



WORKSHEET · DESIGN FACTORS

Function, aesthetics, safety, performance

LEARNING INTENTION

Use the four design factors to analyse and compare products.

SUCCESS CRITERIA · I can...

- ☐ sort statements into the correct design factor
- ☐ compare two products using a design factor
- ☐ explain why different users need different things

FUNCTION



What it **does**.
Primary function = main job.

AESTHETICS



How it **looks and feels**: shape, colour, texture.

SAFETY



Could it **hurt** someone? Edges, small parts.

PERFORMANCE



How **well** it works and how **long** it lasts.

TASK 1 · SORT IT

1 Tick the design factor each statement is about.

Statement about an EarBuddy	F	A	S	P
It is bright orange with a glossy surface	☐	☐	☐	☐
All the corners are rounded with a 5 mm radius	☐	☐	☐	☐
It holds a wired earbud cable without tangling	☐	☐	☐	☐
It still works after being dropped 20 times	☐	☐	☐	☐
It has a fun cat-face shape	☐	☐	☐	☐
There are no small parts that could come off	☐	☐	☐	☐
The cable stays wrapped when it is in a bag	☐	☐	☐	☐
It is light enough to carry on a keyring	☐	☐	☐	☐

TASK 2 · COMPARE TWO PRODUCTS

2 Two products for storing earbuds are shown below.



Product A · WrapStrap

Price	£4
Material	Soft silicone rubber
How it works	Strap wraps round a coiled cable and pops over a stud
Fits	Wired earbuds only
Colours	8 bright colours



Product B · PodPlate

Price	£18
Material	Brushed aluminium, 1.5 mm
How it works	Wireless case clips into a sprung holder on a keyring
Fits	Most wireless earbud cases
Colours	Silver only

Compare the **function** and **aesthetics** of Product A and Product B.

4 marks

Tip: talk about **both** products in each sentence — "Product A... whereas Product B..."

TASK 3 · DIFFERENT USERS, DIFFERENT NEEDS

3 Rank the four design factors for each user: **1** = most important, **4** = least important.

User	Function	Aesthetics	Safety	Performance
A 7-year-old with their first earbuds				
A runner who takes earbuds to the gym				
A teenager who wants to show off their style				

Choose one user. Explain why you ranked their number 1 factor first.

TASK 4 · DESIGN FACTOR DETECTIVE

4 Look at these two EarBuddies made by S1 pupils. For each design factor, write one **good point** and one **improvement**.



Factor	Good point	Improvement
Function		
Aesthetics		
Safety		
Performance		

EXAM-STYLE QUESTIONS

a) Describe the term **aesthetics**.

2 marks

b) Explain why safety is very important when designing a product for young children.

2 marks