High Tunstall College of Science Curriculum Intent

Subject: Trilogy Physics Year: 10

Thread 1—Energy



| Topic | Physics Thread 1—Energy | | Progress | | |
|--------|--|---|----------|---|--|
| | Key ideas | R | Α | G | |
| Energy | I can identify energy stores | | | | |
| | I can explain how energy is transferred in a system | | | | |
| | I can calculate specific heat capacity | | | | |
| | I can calculate energy efficiency | | | | |
| | I can consider the current issues associated with the increasing demand for energy | | | | |
| | I can apply my learning and use contextualised information to solve problems and suggest solutions | | | | |

| Lesson | Learning Focus | Assessment | Key Words |
|--------|---|--|--|
| 1 | What are energy stores and systems? | SOLO taxonomy | Energy store, transfers, ki- netic, thermal, sound, gravi- tational, elastic |
| 2 | What is specific heat capacity and how do we calculate it? | Completion of progress tasks and differentiated questions | Specific heat capacity, mass, temperature change |
| 3 | RPA Specific Heat Capacity | Completion of RPA and conclusions made | Specific heat capacity, mass, temperature change |
| 4 | How do we calculate efficiency? | Calculation of energy efficiency of different appliances | Efficiency, wasted, useful |
| 5 | How can we use renewable energy to solve the energy crisis? | Production of a proposal to suggest appropriate energy resources, with justification for these | Renewable, non-renewable |