1. Why are the interactions between H<sub>2</sub>O molecules stronger than those between HF molecules, even though the polarity of the HF bond is larger than the polarity of the OH bond. 2. Why don't more than four water molecules interact with a central water molecule? 3. What would you predict would be the relative boiling points of methanol (CH<sub>3</sub>OH) and ethane (CH<sub>3</sub>CH<sub>3</sub>) - which have similar molecular weights? Explain your answer. 4. What would you predict would be the relative boiling points of methanol (CH<sub>3</sub>OH) and ethanol (CH<sub>3</sub>CH<sub>2</sub>OH)? Explain your answer.