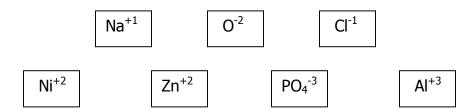
Chemical Matchmaker

Jill was handed an assortment of index cards. Each index card had the chemical symbol for an ion written on it, as shown below.



1. Jill formed compounds using the index cards. She combined sodium and zinc to form the compound Na₂Zn. Is this a possible compound? Why or why not?

2. Jill then wrote formulas for all the possible compounds that sodium could form with the other ions. What formulas did she write?

- 3. Jill also wrote formulas for the ionic compounds listed below. Identify whether each formulas is correct or incorrect. If the formula is incorrect, change it to make it correct.
 - a. ZnCl₃
 - b. Al₃O₂
 - c. Ca₃(PO₄)₂