

## Lesson plan | Innovation is **GREAT**

**Topic:** Innovation

### Learning outcomes:

- Explain what innovation means and how it impacts on society
- Identify some famous examples of innovation and discover more about transport innovation in the UK, while practising reading skills
- Identify the form of the past simple passive and use it to talk about important inventions / discoveries

**Age and level:** 13-17, Adults (B1)

**Time:** 80 minutes

### Materials:

- Student worksheet or presentation
- Video: <https://www.youtube.com/watch?v=PXsZ6IV0dLM>



### Procedure

#### Lead-in (10 mins)

- Refer students to the Lead-in activity in the student worksheet or show slide 2 of the presentation.
- Individually or in pairs students write a definition of the word 'innovation'. Invite some students / pairs to share their definitions with the class. If you like, you could compare definitions with one from a dictionary.
- In small groups or as a whole class, students discuss questions 2 & 3. If students discuss in groups, invite some to share their thoughts and experiences from the discussions.

## Lesson plan | Innovation is **GREAT**

### Task 1: Pre-watching and reading vocabulary activity (10 mins)

- Refer students to Task 1 in the student worksheet or show slides 3 and 4 of the presentation. Individually or in pairs students match the words and definitions.
- Provide the answers or ask students to provide answers.

Answers: 1b, 2e, 3f, 4a, 5c, 6d, 7j, 8l, 9h, 10m, 11g, 12k, 13i

### Task 2: Video (15 mins)

- Refer students to Task 2 in the student worksheet or show slide 5 of the presentation.
- Explain that students are going to watch a video about British innovation. Explain that some of the examples of innovation in the table are included in the video, and some aren't. As they watch the video, they should tick the innovations they see. If necessary, review the vocabulary in the table before students watch.
- Play the video (3.10 minutes): <https://www.youtube.com/watch?v=PXsZ6IV0dLM>
- Ask students to say which innovations are in the video.
- Play the video again. This time, students note as many of the dates as they can. Give them some time to compare their answers, then elicit / give the dates. Ask students if they are surprised by any of the innovations that they have seen in the video.
- In pairs, small groups or as a whole class students discuss questions 1-5 on the student worksheet or slide 6 of the presentation. This gives them the opportunity to talk about innovations from countries other than the UK. If students discuss in pairs or groups, invite them to share answers with the rest of the class. The class may also like to discuss innovations from their own countries.

Answers: the motor racing circuit (1907), the first international flight service (1919), the television set (1925), Formula One (1950), the first automatic landing with passengers (1953), the supersonic passenger plane (1976), the World Wide Web (1991), iPod design (2000)

Innovations not seen in the video: the camera, the car, nuclear power, the computer

## Lesson plan | Innovation is **GREAT**

### Task 3: Reading (15 mins)

- Tell students that they are going to read about British innovation in transport. Before they read the text, ask them which innovations related to transport they can remember from the video.
- Refer students to Task 3 in the student worksheet or show slides 7-9 of the presentation. Explain that they should read and highlight / find seven innovations. Explain that they will have a time limit to read the text. If students are reading the complete text in the worksheet, give them approximately 5-6 minutes. If you use the slides, give students a couple of minutes to read each text. Explain that this will help them develop the skill of reading to find key information in a text.
- When time is up, ask students to name the seven innovations. These are: steam engine, jet engine, Penny Farthing, pneumatic tyre, hydrogen fuel cell motorbike, subway train, space tourism.
- Put students into pairs or small groups. Tell them to discuss the questions below the reading text. Invite some pairs / groups to share their thoughts. The questions are available on slide 9 of the presentation.

### Task 4: Grammar practice (10 mins)

- If necessary, review the form and use of the passive voice (past simple). See the appendix at the end of this lesson plan for an explanation linked to talking about discoveries and inventions.
- **Option 1 (Student worksheet):** Refer students to Task 6. Ask students to find or copy seven examples of the past simple passive in the reading text. If time is short, students can simply highlight the sentences.  
**Option 2 (Presentation):** Show slides 7-9 again. Give students a minute or two to look at each slide, and to find examples of the past simple passive.
- If there is time, refer students to the second activity in the student worksheet or on slide 10 of the presentation. Depending on the level of your class, students can do this in pairs, or you can do this as a whole class activity.

## Lesson plan | Innovation is GREAT

Answers:

Activity 1: 2. The jet engine was invented by Frank Whittle. 3. The Penny Farthing bicycle was invented in 1871 by James Starley. 4. The pneumatic tyre was invented in 1885. 5. The Hydrogen fuel cell Motorbike was designed in 2005. 7. The subway train was invented in 1865. 7. The idea of space tourism was invented in 2009.

Activity 2: 1. The idea of space tourism was invented in 2009. 2. The motor racing circuit was designed in 1907 by Hugh Locke-King. 3. Penicillin was discovered by Alexander Fleming in 1928.

### Task 5: Speaking and listening (10 mins)

- **Option 1 (Student Worksheet):** Refer students to Task 5. Put students into pairs – Student A and Student B. Tell them to fold the page in half and to look at their relevant table. Review any problems with vocabulary.
- Give instructions. Students should take turns to ask each other questions to complete the table.
- **Option 2 (Presentation):** Show slide 11. Review any problems with vocabulary. You could give students a few moments to remember the dates. They must not write them down!
- Show slide 12. Give instructions. In pairs, students should take turns to ask each other about the inventions / discoveries. They should try to remember the dates.
- If necessary, practise asking the questions before students begin the activity and elicit one or two examples:  
When was the telephone invented?  
It was invented in 1876.
- When students are ready, they can check their answers with each other or with slide 11.
- Walk around the room as students do the activity. Make notes of any problems you hear related to the use of the past simple passive. At the end of the activity, review the mistakes you heard with the class.

Note: 'Hawk-eye' is a camera system used in sports such as tennis, cricket, football. The technology tracks a ball in a game. It helps referees to make decisions.

**Lesson plan | Innovation is GREAT****Task 6: Game (10 mins)**

- Organise students into small groups. Call out an innovation from the list below e.g. iPod design. Students write the date e.g. 2000. Continue with more innovations. When you review the answers, encourage students to answer using the passive voice i.e. It was invented in 2000. The group with the most points wins.

1765	The steam engine – James Watt
1798	The first vaccine for smallpox
1826	The suspension bridge
1865	The subway train
1871	The Penny Farthing – James Starley
1876	The telephone
1878	The electric light
1885	The pneumatic tyre
1907	The motor racing circuit
1919	The first scheduled international flight service
1925	The television set
1928	The jet engine – Frank Whittle/ penicillin
1950	Formula one
1953	The structure of DNA/ The first automatic landing with passengers
1976	The supersonic passenger plane
1991	The World Wide Web
2000	iPod design
2001	Hawk Eye
2005	The hydrogen fuel cell motorbike
2009	Space tourism
2010	The artificial artery
2012	The most sustainable stadium in Olympic history

**Follow-up activity / Homework**

Students prepare a short presentation about an innovation from the lesson (or another innovation). It should include: When / Where / Who / Why / Benefits / Impact on individuals and society.

