

Solutions

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

2.1

- Any one: livestock, rice paddies, landfills, natural-gas leaks

2.2

- How much heat a gas traps relative to the same mass of CO₂

2.3

- Methane

3.1 B

- a much higher global warming potential per molecule

3.2

(a)

- Livestock
- methane; coal
- CO₂

(b)

- Methane has a much higher global warming potential, so even small amounts trap a lot of heat

3.3

- Industrialization greatly increased the burning of fossil fuels (and deforestation), releasing CO₂ faster than natural processes remove it, so it accumulates