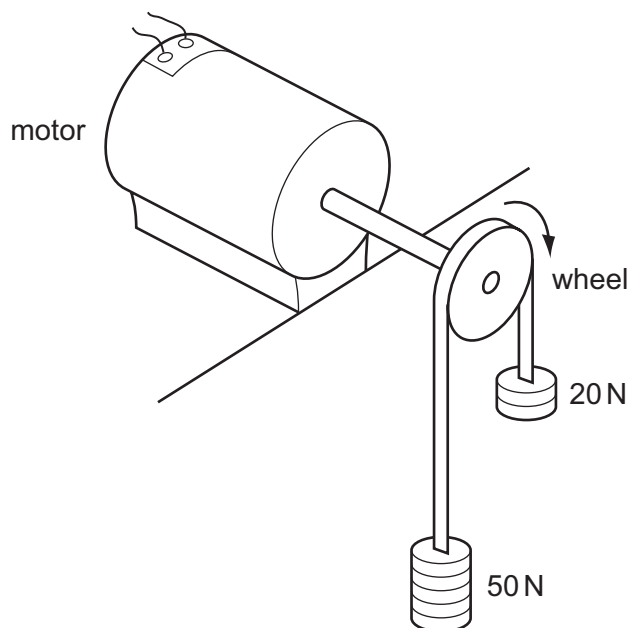


- 16** The diagram shows an arrangement used to find the output power of an electric motor.

The wheel attached to the motor's axle has a circumference of 0.5 m and the belt which passes over it is stationary when the weights have the values shown.



If the wheel is making 20 revolutions per second, what is the output power of the motor?

- A** 300 W **B** 500 W **C** 600 W **D** 700 W
- 17** Ice at a temperature of 0°C is a rare example of a solid that floats on its liquid form, in this case water, when they are both at the same temperature.

What is the explanation for this?

- A** The average speed of the molecules in the ice is greater than the average speed of the molecules in the water.
- B** The average speed of the molecules in the water is greater than the average speed of the molecules in the ice.
- C** The mean separation of the molecules in the ice is greater than the mean separation of the molecules in the water.
- D** The mean separation of the molecules in the water is greater than the mean separation of the molecules in the ice.

Space for working