**Graphical user interface

Description automatically generated with medium confidenceElectricity in the Home** (Phys)

RAG your understanding.

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|  | **Start of Topic** | **End of Topic** | **Revised** |
| **2.3 Domestic uses and safety** |  |  |  |
| P.2.3.1.a - I can explain the difference between direct and alternating voltage and current, stating that UK mains is an a.c. supply of 50 Hz and 230 V. |  |  |  |
| P.2.3.2.a - I can identify and describe the function of each wire in a three-core cable. |  |  |  |
| P.2.3.2.b - I can state that the potential difference between the live wire and earth (0 V) is about 230 V, and that both neutral wires and our bodies are at, or close to, earth potential (0 V). |  |  |  |
| P.2.3.2.c - I can explain that a live wire may be dangerous even when a switch in the mains circuit is open by explaining the danger of providing any connection between the live wire and earth. |  |  |  |
| **2.4 Energy transfers** |  |  |  |
| P.2.4.1.a - I can calculate power by recalling and applying the equations:  P = VI and P=I2R |  |  |  |
| P.2.4.2.a - I can describe how appliances transfer energy to the kinetic energy of motors or the thermal energy of heating devices because work is done when charge flows in a circuit. |  |  |  |
| P.2.4.2.b - I can calculate and explain the amount of energy transferred by electrical work by recalling and applying the equations:  E = Pt and E = QV |  |  |  |
| P.2.4.3.a - I can identify the National Grid as a system of cables and transformers linking power stations to consumers. |  |  |  |
| P.2.4.3.b - I can explain why the National Grid system is an efficient way to transfer energy, with reference to change in potential difference reducing current and therefore heat loss, for a given electrical power. |  |  |  |

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| **Doddle Quizzes** | **Mark:** | **Out of:** |
| <https://www.doddlelearn.co.uk/app/teacher/launch-content/e5471d63-8314-4a95-8564-83b9599b3588> |  | 25 |