7 A camera drone of mass 1.20 kg hovers at a fixed point above the ground. The drone has four propellers.



In a time of 1.00 s, each propeller pushes a mass of 0.400 kg of air vertically downwards.

Assume that the air above the propellers is stationary.

What is the speed of the air leaving each propeller?

- **A** $0.750\,\mathrm{m\,s^{-1}}$
- **B** $3.00\,\mathrm{m\,s^{-1}}$
- **C** $7.36 \,\mathrm{m \, s^{-1}}$
- **D** $29.4 \,\mathrm{m \, s^{-1}}$

8 A box rests on the Earth, as shown.

Newton's third law describes how forces of the same type act in pairs. One of the forces of a pair is the weight W of the box.

Which arrow represents the other force of this pair?

