAILS

	Target 1	Target 2	Target 3
Chemical Formula			
Compound Name			
Lewis Structure			
Formula Mass (g/mol)			

Ionic Bonding and Ions - Connected Level 1

MISSION 1. GATHER YOUR INTEL

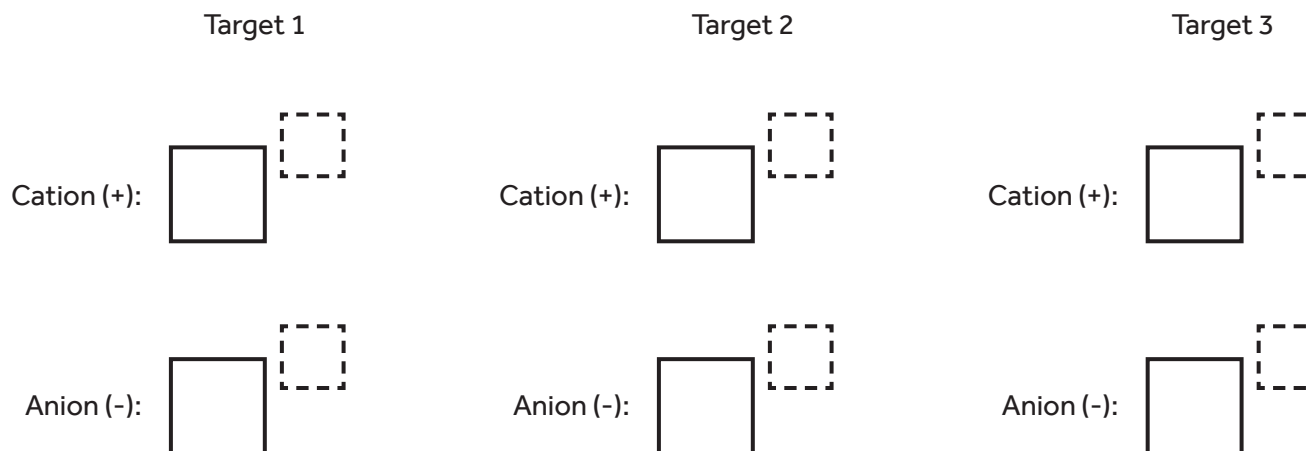


MISSION 2. EXPOSE THE DETAILS

	Target 1	Target 2
Chemical Formula		
Compound Name		
Lewis Structure		
Formula Mass (g/mol)		

