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K Education Centre



GCSE Physics - Energy

P3: Energy Resources

Assignment Questions

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P3: Energy Resources

Q: Give advantages and disadvantages of nuclear fuel over other fuels.

Q: What is a renewable resource of energy? Give examples.

Q: A solar water panel heats the water flowing through it from 15°C to 70°C when water flows through at a rate of 0.020 Kilograms per second.

a) Calculate the energy transferred by hot water from the solar panel.

b) Estimate the output temperature of the hot water if the flow rate is reduced to 0.006 kg/s. Specific heat capacity of water is $4200\text{ J/Kg}^{\circ}\text{C}$.

Q: Give advantages and disadvantages of renewable energy resources.

Q: Why nuclear power cannot replace fossil fuels completely?

Q: Name the type of power station that can be started fastest.

Q: How variable demand of electricity is met?

Q: What does carbon neutral? Give an example of a biofuel.

Q: Which type of power station is the least suitable for connecting to the national grid to meet a sudden increase in demand. Give reason for your answer.