

Curriculum Links

By Doaa George

Year 8: Energy appears in different forms, including movement (kinetic energy), heat and potential energy, and energy transformations and transfers cause change within systems.

Discusses how scientific understanding and technological developments have contributed to finding solutions to problems involving energy transfers and transformations

Year 9: Ecosystems consist of communities of interdependent organisms and abiotic components of the environment; matter and energy flow through these systems.

Chemical reactions, including combustion and the reactions of acids, are important in both non-living and living systems and involve energy transfer. Energy transfer through different mediums can be explained using wave and particle models.

Year 10: Energy conservation in a system can be explained by describing energy transfers and transformations) Applies models, theories and laws to explain situations involving energy, force and motion. Explains how scientific understanding about energy conservation, transfers and transformations is applied in systems

	Demonstrated inquiry	Prescribed inquiry	Structured inquiry	Guided inquiry	Open inquiry
Questions	No question	Teacher provides question	Learner sharpens question	Learner selects question	Learner poses questions
Plans	No planning	Teacher provides procedure	Teacher discusses possible plans	Learner guided while planning	Learner determines plans
Conducts	Teacher conducts	Learner told how to conduct and record	Learner sharpens plan and conducts	Learner guided while conducting and recording	Learner conducts and records
Analyse	Teacher analyses	Learner told how to analyse data	Teacher discusses possible analyses	Learner guided in analysis	Learner analyses data identifying trends
Problem Solve	No problem solving	Teacher provides reasoning and links	Teacher discusses reasoning and conclusion	Learner guided in reasoning and formulate conclusion	Learner reasons to formulate conclusions
Communicate	No conclusion	Teacher writes conclusion	Learner writes conclusion	Learner guided on justifying findings and communicating	Learner justifies findings and conclusions