Ionic bonding: knowledge check

1. What type of bonding does this diagram represent? Circle the answer.

covalent bonding ionic bonding metallic bonding



1. Use the words to complete the sentences.

attracted electrostatic forces ionic

negatively non-metal transferred

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ bonding – this bond is formed when electrons are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ from a metal to a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, forming positively charged and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ charged ions. Strong \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ attract the oppositely charged ions to each other.

Ionic bonding: test myself

1. What types of elements are involved in ionic bonding?

Circle the correct answer.

metal and non-metal metals only non-metals only

1. Are ionic bonds strong or weak? Use the correct word to complete the sentence.

strong weak

Ionic bonds are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. What type of forces hold the particles together in an ionic bond? Use the correct word to complete the sentence.

covalent forces electrostatic forces ionic forces

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of attraction hold the particles together in an ionic bond.

1. What do the curly arrows represent in the diagram?



Use the correct word to complete the sentence.

atoms electrons ions shared transferred

The curly arrows represent \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ being \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ from one atom to another.

Ionic bonding: feeling confident?

1. Complete the bonding diagram of the reaction between sodium and fluorine.



Ionic bonding: what do I understand?

Think about your answers and confidence level for each mini-topic. Decide whether you understand it well, are unsure or need more help. Tick the appropriate column.

|  |  |  |  |
| --- | --- | --- | --- |
| **Mini-topic** | **I understand this well** | **I think I understand this** | **I need more help**  |
| I can interpret diagrams representing ionic bonds. |  |  |  |
| I know that there are ions in ionic bonds. |  |  |  |
| I know about electrostatic forces in ionic bonds. |  |  |  |
| I know the types of elements involved in ionic bonds. |  |  |  |
| **Feeling confident? topics** | **I understand this well** | **I think I understand this** | **I need more help** |
| I can complete a diagram to represent the formation of an ionic bond. |  |  |  |