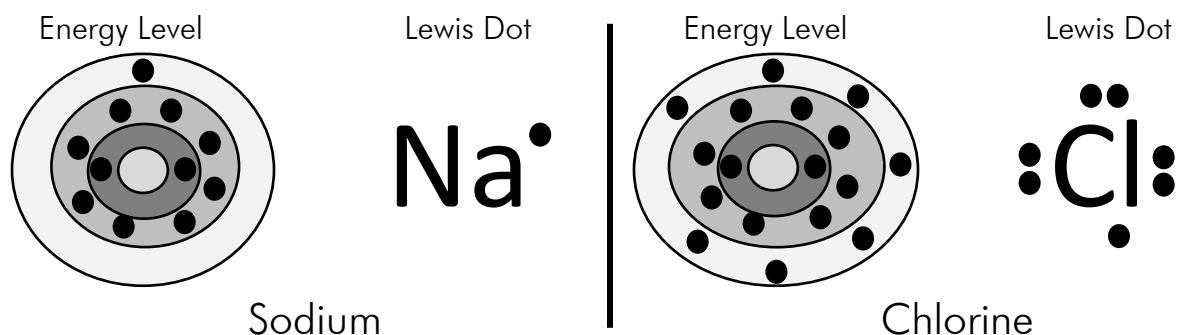


# Lewis Dot Diagrams

Answer the following questions about Lewis dot diagrams.

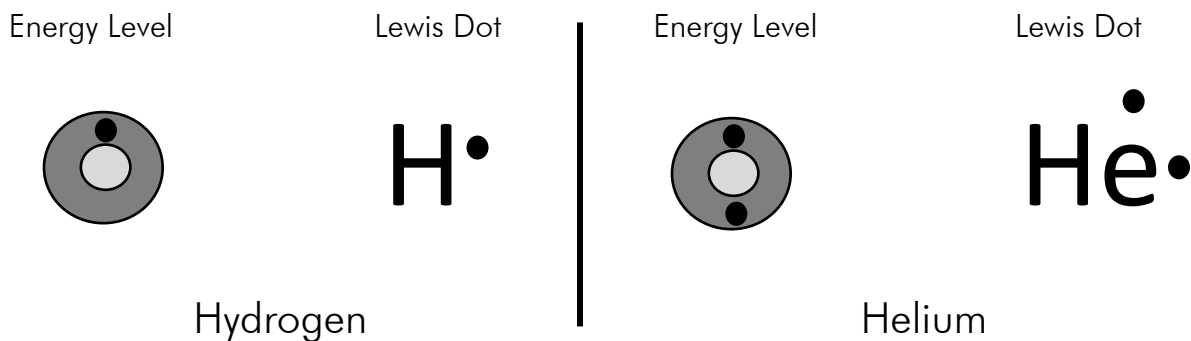
Compare the energy level diagrams to the Lewis dot diagrams.



What do you notice about the dots in each diagram? \_\_\_\_\_

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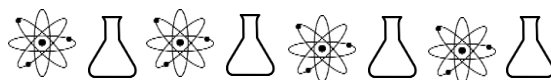
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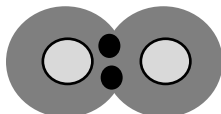
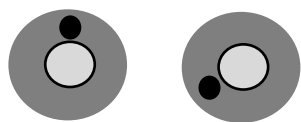
Why are the number of dots associated with hydrogen and helium the same on each type of diagram? \_\_\_\_\_

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(continued on next page)



Compare the energy level diagram for a covalent bond in the hydrogen molecule  $H_2$  with the Lewis dot diagram of the same bond.



What do the two dots represent between the Hs? \_\_\_\_\_

What do the two lines represent? \_\_\_\_\_

Draw a Lewis dot diagram for the covalent bond of two hydrogen atoms to one oxygen atom in a water molecule. Use dots in the first diagram and lines in the second.

