**Unit P3b Key Words**

Generating energy

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| **1** | **Generator** | System by which electricity is transferred from power stations to consumers through wires and cables |  |
| **2** | **Electromagnetic induction** | In a thermal power station, high pressure steam passes through this which rotates a generator and produces electricity |  |
| **3** | **Alternating current (a.c)** | A power station that uses heat extracted from underground rocks to heat water to produce steam to drive turbines |  |
| **4** | **Renewable energy sources** | Form of hydropower that converts the energy of tides into useful forms of power |  |
| **5** | **Thermal power station** | Resources that can be used to generate electricity without being used up, such as the wind, tides and sunlight |  |
| **6** | **Turbine** | Can be used to alter the voltage of an a.c. electricity supply |  |
| **7** | **Nuclear reactor** | Power obtained by harnessing the energy of the wind |  |
| **8** | **Solar power** | An electric current that reverses direction many times a second |  |
| **9** | **Hydroelectric** | An area of land with a group of energy-producing windmills or wind turbines |  |
| **10** | **Wind farm** | The generation of electricity using flowing water |  |
| **11** | **Wave power** | The name of the process in which a potential difference (and hence often an electric current) is generated in a wire, when it is in a changing magnetic field |  |
| **12** | **Tidal power** | Power obtained by harnessing the energy of the sun’s rays |  |
| **13** | **National grid** | A device that uses motion to generate electricity. It consists of a coil that is rotated in a magnetic field. This produces a potential difference across the ends of the coil, which can then be used to provide an electric current |  |
| **14** | **Transformer** | Uses heat from nuclear reactions in the nuclear fuel to boil water. The steam from the boiling water makes a turbine spin, which in turn makes a generator spin. |  |

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| **2** | **Electromagnetic induction** | In a thermal power station, high pressure steam passes through this which rotates a generator and produces electricity | 6 |  |
| **3** | **Alternating current (a.c)** | A power station that uses heat extracted from underground rocks to heat water to produce steam to drive turbines | 5 |  |
| **4** | **Renewable energy sources** | Form of hydropower that converts the energy of tides into useful forms of power | 12 |  |
| **5** | **Thermal power station** | Resources that can be used to generate electricity without being used up, such as the wind, tides and sunlight | 4 |  |
| **6** | **Turbine** | Can be used to alter the voltage of an a.c. electricity supply | 14 |  |
| **7** | **Nuclear reactor** | Power obtained by harnessing the energy of the wind | 11 |  |
| **8** | **Solar power** | An electric current that reverses direction many times a second | 3 |  |
| **9** | **Hydroelectric** | An area of land with a group of energy-producing windmills or wind turbines | 10 |  |
| **10** | **Wind farm** | The generation of electricity using flowing water | 9 |  |
| **11** | **Wave power** | The name of the process in which a potential difference (and hence often an electric current) is generated in a wire, when it is in a changing magnetic field | 2 |  |
| **12** | **Tidal power** | Power obtained by harnessing the energy of the sun’s rays | 8 |  |
| **13** | **National grid** | A device that uses motion to generate electricity. It consists of a coil that is rotated in a magnetic field. This produces a potential difference across the ends of the coil, which can then be used to provide an electric current | 1 |  |
| **14** | **Transformer** | Uses heat from nuclear reactions in the nuclear fuel to boil water. The steam from the boiling water makes a turbine spin, which in turn makes a generator spin. | 7 |  |