

Name: _____

Class: _____

Ionic Bonding Quest

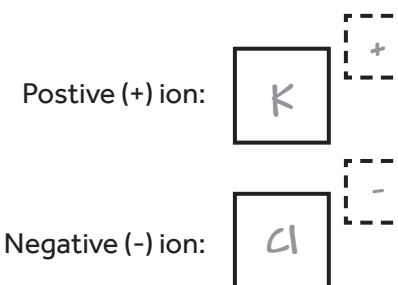
Now that you have completed the Ionic Bonding Challenges, you are ready to conduct this Ionic Bonding Quest.

MISSION 1. GATHER YOUR INTEL

Use your Collisions gameplay experience to gather the following intel:

- Determine the negative ion in the target.
 - Label the element symbol(s) in the large square.
 - Write the charge in the smaller, dashed box.
- Determine the positive ion 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	KCl
Compound Name	Potassium Chloride
Cation	K ⁺
Anion	Cl ⁻
Lewis Structure	$[K]^+ [:\ddot{Cl}:]^-$
Formula Mass (g/mol)	74.55 g/mol

Ionic Bonding - Challenge Level 1

MISSION 1. GATHER YOUR INTEL

Target 1

Positive (+) ion:

Negative (-) ion:

MISSION 2. EXPOSE THE DETAILS

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

Ionic Bonding - Challenge Level 2

MISSION 1. GATHER YOUR INTEL

Target 1

Positive (+) ion:

Negative (-) ion:

MISSION 2. EXPOSE THE DETAILS

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

Ionic Bonding - Challenge Level 3

MISSION 1. GATHER YOUR INTEL

Target 1

Positive (+) ion:

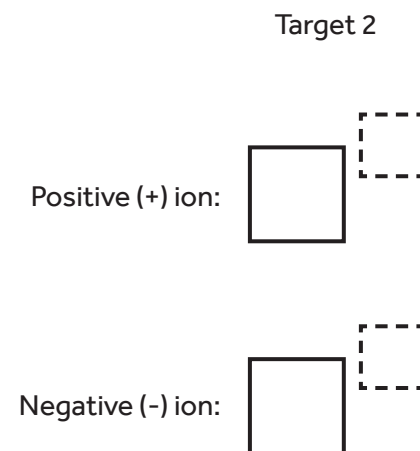
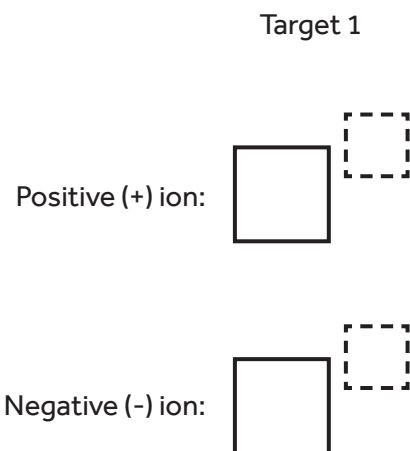
Negative (-) ion:

MISSION 2. EXPOSE THE DETAILS

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

Ionic Bonding - Challenge Level 4

MISSION 1. GATHER YOUR INTEL



MISSION 2. EXPOSE THE DETAILS

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

Ionic Bonding - Challenge Level 5

MISSION 1. GATHER YOUR INTEL

	Target 1	Target 2	Target 3
Positive (+) ion:	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
Negative (-) ion:	<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			
Cation			
Anion			
Lewis Structure			
Formula Mass (g/mol)			

Ionic Bonding - Challenge Level 6

MISSION 1. GATHER YOUR INTEL

	Target 1	Target 2	Target 3
Positive (+) ion:	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
Negative (-) ion:	<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			
Cation			
Anion			
Lewis Structure			
Formula Mass (g/mol)			