

- 19** The total energy input  $E_{\text{in}}$  in a process is partly transferred to useful energy output  $U$ , and partly to energy that is wasted  $W$ .

What is the efficiency of the process?

**A**  $\frac{U}{W} \times 100\%$

**B**  $\frac{W}{E_{\text{in}}} \times 100\%$

**C**  $\frac{U}{E_{\text{in}}} \times 100\%$

**D**  $\frac{U+W}{E_{\text{in}}} \times 100\%$

- 20** Why does an ideal gas exert pressure on its container?