 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



   Compare the running costs of fluorescent and filament light bulbs.

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| Know - |  | Apply21 |
| Ideas |  |  |  |
| K1 | We pay for our domestic electricity usage based on the amount of energy transferred. |  | A1 | Compare the amounts of energy transferred by different foods and activities. |
| K2 | Electricity is generated by a combination of resources which each have advantages and disadvantages. |  | A2 | Compare the energy usage and cost of running different home devices. |
|  |  | A3 | Explain the advantages and disadvantages of different energy resources. |
| Skill |
| K3 | Calculate the cost of home energy usage, using the formula: cost = power (kW ) x time (hours) x price (per kWh). |  | A4 | Represent the energy transfers from a renewable or non-renewable resource to an electrical device in the home. |
|  |  |  |  |
| Facts |
| K4 | Food labels list the energy content of food in kilojoules (kJ). |  |  |  |
|  |  |  |  |
| Key words |
| K6K5 | **Power:** How quickly energy is transferred by a device (watts). |  |  |  |
|  | **Energy resource:** Something with stored energy that can be released in a useful way. |  |  |  |
| K7 | **Non-renewable:** An energy resource that cannot be replaced and will be used up. |  |  |  |
| K8 | **Renewable:** An energy resource that can be replaced and will not run out. Examples are solar, wind, waves, geothermal and biomass. |  |  |  |
| K9 | **Fossil fuels:** Non-renewable energy resources formed from the remains of ancient plants or animals. Examples are coal, crude oil and natural gas. |  |  |  |
| 3 | Extend |  |  |  |
| E1 | Evaluate the social, economic and environmental consequences of using a resource to generate electricity, from data. |  |  |  |
| E2 | Suggest actions a government or communities could take in response to rising energy demand. |  |  |  |
| E3 | Suggest ways to reduce costs, by examining data on a home energy bill. |  |  |  |
| E4 |  |  |  |  |
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| E5 |  |  |  |  |
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