

## ANSWER GUIDE:

# Going green: sustainable energy

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Term 1, 2019

# Part 1: New power generation


## PAGE 2

Activity title	Answers
What am I?	The old <b>East Perth Power Station</b> , which is still visible across the river from Optus Stadium. To find out more about its history and future plans, search online for 'East Perth power station'.
Nuclear power	Students will have own responses.

## PAGE 3

Activity title	Answers
Renewable v non-renewable	Three: wind, solar and water are renewable energy sources. Fossil and nuclear energy is non-renewable.
Sustainable energy jargon	A) Solar; B) Hydro; C) Bio; D) Geothermal; E) Ocean; F) Wind.
Pros and cons	Students will have own responses.
Jobs in the energy sector	Students will have own responses. Some examples include: Process Engineer, Energy Analyst, Meter Reader, Underground Mine Operator, Environmental Officer, Offshore Driller
True or false?	True. It is also one of the cheapest renewable forms of creating electricity.

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Activity title	Answers
Wind farm word search	
What is the common factor?	They are all on the coast, taking full advantage of wind rolling in from the sea.
Warradarge Wind Farm	Near Eneabba

# Part 2: Powering the home

## PAGE 1

Activity title	Answers
Crossword challenge	Across: 3. Toaster; 7. Charger; 9. Dishwasher; 11. Fan; 12. Freezer. Down: 1. Iron; 2. Vacuum; 4. Oven; 5. Television; 6. Lamp; 8. Kettle; 10. Heater.

## PAGE 2

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No power, no problem	<p>Possible answers:</p> <table border="1"> <thead> <tr> <th>Task</th> <th>Modern day – with electricity</th> <th>Olden days – without electricity</th> </tr> </thead> <tbody> <tr> <td>Cook a meal</td> <td>Microwave, electric stove top</td> <td>Wood BBQ, wood fired stove top</td> </tr> <tr> <td>Wash clothes</td> <td>Washing machine</td> <td>Hand wash on a scrubbing board</td> </tr> <tr> <td>Have a hot bath</td> <td>Shower/ bathtub with hot and cold taps</td> <td>Use cold water or boil water over a fire and bring it to the tub</td> </tr> <tr> <td>Light the house at night</td> <td>Flick on a switch</td> <td>Use candles or kerosene lamps</td> </tr> <tr> <td>Be entertained</td> <td>Computers, gaming consoles</td> <td>Board games, crafts, outdoor play</td> </tr> </tbody> </table>	Task	Modern day – with electricity	Olden days – without electricity	Cook a meal	Microwave, electric stove top	Wood BBQ, wood fired stove top	Wash clothes	Washing machine	Hand wash on a scrubbing board	Have a hot bath	Shower/ bathtub with hot and cold taps	Use cold water or boil water over a fire and bring it to the tub	Light the house at night	Flick on a switch	Use candles or kerosene lamps	Be entertained	Computers, gaming consoles	Board games, crafts, outdoor play
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Easy alternatives	<p>Possible answers:</p> <p>Cool off: use a hand-held fan, take off unnecessary clothes, have a cool shower, have a cold drink, plant trees to create shade around your house.</p> <p>Warm up: put on a blanket or extra clothes, have a warm drink, exercise, close windows and cover gaps that let in cold draughts air.</p>																		

## PAGE 3

Activity title	Answers
Reduce your carbon footprint	<p>Some possible answers:</p> <ul style="list-style-type: none"> <li>• Wash clothes in cold water and line dry them</li> <li>• Switch off appliances at the wall</li> <li>• Turn off lights when leaving a room</li> <li>• Carpool when possible</li> <li>• Plant local, native trees</li> <li>• Buy locally grown produce and compost food waste</li> <li>• Reuse and recycle as much as possible</li> <li>• Buy second hand items</li> <li>• Switch to LED lightbulbs</li> <li>• Reduce water use – shorter showers, turn the tap off when brushing teeth etc.</li> </ul>
Fill in the missing vowels	<ol style="list-style-type: none"> <li>1. Switch to efficient lighting</li> <li>2. Get a home assessment</li> <li>3. Install solar power</li> <li>4. Improve heating and cooling at home</li> </ol>