$$v_{rms} = \sqrt{\frac{3k_B T}{m}}$$

$T_1 = 10°C = 283\,K$
$T_2 = 1000°C = 1273\,K$
} must use T in Kelvin!

$(v_{rms})_1 = \sqrt{\frac{3kT_1}{m}}$ and $(v_{rms})_2 = \sqrt{\frac{3k_B T_2}{m}}$

So:

$$\frac{(v_{rms})_2}{(v_{rms})_1} = \left(\frac{T_2}{T_1}\right)^{1/2} = \underline{2.121}$$