

Analysis Time – Detecting Explosives.

Technology being(1) developed at Pacific Northwest National Laboratory could put(2) explosive-sniffing(3) dogs out of business. Just like dogs, the technology can 'sniff' the air to detect vapors from explosives. Unlike dogs, it doesn't need to be fed, exercised, rested, and given breaks(4). It also shows promise(5) to accurately detect minute(6) amounts of explosives. It takes in a sample of air from around an object and examines that air. An explosive called RDX does not easily vaporize, and so it is difficult for dogs to detect it. However, this new technology can detect vapors of RDX from a fingerprint when there are less than 25 parts per quadrillion. "This technology is more sensitive than anything out there(7) now," said a senior research scientist. The technology could be used to screen(8) passengers or luggage at airports or large containers at ports.

1. 'Technology being developed' is a shorter than 'technology that is being developed'. Both are accurate and work in the sentence. There are many other occasions when you can miss out the pronoun 'that' and the verb in the first half of the sentence, and simply use the second verb in the gerund form.

a. The teacher helping students every day can make a difference.

b. Clouds gathering show the promise of rain.

c. Flowers appearing show us that Spring is around the corner.

2. 'To put someone out of business'. We use the verb 'put' here when referring to a business or a person who is being forced to stop work, usually because of competition.

a. The bigger shops have put the smaller shops out of business.

b. High prices put the shop out of business.

3. 'Sniffing' comes from the verb 'to sniff'. I love this verb; it is onomatopoeic, which is a fancy way of saying that it sounds like its meaning.

a. "I have lost my last penny," sniffed the sad old lady.

b. The dog sniffed the air; someone was cooking bacon.

4. 'It doesn't need to be rested, exercised, rested, and given breaks.' This sentence shows how adjectives, or past participle verbs can be used in a list.

a. The car was washed, dried, waxed, and driven to my house.

b. The document was signed and delivered to the office.

5. 'To show promise' means that the subject gives signs of usefulness, hope, health, or some kind of positive capability.

a. He shows promise of becoming a great chef.

b. She always showed promise of singing success.

6. 'Minute' is spelled the same as 'minute'. The first means 'tiny'.

a. The shells are minute; you can hardly see them.

b. There was just a minute amount of bacteria left.

7. 'Anything out there' means 'anything available/ that can be found/on the market'.

a. This is the most powerful motorbike out there.

b. I don't think you'll find a cheaper computer out there.

8. 'To screen' is 'to examine for substances'.

- a. All the passengers in the airport were screened before boarding the plane.
- b. Screening luggage keeps us all safe.