

Spacing grid example

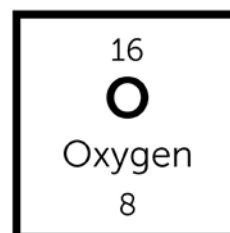
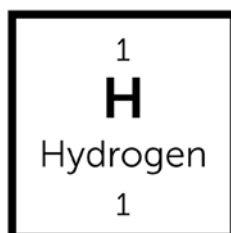
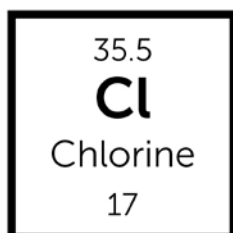
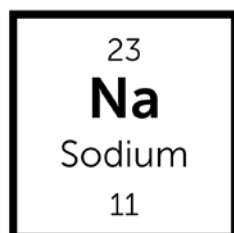
Education in Chemistry

September 2019

rsc.li/2NqeJTm

Use a spacing grid like this to give pupils retrieval cues.

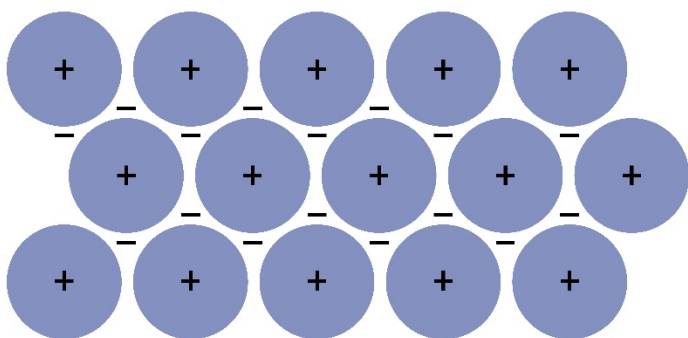
Draw the bonding in sodium chloride (NaCl) and water (H₂O).



Explain how sodium chloride has a high melting and boiling point, but water has a low melting and boiling point.

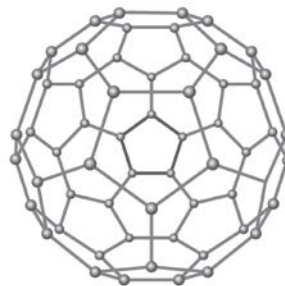
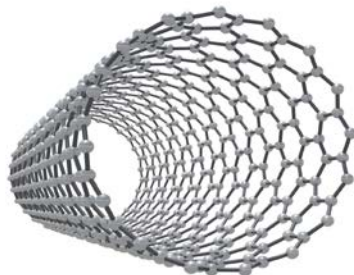
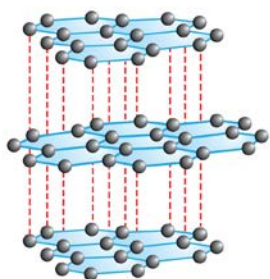
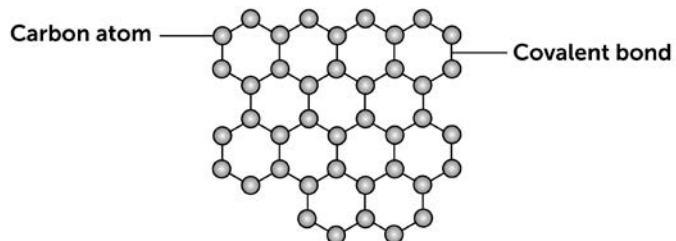
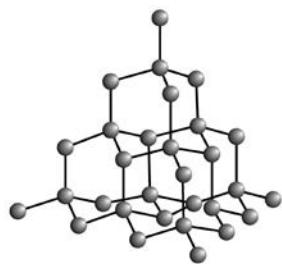
What other properties do ionic compounds have?

Using this model of closely packed positive metal ions and a sea of delocalised electrons, explain why **metals**:



- Have high melting and boiling points:
- Are good conductors of heat and electricity:
- Are malleable and ductile:

Allotropes of carbon – name each one. What can you remember?



How are the above allotropes (other than diamond) able to conduct electricity?