Unit 3 Getting from A to B



Starting off

1 **Work in small groups. Look at the photos. Which of these forms of transport do you think is the:**

- cleanest?
- fastest?
- healthiest?
- most comfortable?
- noisiest?
- most dangerous?
- most exciting?
- quietest?

2 **What types of transport do you use regularly? Why?**

Reading 1

Labelling a diagram

1 **Work in pairs. You are going to read a passage about cars.**

1 Read the title and subtitle of the passage on page 29 and look at the diagram. What do you think the passage will be about?
2 Read the passage quickly and find the advantages of electric cars which are mentioned.

2 **Quickly underline these words (1–8) in the passage on page 29. Then match them with their definitions from the *Cambridge Learner's Dictionary* (*CLD*) (a–h).**

1 existing	a belonging or relating to a town or city
2 urban	b make a connection between two or more people, things or ideas
3 vehicle	c make certain that something is done or happens
4 renewable energy	d something such as a car or bus that takes people from one place to another, especially using roads
5 zero emissions	e when someone or something uses time and energy well
6 efficiency	f which exist or are used at the present time
7 link	g when the power that comes from electricity, etc. can be produced as quickly as it is used
8 ensure	h when no gas is sent out into the air

LIVEWORKSHEETS

The electric revolution

Your next car may be electric. We look at the technologies that will bring the revolution.

The main reasons why electric cars are not more popular at present are their price and their relatively small range. Existing battery systems only allow electric cars to travel a distance of between 100 and 160 km. However, this distance may not be a problem for urban drivers. A recent Sydney study reported that 70 percent of journeys were 30 km or less, and recent data from the US suggests that 77 percent of trips taken there are 48 km or less.

An innovative company called Better Place is aiming to make electric cars an option for all drivers. It wants to see existing vehicles replaced by electric vehicles which, it says, offer a number of benefits. Firstly, they can be powered by renewable energy which produces zero emissions. What is more, electric motors are more efficient and can convert more than 90 percent of power into movement, whereas the efficiency of diesel or petrol engines is less than 20 percent. To achieve its aim, Better Place plans to use technology which is already available.

The plan is simple but revolutionary. It starts with the installation of a home charge point, and through this, the vehicle will be plugged into the electricity grid whenever it is in the garage, typically at night. In the morning, with a fully charged battery, the car is capable of as much as 160 km in urban motoring conditions. In addition to the home charge point, the battery can be topped up by charge points at work and at supermarkets.

The battery is linked to a control centre by smart technology inside the vehicle. Better Place can then ensure that the car is charged with electricity from renewable sources at the cheapest price. For longer trips, a navigation system directs the driver to the nearest switch station, where the depleted battery can be replaced with a charged one by a robot within a couple of minutes.

by Tim Thwaites, issue 29 of *Cosmos*, October 200

3 **Work in pairs. Look at the diagram on the right. What information do you need for each gap?**

4 **Complete the labels on the diagram on the right. Choose NO MORE THAN TWO WORDS AND/OR A NUMBER from the passage for each answer.**

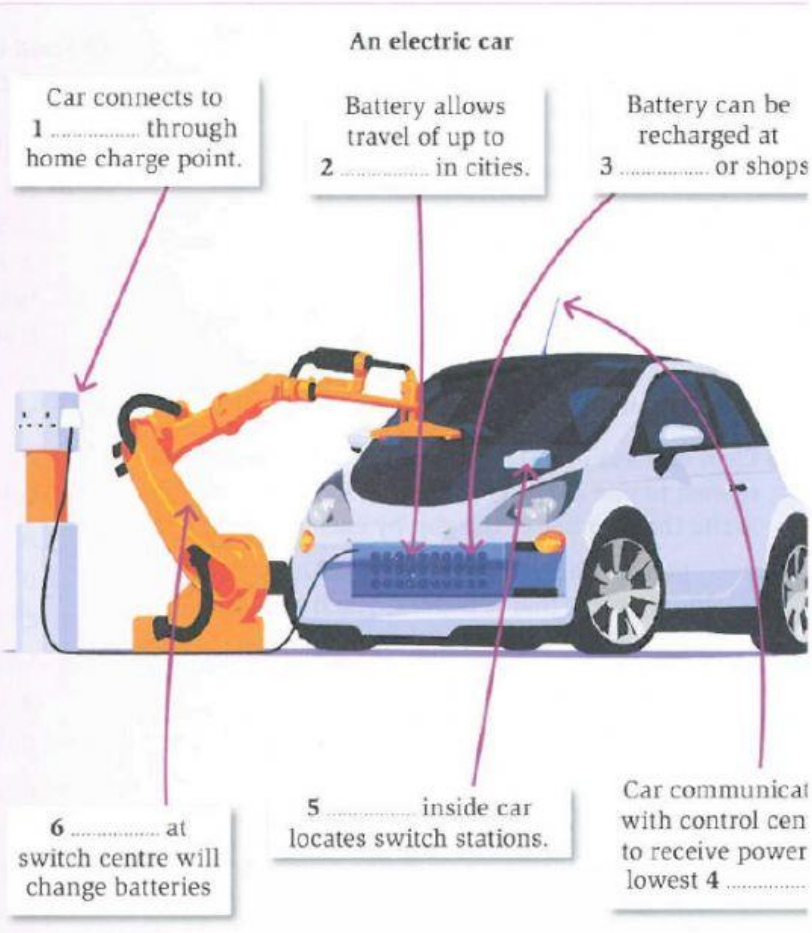
Exam advice *Labelling a diagram*

- Find where the picture(s) is/are dealt with in the passage.
- Find words in the passage that mean the same as the words already on the diagram.
- Decide what type(s) of word you need for each gap.
- Underline the word(s) you need in the passage and copy it/them exactly.

5 **Work in pairs.**

1 Do you think electric cars will replace diesel or petrol cars? Why? / Why not?
2 Would you like to have an electric car? Why? / Why not?

An electric car



LIVEWORKSHEETS