

Role-Play Chemical Bonds

Cooperate to role play different kinds of chemical bonds and submit a report comparing/contrasting them.

Detailed Description

Groups of 3-5 students make a presentation in which they:

1. Act out the three kinds of bonds.
2. Explain the forces that hold the bonds together.
3. Relate the bonds to the model of the atom.
4. Compare and contrast the three kinds of bonds.
5. Name several examples of familiar compounds which use the different kinds of bonds.

Each student turns in a written summary of the presentation which includes these same five items.

Students graded on: group presentation; individual summary

Time to complete: 1 week

Specific Grading Criteria

- Showed understanding of the three kinds of bonds.
- Showed understanding of the forces between molecules.
- Correctly spelled and applied science terms and concepts.
- Clearly and correctly related bonds to the model of the atom.
- Correctly identified examples of compounds which use the three types of bonds.

General Grading Criteria

- Followed directions (on time, as assigned).
- Correct mechanics (spelling, punctuation, capitalization).
- Sentences and word choice correct.
- Sentences complete.
- Organized (logical and clear) and easy to follow.
- Complete (included all details).
- Work neatly done.
- Spoke clearly, spoke loud enough.
- Poised (eye contact, gestures, voice).
- Precise (said only what was necessary).
- Stayed on topic.

Productivity Skills

- Stays focused on completing responsibilities.
- Contributes to the success of a group.
- Uses critical thinking strategies.

Main Standard Assessed

Chemistry

Standard 7: Understand the similarities and differences between bond types.

Performance Indicators

- A. Be able to identify ionic bonding.
- B. Be able to identify metallic bonding.
- C. Be able to identify covalent bonding.
- D. Know the forces between molecules.

Other Standard Assessed

Chemistry

Standard 1: Be able to apply science to life.

Performance Indicators

- A. Higher thinking (relate).
- B. Communications (present, explain).

Difficulty: .5

District Code: _____

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Role-Play Chemical Bonds

Name: _____ Date: _____

Specific Grading Criteria	12	9	6	3	0
• Showed understanding of the three kinds of bonds.					
• Showed understanding of the forces between molecules.					
• Correctly spelled and applied science terms and concepts.					
• Clearly and correctly related bonds to the model of the atom.					
• Correctly identified examples of compounds which use the three types of bonds.					

General Grading Criteria	4	3	2	1	0
• Followed directions (on time, as assigned).					
• Correct mechanics (spelling, punctuation, capitalization).					
• Sentences and word choice correct.					
• Sentences complete.					
• Organized (logical and clear) and easy to follow.					
• Complete (included all details).					
• Work neatly done.					
• Spoke clearly, spoke loud enough.					
• Poised (eye contact, gestures, voice).					
• Precise (said only what was necessary).					
• Stayed on topic.					

Productivity Skills	Yes	No
• Stays focused on completing responsibilities.		
• Contributes to the success of a group.		
• Uses critical thinking strategies.		

"Goes Beyond" Criteria	12	9	6	3	0
Creativity, extra effort, depth, higher thinking, understanding (Specify)					
Total Points					