P4a-d Revision

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| Define static electricity | Like charges  Unlike charges |
| Define ion | Static can be dangerous when |
| Static can be a nuisance when | You can reduce you chance of receiving an electric shock by |

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| Explain how dust precipitators work | Explain how paint sprayers work |
| Explain how defibrillators work |  |

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| What wires have more resistance? | Draw the triangle for the equation  Resistance = voltage / current |
| Describe the relationship between current, voltage and resistance | Describe the functions of the 3 wires in a plug |
| How does a fuse reduce the risk of fire? | Explain how the combination of a wire fuse and earthing protects people |
| Explain why double insulated appliances don’t need an earth | Draw the triangle for the equation  Power = voltage x current |

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| Define the term wavelength | Define the term frequency |
| Define the term compression | Define the term rarefaction |
| Define the term amplitude | Give examples of how ultrasound if used |
| Explain the advantages of ultrasound over x ray |  |

P4e-h Revision

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| Describe how to measure radiation | Show, with an equation, what happens when a carbon-14 atom emits a beta particle |
| Define radioactive decay | Ionising radiation can be dangerous because |
| Show, with an equation, what happens when a uranium-238 atom emits an alpha particle | List 4 uses of radioisotopes |

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| Explain how smoke alarms work | Explain how tracers work |
| Explain how U-238 can help date rocks |  |

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| How can gamma radiation sterilise equipment in hospitals? | Why is alpha radiation not used in therapy and diagnosis? |
| Explain why X rays and gamma rays are useful in medicine | Draw a flow chart to show a nuclear power station |
| Describe what’s meant by nuclear fission |
| Describe what’s meant by ‘chain reaction’ | What do boron rods do in a nuclear power station? |

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| Give two advantages of nuclear power | Give two disadvantages of nuclear power |
| How do we safely dispose of radioactive material? |  |