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| **Answer sheet** | Country code (2 letters) |   | Student number (1-5) |   |

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| 1.1 | Average speed $v=$ | 1.3 |

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| 1.2a | Time $t\_{10\%}$ to reduce speed by 10 %: $t\_{10\%}=$  | 0.7 |
| 1.2b | $E\_{kin}/E\_{melt} =$  | 0.3 |

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| 1.3a | Heat diffusion: $(α,β,γ,δ)=$ | 0.6 |
| 1.3b | $x\left(5 s\right)=$ $x/R\_{M}=$ | 0.4 |

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| 1.4a | Rb-Sr decay scheme: | 0.3 |
| 1.4b | Proof of slope $a(t)=\left(e^{λt}-1\right):$  | 0.7 |
| 1.4c | The age of the meteorite, $τ\_{M}=$ | 0.4 |

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| 1.5 | $$t\_{Encke}=$$ | 0.6 |

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| 1.6a | max $Δθ=$ | 0.7 |
| 1.6b |  $Δτ\_{vrt}=$ | 0.7 |
| 1.6c |  $Δτ\_{tan}=$ | 0.7 |

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| 1.7 | Maximum impact speed $v\_{imp}^{max}=$ | 1.6 |

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|  | **Total** | **9.0** |