



2. This question is about metals.

Look at the table. It shows some properties of three metals.

	Density in g/cm <sup>3</sup>	Relative electrical conductivity (0 = low, 100 = high)	Relative strength (0 = weak, 1000 = very strong)	Corrosion in moist air	Cost per tonne in £
Aluminium	2.7	40	300	does not corrode	770
Copper	8.9	64	400	corrodes slowly	5900
Iron	7.9	11	600	corrodes	200

Look at the picture. It shows overhead power cables used by electric trains.



Suggest what **properties** are needed by a metal used to make the overhead power cables.

Which metal in the table would you use and why?



*The quality of written communication will be assessed in your answer to this question.*

-----

-----

-----

-----

-----

-----

-----

-----

END OF QUESTION PAPER