P2 Revision Sheet

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| Advantages of photocells | Disadvantages of photocells |
| How light produces electricity in a photocell | Factors that affect current and power in a photocell |
| Advantages of wind turbines | Disadvantages of wind turbines |
| How passive solar heating works | How to make solar collectors efficient |

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| How can you increase the current in a dynamo | Describe how an AC generator works |
| Describe how a power station makes electricity | Calculate efficiency (write equation) |

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| Describe which EM waves pass through the atmosphere and which are absorbed | Explain the greenhouse effect |
| State sources of greenhouse gases (water vapour, methane and carbon dioxide) | What is the debate about the greenhouse effect? |

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| Write the triangle for the equation power = voltage x current, and the units | Advantages and disadvantages of fossil fuels |
| Advantages and disadvantages of renewable energy sources (e.g. biomass) | Write the triangle for the equation energy supplied = power x time, and the units |
| Describe advantages and disadvantages of using off peak electricity in the home | Describe the function of a transformer |
| Explain why electricity is transmitted at high voltage through power cables | |

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| Radiation   |  |  |  |  | | --- | --- | --- | --- | | Type of radiation | Use | Penetrating power | How ionising? | |  |  |  |  | |  |  |  |  | |  |  |  |  | | |
| Explain how ionisation damages human cells | Define plutonium |
| Describe ways of disposing of radioactive waste | Explain the problems of dealing with radioactive waste |

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| Define comet | Define meteor |
| Define black hole | Define centripetal force |
| Why do planets have a circular orbit? | Define light year |
| State disadvantages of manned space travel | Describe advantages and disadvantages of unmanned space craft |

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| Desribe the formation of the Earth-Moon system | Describe the evidence for the formation of the moon |
| Describe asteroids | Describe evidence for asteroid collisions with Earth |
| Explain the position of the asteroid belt | Describe comets |
| Why does a comets speed change as it approaches a star? | Describe how observations of NEOs can be used to determine their trajectories |
| Explain why it is difficult to observe NEOs | How can we reduce the threat of NEOs? |

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| State evidence for Big Bang Theory | Describe the end of the life cycle of a small star |
| Describe the end of the life cycle of a large star | Describe the life history of a star |
| Describe the properties of a black hole | Evidence of Copernicus and Galileo |