

PART 4 Questions 31–40

Complete the notes below.

Write **ONE WORD ONLY** for each answer.

Elephant translocation

Reasons for overpopulation at Majete National Park

- strict enforcement of anti-poaching laws
- successful breeding

Problems caused by elephant overpopulation

- greater competition, causing hunger for elephants
- damage to 31 in the park

The translocation process

- a suitable group of elephants from the same 32 was selected
- vets and park staff made use of 33 to help guide the elephants into an open plain
- elephants were immobilised with tranquilisers
 - this process had to be completed quickly to reduce 34
 - elephants had to be turned on their 35 to avoid damage to their lungs
 - elephants' 36 had to be monitored constantly
 - tracking devices were fitted to the matriarchs
 - data including the size of their tusks and 37 was taken
- elephants were taken by truck to their new reserve

Advantages of translocation at Nkhotakota Wildlife Park

- 38 opportunities
- a reduction in the number of poachers and 39
- an example of conservation that other parks can follow
- an increase in 40 as a contributor to GDP

READING

READING PASSAGE 1

You should spend about 20 minutes on Questions 1–13, which are based on Reading Passage 1 below.

Urban farming

In Paris, urban farmers are trying a soil-free approach to agriculture that uses less space and fewer resources. Could it help cities face the threats to our food supplies?

On top of a striking new exhibition hall in southern Paris, the world's largest urban rooftop farm has started to bear fruit. Strawberries that are small, intensely flavoured and resplendently red sprout abundantly from large plastic tubes. Peer inside and you see the tubes are completely hollow, the roots of dozens of strawberry plants dangling down inside them. From identical vertical tubes nearby burst row upon row of lettuces; near those are aromatic herbs, such as basil, sage and peppermint. Opposite, in narrow, horizontal trays packed not with soil but with coconut fibre, grow cherry tomatoes, shiny aubergines and brightly coloured chards.

Pascal Hardy, an engineer and sustainable development consultant, began experimenting with vertical farming and aeroponic growing towers – as the soil-free plastic tubes are known – on his Paris apartment block roof five years ago. The urban rooftop space above the exhibition hall is somewhat bigger: 14,000 square metres and almost exactly the size of a couple of football pitches. Already, the team of young urban farmers who tend it have picked, in one day, 3,000 lettuces and 150 punnets of strawberries. When the remaining two thirds of the vast open area are in production, 20 staff will harvest up to 1,000 kg of perhaps 35 different varieties of fruit and vegetables, every day. 'We're not ever, obviously, going to feed the whole city this way,' cautions Hardy. 'In the urban environment you're working with very significant practical constraints, clearly, on what you can do and where. But if enough unused space can be developed like this, there's no reason why you shouldn't eventually target maybe between 5% and 10% of consumption.'

Perhaps most significantly, however, this is a real-life showcase for the work of Hardy's flourishing urban agriculture consultancy, Agropolis, which is currently fielding enquiries from around the world to design, build and equip a new breed of soil-free inner-city farm. 'The method's advantages are many,' he says. 'First, I don't much like the fact that most of the fruit and vegetables we eat have been treated with something like 17 different pesticides, or that the intensive farming techniques that produced them are such huge generators of greenhouse