

# Cambridge IGCSE<sup>™</sup>

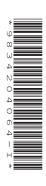
ENTERPRISE 0454/13

Paper 1 October/November 2021

INSERT 1 hour 30 minutes

## INFORMATION

- This insert contains the case study.
- You may annotate this insert and use the blank spaces for planning. **Do not write your answers** on the insert.



## The reusable drinking bottle enterprise

## The background

Marissa is concerned about the environment. At school she had organised the collection of empty cans. She took the cans collected to be recycled into new products.

Watching a television documentary on pollution, Marissa was shocked to hear that by 2050 there will be more plastic than fish in the sea. Plastic bottles were identified as a serious part of the problem. Marissa knew that she had to do something to help reduce this problem. After chatting with her friends, she decided to organise a beach clean-up day with them.

At the beach clean-up day, Marissa and her friends walked along the beach collecting litter. At the end of the walk, each person had two large bags of litter. The problem was what to do with the litter collected. She needed a creative solution. Marissa wondered if the plastic could be recycled into usable products, so she decided to do some research.

#### The research

Marissa visited the recycling company that she had worked with at school. She saw thousands of single-use plastic bottles being produced. The recycling company manager explained that many of these bottles were bought and discarded every day. Although the bottles were made from recycled material, many would eventually become litter in the ocean.

Marissa thought that as plastic bottles were a significant problem on the beach, this would be the product she should focus on. She believed that encouraging people to use fewer single-use plastics might have a more positive impact on pollution than recycling. Marissa decided that the solution might be to persuade people to use a reusable drinking bottle.

### The product

Marissa asked a product designer, Fahim, to design a reusable drinking bottle. Fahim produced a design and also made one bottle (a prototype) entirely from recycled materials. Fig. 1.1 shows this prototype.



Fig. 1.1

Marissa showed the prototype to the recycling company manager. Although he liked it, a new machine would be needed to manufacture the bottles. The machine would cost US\$1500. The recycling company manager would not risk investing this amount of money unless he was convinced that he could sell enough bottles to cover that cost.

Marissa also showed the prototype to her friends. They said that if the bottle would help to reduce pollution, they might buy it. However, the most important factors for them would be the final design and the price.

<sup>1</sup>recycled: the method of production that changes waste into new items © UCLES 2021 0454/13/INSERT/O/N/21 Marissa had thought that a price of US\$5 per bottle would be acceptable to potential customers but, she had not researched this. Marissa decided that her next step was to focus on how to market the reusable drinking bottle.

## Marketing

Marissa decided to focus her marketing on places where many people buy bottled drinks. School students could be a large target market for the reusable drinking bottle. Marissa therefore decided to ask the Principal of the local school for permission to talk to the students. She contacted the school to arrange a meeting with the Principal.

## The meeting

At the meeting with the Principal, Marissa explained the problem of plastic waste. She showed him the reusable drinking bottle and explained how this would help to reduce pollution. The Principal was very impressed with Marissa's enterprising idea. He was willing to allow her to give a presentation to the students. The Principal suggested that Marissa come back in one week's time.

The Principal also wanted to buy one reusable drinking bottle for each of the 150 members of staff.

Marissa had work to do. She needed to prepare an inspirational presentation.

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