Sankey Diagrams

1 1 An electrical fan transfers energy in order to create a flow of air. Some of the types of energy involved in the transfer are shown below. Kinetic energy Heat energy Electrical energy Sound energy 1 (a) (i) What is the relationship between the total energy input and total energy output from the [1 mark] 1 (a) (ii) Here is a Sankey diagram showing information about the energy transfers for the fan. Kinetic energy Electrical energy 150 J 100 J Sound energy Heat energy Complete the Sankey diagram to show the amounts of sound and heat energy transferred. [2 marks] 1 (a) (iii) Calculate the **percentage** efficiency of the fan.

[2 marks] Efficiency % (Total 5)

End