

Solutions

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

2.1

- A surface (road, roof) that water cannot soak into

2.2

- It increases runoff and reduces infiltration

2.3

- Cities being warmer than surrounding rural areas

3.1 B

- the urban heat island effect

3.2

(a)

- Paving stops water soaking in, so more runs off quickly over the hard surfaces, overwhelming drainage and causing floods

(b)

- Any one: green roofs, permeable pavement, preserving green space, denser development

3.3

- Dark paved surfaces and buildings absorb and re-radiate heat, and there is little vegetation to cool the air by shade and transpiration, so cities stay hotter