

Commentary on candidate evidence

Candidate 1

The candidate was awarded a total of **47 marks**.

Section 1

Question 1(a)

The candidate was awarded **4 marks** for the following responses:

- 'stainless steel shelves...is chemical resistant, making it easy to clean'
- 'nylon castor wheels... self subricating (lubricating), meaning they can easily spin and rotate'
- 'Tubular stainless steel frame... light in weight, meaning it won't add too much weight ...stopping it from moving'
- 'galvanised mild steel wheel brackets... won't corrode'

Question 1(b)

The candidate was awarded **2 marks** for the following responses:

- 'nylon castor wheels...injection moulded'
- 'ABS shelves...create the intricate design'. Please note: the justification is correct however it's for the wrong process

Question 1(c)

The candidate was awarded **2 marks** for the following responses:

- 'tool trolley...compartments ... securely hold any loose items'
- 'tool trolley...simple to assemble ... shouldn't require any specialist knowledge'

Question 1(d)

The candidate was awarded **2 marks** for the following responses:

- 'drawback...hinder the designers when they are trying to design a product'
- 'benefit...don't require any specialist knowledge or tools'

Question 1(e)

The candidate was awarded **4 marks** for the following responses:

- 'let's you see what the whole model will look like'
- 'look at how parts will join together'
- 'Test out the ergonomics...see if all sizes are correct'
- 'allows you to see if you need to make changes or fix any mistakes the model has'

Section 2

Question 2(a)

The candidate was awarded **2 marks** for the following responses:

- 'Abs'
- 'helmet will take most of the hit and it can take multiple hits without breaking'

Question 2(b)

The candidate was awarded **4 marks** for the following responses:

- 'cushioning of the helmet...comfy for their head'
- 'adjustable strap...suitable for all childrens head sizes'
- 'chin strap...stays on child's head...doesn't fall off'
- 'blue and red colour scheme allows them to stand out...more visible to cars'

Question 2(c)

The candidate was awarded **0 marks** because they did not give a description of the tests that would have been carried out.

Question 3(a)

The candidate was awarded **1 mark** for the following response:

- 'advantage...allows the designer to be creative and design something never seen before'

Question 3(b)

The candidate was awarded **3 marks** for the following responses:

- 'purpose...tell the designer things the product should contain'
- Example 1: 'this may include a colour scheme it should follow'
- Example 2: 'it's main purpose/function'

Question 3(c)

The candidate was awarded **2 marks** for the following responses:

- 'Morphological analysis is a table, with multiple headings with columns under them'
- 'you pick one box from each column to create a design to help with your initial ideas'

Question 3(d)

The candidate was awarded **2 marks** for the following responses:

- 'a quick way to get some initial ideas'
- 'show the designer how parts of the design will join together when being assembled'

Question 4(a)

The candidate was awarded **3 marks** for the following responses:

- 'Advertisements can be used to hype customers for launch of a product'
- 'deal for a new product, like buy two get one free'
- 'celebrity endorsement...gives customers faith that what they are buying is worth their money'

Question 4(b)

The candidate was awarded **2 marks** for the following responses:

- 'companys can put on a sale ...customers are more likely to buy it'
- 'rebrand of packaging can create new hype...increasing the sales'

Question 5(a)

The candidate was awarded **3 marks** for the following responses:

- 'width of the handle...adults hand grip can use it'
- 'size of the buttons should be that of the finger tip ...so that the majority of people can press the buttons'
- 'green...and red...indicator that it is start and stop'

Question 5(b)

The candidate was awarded **0 marks** because they did not answer the question adequately.

Question 5(e)

The candidate was awarded **1 mark** for the following response:

- 'stops people from copying what your products purpose is'

Question 6(a)

The candidate was awarded **2 marks** for the following responses:

- 'burning of a metal...looking at the light it burns (colour of light)'
- 'magnet sticks to a metal it means it contains iron and is ferrous'

Question 6(b)

The candidate was awarded **1 mark** for the following responses:

- '...it will be hollow'

Question 6(c)

The candidate was awarded **3 marks** for the following responses:

- 'Gantt charts help show workers what is left to be complete'
- 'also tells workers deadlines for when things that have to be complete'
- 'JIT...storage to not be needed as things are brought in just in time for when they need to be used'

Question 7

The candidate was awarded **4 marks**. This question is marked holistically and the marks awarded are for the overall response rather than individual points made. In terms of assessing knowledge of how consideration of the environment impacts products. This candidate has demonstrated adequate knowledge and looked at a reasonable range of different factors, but none are explored in depth.