14 A student investigated the terminal velocity of steel spheres falling through oil.

The student obtained the following results.

radius of steel sphere = 1.50 mm
volume of steel sphere = $1.41 \times 10^{-8}\,m^3$
mass of steel sphere = 1.10×10^{-4} kg
maximum speed of sphere = $0.849\,m\,s^{-1}$

The student had the following table.

Type of oil	Density at 26 °C / kg m^{-3}	Viscosity at 26 °C / Pa s
Corn	918	0.0447
Hazelnut	918	0.0504
Sunflower	918	0.0414

(a) Identify which type of oil the student used.

(4)

(b) The values in the table are for oil at 26 °C.

Explain the effect of carrying out the investigation with oil at a lower temperature.

(2)

(Total for Question 14 = 6 marks)