

### Practice B

Complete the second sentence so that it has a similar meaning to the first sentence, using the word given. Do not change the word given. You must use between three and eight words, including the word given.

- Unfortunately, your request to extend your contract has been turned down.  
**you**  
We regret ..... been renewed.
- As soon as she had graduated, a top engineering company offered her a job.  
**immediately**  
Upon ..... by a top engineering company.
- He spent three years writing the book, during which time his editor constantly encouraged him.  
**being**  
It took him ..... by his editor all the while.
- Charles decided to find a rich woman to marry, as he'd spent his father's inheritance.  
**set**  
Having ..... look for a rich woman to marry.
- I'm sure I would enjoy having a go at bungee-jumping, but I know my mum wouldn't let me.  
**try**  
Much as I ..... my mum wouldn't let me.
- I enjoyed science when I was a child and now I wish I had kept up that interest.  
**early**  
I regret ..... in science.
- This was my tenth attempt to solve the equation and I'm not going to try again.  
**tried**  
I decided to give ..... equation ten times.

### Practice C

Read the whole text below, then complete the gaps by writing the appropriate form of the verb in the margin. Choose from the forms below. The first one has been done as an example.

- present infinitive, active or passive
- perfect infinitive, active or passive
- present gerund, active or passive
- perfect gerund, active or passive
- bare infinitive

The traditional approach to artificial intelligence has tended (0) ~~to treat~~ intelligence as something (1) ..... in rules, and hence software. Give a robot a software replica of its world (2) ..... to, and a set of instructions for successfully (3) ..... that world, and it would appear (4) ..... intelligently.

The first (5) ..... this idea was Rodney Brooks of the Massachusetts Institute of Technology, in his work on robot insects in the 1980s. Brooks rejected the idea of a central 'brain' and showed how intelligent behaviours could (6) ..... from co-operation between a number of simple, independent systems. For example, each leg of Genghis, a six-legged robot, had its own simple controller, and (7) ..... emerged by precisely timing the actions of the controllers. (8) ..... with 'whiskers', Genghis was able, with accuracy, (9) ..... obstacles and, this information (10) ..... to the controllers, the signalling between the legs was modulated, (11) ..... the robot to step over an obstacle as though it knew what was before it.

(12) ..... back the boundaries of traditional AI with their insect robots, Brooks and his team have now produced Cog and Kismet, the first of a new type of robot designed (13) ..... in the same way as small children. What makes these robots so different from their insect predecessors is the researchers are not simply trying (14) ..... an increasingly complex system and (15) ..... what emerges: they are attempting (16) ..... a robot with the intelligence of a two-year-old by giving it the innate abilities of a newborn and letting it (17) .....

TREAT  
ENCODE  
REFER  
NEGOTIATE  
ACT

CHALLENGE

EMERGE

WALK  
FIT  
DETECT  
RELAY  
ALLOW

PUSH

BEHAVE

CREATE  
OBSERVE  
FASHION  
DEVELOP

# Vocabulary

## Phrasal verbs: science

- 1** Popular science writing and spoken English often use phrasal or prepositional verbs while academic writing about science and technology tends to use more formal verbs. Match the verbs in bold in the sentences below to the ones (a – p) that would be used in an academic text about science or technology.

If kept at a temperature of 100 degrees Centigrade, water (1) **boils away**.  
 Many antibiotics not only (2) **wipe out** harmful bacteria but also attack intestinal bacteria which help to (3) **break down** food, thus causing stomach upsets and diarrhoea.  
 Most comets do not present a major hazard as they would probably (4) **break up** after entering the Earth's atmosphere.  
 Scientists need to (5) **come up with** new methods of (6) **getting rid of** nuclear waste.  
 It has been estimated that the average adult (7) **gives out** half a kilowatt of heat per hour, so it's not surprising that crowded trains can become hot and stuffy.  
 The French government was unpopular internationally in the late 1980s for its policy of (8) **letting off** nuclear bombs for test purposes on Pacific atolls.  
 Factories must no longer be allowed to (9) **let** untreated waste **out** into rivers or the sea.  
 Water should not be used for (10) **putting out** fires of electrical origin.  
 It is essential not to let the battery (11) **run down**.  
 My new car (12) **runs on** diesel.  
 The mines were closed when the coal supplies in this region (13) **ran out**.  
 Coverage of many international sporting events is now (14) **sent out** live by satellite.  
 A battery is a device which (15) **turns** chemical energy **into** electricity.  
 Remember to (16) **turn off** the electricity supply at the mains before changing the fuse.

- a be/become depleted
- b be/become exhausted
- c be fuelled by
- d broadcast
- e change the chemical structure of a substance
- f convert to
- g dispose of
- h destroy/eliminate
- i detonate
- j discharge
- k disconnect
- l disintegrate
- m evaporate
- n extinguish
- o invent/discover
- p produce

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- 2** The phrasal verbs below could be substituted for phrasal verbs in the sentences in exercise 1. Find the corresponding verbs in the sentences.

change into = .....  
 put off = .....  
 set off = .....

- 3** Which phrasal verb in exercise 1:

- 1 can also mean the same as *run out*?
- 2 can also be used intransitively, in which case it means 'stop functioning'?