

4 Match the words with their definitions.

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|---------------|--|
| 1 array | a <input type="checkbox"/> a spot where hot water comes up naturally from the ground |
| 2 kinetic | b <input type="checkbox"/> unwanted material left after using |
| 3 tide | c <input type="checkbox"/> a group of things arranged in a particular way |
| 4 hot spring | d <input type="checkbox"/> waste material from animals used as fertiliser |
| 5 to pipe | e <input type="checkbox"/> the process of keeping something in good condition by regularly checking it |
| 6 manure | f <input type="checkbox"/> produced by motion |
| 7 waste | g <input type="checkbox"/> to send a liquid or a gas through a tube |
| 8 maintenance | h <input type="checkbox"/> the regular change in the level of the sea caused by gravitational attraction of the moon and the sun |

5 Read the text about the electrical distribution system and complete it with the words in the box. Then listen and check.

pole demand lower voltages consumers high-voltage
power plants delivery appliances **network** transformer

Electricity distribution is the final stage in the (1) _____ of electricity to end users. In order to be able to use electric power for our daily activities, electricity must be transmitted from the (2) _____ to other areas where it can be distributed to different (3) _____. The electricity generated by power plants is increased or **stepped up** at substations and distributed through (4) _____ transmission lines, in order to minimize energy **losses** and to economise on the material needed for conductors. Transmission lines use voltages as high as 765,000 volts and they are usually connected in a (5) _____. This means that if a station receives an unexpected (6) _____ for electric power, it can call on the other stations to help to meet the demand. Then electrical power is converted from high voltage to (7) _____ thanks to step-down transformers which turn electricity into different power levels. Once it is sent to your neighbourhood, another small (8) _____ mounted on a (9) _____ converts the power to even lower levels to be used at home. The final voltage is between 110 volts – for lights, TVs, and other smaller appliances – and 240 volts for larger (10) _____.

6 Reorder the different stages in the distribution system and match them to the numbers in the picture.

- a ☐ Transmission lines carry high-voltage electricity to different substations.
b ☐ Electricity leaves the power plant.
c ☐ Electricity is **stepped down** by transformers.
d ☐ Current at lower voltages is transmitted to homes and offices.
e ☐ The voltage is increased at a step-up station.
f ☐ Power levels are lowered by small transformers mounted on poles.

