

# **Teacher guide**

# R&D - ARM

#### Where does the lesson fit?

This session could be used in a marketing module, particularly when exploring the product element of the marketing mix.



## Suggested resources & activities related to ARM and research and development:

- Full ARM case study
- Research and development PowerPoint
- New product development lesson resources
- ARM crossword
- ARM word search

## Suggested timings for the session

5 mins Starter e.g. ARM crossword

5 mins Read the case study

10 mins Questions

30 mins Task – product development activity

5 mins What have you learned?

## **Answers to questions**

1. What is research and development?
Research and development (R&D) is the scientific research and the technical development involved in developing new products or processes.



- 2. Describe the stages within the development process.
  - Idea generation (through research)
  - Idea screening & concept testing
  - Product design brief prepared
  - Prototypes made & tested (may be discarded, adapted or adopted)
  - Test marketing
  - Full scale production
  - Launch (supported by promotion)
- 3. Explain the challenges of R&D.

Challenges of R&D include:

- the high costs
- the long timescales
- the high risks
- 4. Analyse how ARM deals with the challenges of the development of new products.

ARM help to overcome these challenges through:

- working with lead partners to understand what is technically possible
- listening to what its customers and their customers are asking for
- managing timescales by adjusting the team size and ensuring the right skills are in place in order to deliver on time.

#### What have you learned?

Expected learning is likely to include:

- Definition of R&D
- Purpose of new product development
- Stages of research and development
- Costs and benefits of R&D
- How firms deal with the challenges of R&D