Trends and Product Design

Lesson plan

Starter activity

Ask the class the following question and collect responses.

- When you think of medical technologies, what comes to mind?
- Can you think of any other factors which you think are responsible for innovation in healthcare, either in the past or today?

Learning objectives

- To define the concept of medical technologies and give some examples.
- To identify relevant factors which impact the development of medical technologies.
- To consider the history of medical technology innovation, focusing on three specific devices.

Main activities

Look at the timeline of innovation in MedTech from Step 1.3. Highlight and lead discussion on any important or interesting points.

Divide class into three groups. Each group will research and produce a timeline of development and design for the following medical devices:

- The stethoscope
- Wound dressings
- Hip implants

Each group then presents their timeline to the class.

(Optional: after performing their own research, the class can watch the video 'A history of innovation' in Step 1.4 which describes the development of these devices).

Resources required

- 1. A history of innovation in MedTech (Step 1.3) PDF version or device for class to view.
- 2. Materials for creating timelines.
- 3. Devices for performing research (and optionally watching the video)

Assessment for Learning

Group timelines, contributions to discussion.

Differentiation

SEND: Teacher-led support. **Low ability**: Peer-learning.

Gifted and Talented: Peer-teaching.

Plenary

Discuss and answer the following questions:

- What are the similarities and differences in the developmental processes of these technologies?
- Revisit the factors identified in the starter activity. Can you identify more, or refine the list?