

Solutions

Each answer shows the steps, then the **result**.

2.1

- Its oxygen pulls electrons more strongly, giving a slightly negative O and slightly positive H (uneven charge)

2.2

- A hydrogen bond

2.3

- It stabilizes the temperature of cells/organisms/habitats (resists rapid temperature change)

3.1 B

- polar

3.2

(a)

- Cohesion and adhesion

(b)

- Water molecules are polar, so the slightly positive H of one attracts the slightly negative O of another, holding the molecules together

3.3

- Hydrogen bonds absorb a lot of energy before the temperature rises, so water (and the organisms in it) warms and cools slowly, buffering them against sudden temperature swings