Science KS3 Assessment Framework

	Beginning Grade 1	Working Towards Grade 2-3	Expected Grade 4-5	Exceeding Grade 6-7	Excelling Grade 8-9
Energy	I can: State how work is calculated. State that thermal insulators reduce energy loss compared to thermal conductors. State some sources of infrared radiation.	I can: State that machines change the size of forces or distances. Describe simply what happens in conduction and convection. State some properties of infrared radiation. Describe some sources of infrared radiation, and how energy is transferred.	I can: Apply the conservation of energy to simple machines. Calculate work done. Describe how energy is transferred by particles in conduction and convection. Describe how a thermal insulator can reduce energy transfer. Describe different ways to insulate in terms of conduction, convection and radiation.	I can: Compare the work done in different scenarios and by different machines. Explain how conservation of energy applies in one example. Explain in detail the processes involved during heat transfers. Compare the different ways that energy is transferred.	I can: Evaluate results (including random and systematic errors) and suggest how the experiment can be improved. Explain why certain materials are good thermal insulators. Explain how thermal equilibrium can be established.