

Name _____

Class _____

Date _____

By the end of this worksheet I can...

- ☐ describe the key stages of brainstorming
- ☐ describe the key stages of morphological analysis
- ☐ explain why idea-generation techniques are used
- ☐ describe the key stages of analogy
- ☐ describe how lifestyle and mood boards are used
- ☐ explain exploration, synthesis and refinement of ideas

I DO

Worked example Read how a full-mark answer is built

A design team needs ideas for a new bike light.

1 Describe three key stages of brainstorming. (3 marks)

Full-mark answer each ✓ is one mark

The problem is explained clearly to a small group so everyone knows the purpose ✓. The group suggests as many ideas as possible within a time limit, and every idea is recorded ✓. No idea is criticised; members build on each other's ideas before the best are selected ✓.

Why marks are not awarded

"You think of lots of ideas and write them down."

0–1 mark: "think of lots of ideas" was given 0; only recording ideas could score.

WE DO

Guided practice Use the starters and word bank to help you

2 Describe two idea-generation techniques. (4 marks)

Sentence starters

Brainstorming: ...
Morphological analysis: ...
Analogy: ...
Mood board: ...

Word bank

problem · stated · Mood board ·
brainstorming · technique · Morphological
analysis · Analogy · simply

Tip: 4 marks = 4 separate, developed points.

YOU DO

On your own No notes. Check your answers afterwards.

3 Quick check: tick one box for each.

- a) Combining the best features of several initial ideas is called...
☐ Synthesis ☐ Refinement ☐ Evaluation ☐ Analysis
- b) Which is a rule of brainstorming?
☐ Only feasible ideas are written down ☐ Every idea is recorded without criticism ☐ Ideas are judged as soon as they appear ☐ It must be done alone to avoid copying
- c) Nike basing a trainer's cushioning on Formula One suspension is an example of...
☐ Mood board ☐ Morphological analysis ☐ Analogy ☐ Synthesis
- d) How does morphological analysis improve the breadth of ideas?
☐ It creates many unique combinations of variables ☐ It quickly removes the weakest ideas early on ☐ It tests each idea with users before sketching ☐ It records every idea as an annotated sketch

4 Key terms: write the letter of the matching description next to each term.

- | | | |
|----------------------------------|-------|--|
| 1. Morphological analysis | _____ | A Collage of images on a mood/theme to inspire ideas and set an aesthetic direction. |
| 2. Brainstorming rule | _____ | B Taking an idea from one context and applying it in another (e.g. F1 suspension → trainer cushioning). |
| 3. Analogy | _____ | C A matrix of design variables and options; combine one option from each to generate many ideas. |
| 4. Lifestyle board | _____ | D Record every idea and don't criticise; build on each other's ideas within a time limit. |
| 5. Mood board | _____ | E Images showing the lifestyle of the typical user, to understand the target market. |

5 Explain what is meant by 'Synthesis'. (2 marks)

6 Explain what is meant by 'Refinement'. (2 marks)

Check and reflect

Mark your answers with the answer sheet. Go back to the checklist on the site and re-rate each "I can" statement above. Which one still needs work?
