Emphasising technical advantages

10 In pairs, discuss the term *technical advantage*. Give some examples of technology you are familiar with.

11 a Read the first paragraph of some promotional literature from Otis, a leading elevator company. What is the Gen2™ system?

b Match the words (1–6) from the text in Exercise 11a to the synonyms (a–f).

1	conventional	a	decreases
2	eliminates	b	better / the best
3	superior	c	improved
4	energy-efficient	d	standard, usual
5	enhanced	e	gets rid of
6	reduces	f	has low energy consumption

c Complete the following text using the correct form of the words (1–6) in Exercise 11b. You will need to use some words more than once.

OTIS Unique Flat Belt

The key to Otis's patented drive technology

At the heart of the Gen2™ elevator system is a flat belt (developed by and unique to Otis). It is just 3mm thick. Yet it is stronger than **conventional** steel cables. It lasts up to three times longer. And it has enabled Otis to completely re-invent the elevator. The flat, coated-steel belt totally **eliminates** the metal-to-metal effect of conventional systems. Coupled with a smooth-surface crowned machine sheave, the result is exceptionally quiet operation and **superior** ride comfort. Furthermore, the flexible flat belt enables a more compact, **energy-efficient** machine, which can be contained in the hoistway. This **enhanced** technology **reduces** building and system operating costs, and frees up valuable space.

Protecting the environment

Neither the belt nor the gearless machine, with its permanently sealed bearings, requires any lubrication so the Gen2™ system is cleaner for the environment. The highly (1) energy-efficient gearless machine, with its permanent-magnet synchronous motor, (2) _____ power consumption by as much as 50 percent over (3) _____ geared machines and 15 percent over other machines with permanent-magnet motors of axial construction.

Reliable by design

Long-lasting flat belts, smooth, crowned sheaves and minimal moving parts in the gearless machine dramatically (4) _____ wear and increase durability and efficiency. To further (5) _____ reliability and safety, Otis developed the Pulse™ system, which continually monitors the status of the belts' steel cords. Unlike visual inspections of (6) _____ steel ropes, the Pulse™ system automatically detects and reports belt faults to maintenance personnel for rapid response, providing owners with greater peace of mind. With flat belt technology, Otis has created a (7) _____ system that (8) _____ the need for a machine room, is quiet, clean, reliable and economical, and easy to install and maintain.

d In pairs, summarise the advantages of the flat belt system. Discuss durability, wear, noise, space, cleanliness, efficiency, automation, maintenance and cost.