Ionic Bonding and Ions - Connected Level 2

MISSION 1. GATHER YOUR INTEL

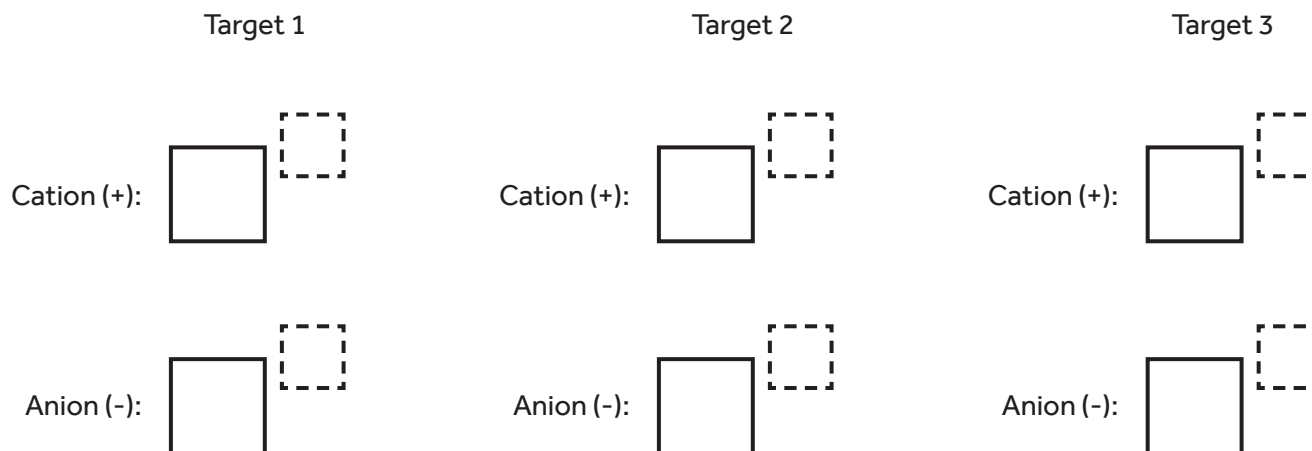


MISSION 2. EXPOSE THE DETAILS

	Target 1	Target 2	Target 3
Chemical Formula			
Compound Name			
Lewis Structure			
Formula Mass (g/mol)			

Ionic Bonding and Ions - Connected Level 3

MISSION 1. GATHER YOUR INTEL

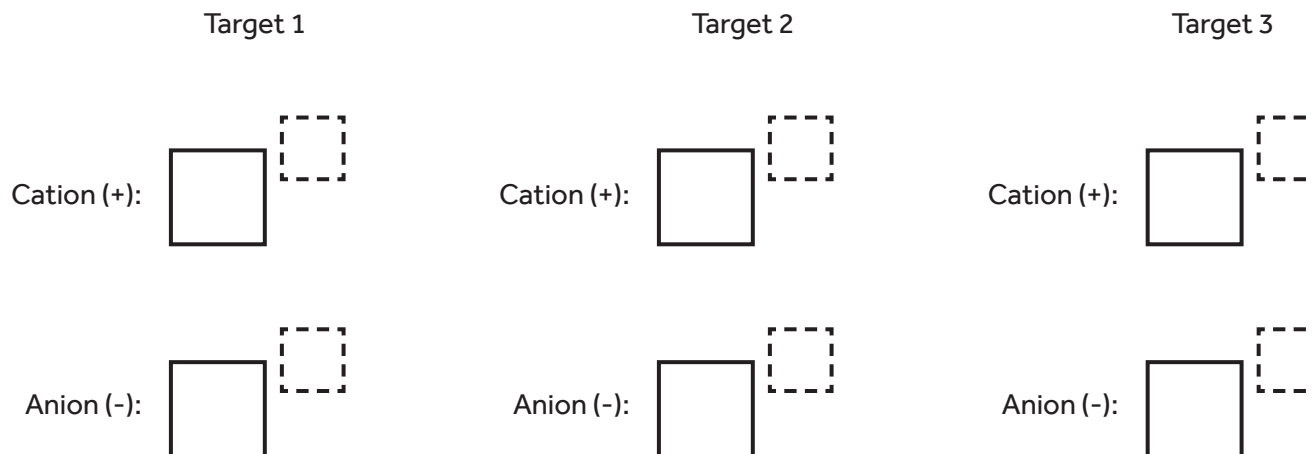


MISSION 2. EXPOSE THE DETAILS

	Target 1	Target 2	Target 3
Chemical Formula			
Compound Name			
Lewis Structure			
Formula Mass (g/mol)			

Ionic Bonding and Acids & Bases - Connected Level 1

MISSION 1. GATHER YOUR INTEL



MISSION 2. EXPOSE THE DETAILS

	Target 1	Target 2	Target 3
Chemical Formula			
Compound Name			
Lewis Structure			
Formula Mass (g/mol)			

Ionic Bonding and Acids & Bases - Connected Level 2

MISSION 1. GATHER YOUR INTEL

	Target 1	Target 2	Target 3
Cation (+):	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
Anion (-):	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>

MISSION 2. EXPOSE THE DETAILS

	Target 1	Target 2	Target 3
Chemical Formula			
Compound Name			
Lewis Structure			
Formula Mass (g/mol)			

Ionic Bonding and Acids & Bases - Connected Level 3

MISSION 1. GATHER YOUR INTEL

	Target 1	Target 2	Target 3
Cation (+):	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
Anion (-):	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>

MISSION 2. EXPOSE THE DETAILS

	Target 1	Target 2	Target 3
Chemical Formula			
Compound Name			
Lewis Structure			
Formula Mass (g/mol)			