

Innovation Nation**Topic**

Inventions and their impact on society

Learning outcomes

- Review vocabulary related to inventions
- Practise speaking skills, giving opinions and presenting an invention
- Review comparatives
- Practise describing inventions

Age and level

13-17, Adults (B1 / B2)

Time

Approximately 90 minutes + optional 10-minute task

Materials

Student worksheet

Introduction

In this lesson, students talk about important past innovations. They read about some new inventions and write descriptions of inventions. They discuss how certain innovations have affected their lives and how they have impacted on society. Finally, they come up with a new invention to present to the class.

Options are provided for higher and lower level classes.

Procedure

1. Lead-in (5 mins)	<ul style="list-style-type: none"> Ask questions to introduce the topic: What does innovation mean? In what areas are the British or your country innovative? Can you think of any recent innovations?
2. Task 1: British inventions (10 mins)	<ul style="list-style-type: none"> Explain that the British have a long history of inventiveness. Point out that their ideas are often then better exploited by Japan and America. Give pairs or small groups a few minutes to match the inventions and inventors. Students could use a process of elimination. Elicit the answers. If students enjoy this task, ask them to think of questions about other inventions, not restricted to British inventions e.g. Who invented the electric guitar? <p>Answers: television (Baird), steam locomotive (Stephenson), pocket calculator (Sinclair), first pneumatic tyres (Dunlop), World Wide Web (Berners Lee)</p>
3. Optional task: Which came first? (10 mins)	<ul style="list-style-type: none"> Dictate or write the following inventions on the board: plastics, photography, the wheel, railways, space probes. Ask students to put the inventions in the order that they were invented. Elicit answers: the wheel, photography, railways, plastics, space probes. Write a follow-up question on the board: Which of these inventions do you think was the most important to your society? Higher level classes can discuss in groups, followed by a whole-class feedback session. Lower level classes can discuss the question as the whole class. Encourage the language of comparatives e.g. The Wheel helped people travel faster and made work in the fields easier.
4. Task 2: Favourite inventions (10 mins)	<ul style="list-style-type: none"> Explain that BBC Radio 4 asked listeners to vote for the best and worst inventions. Pairs or groups read the list of inventions and discuss why the inventions are useful / not useful. You could put up a list of comparatives for lower levels to use as prompts when they are thinking of reasons.

	<ul style="list-style-type: none"> • Pairs or groups add one example to each category. Elicit one or two examples to add to the lists from the class. Get a show of hands to see which is the most and least popular invention among the group. • You can explain that some inventions were nominated to both categories: mobile phones and TV are loved and hated depending on your attitude towards life. Encourage higher level students to reflect on why people might love / hate these inventions.
5. Task 3: Innovation nation (15 mins)	<ul style="list-style-type: none"> • Explain that BBC Science launched a competition to find a new invention. Tell students to read the descriptions of the top ten inventions. They should find inventions a, b, c. Elicit answers: a) a padlock, b) a carpet cleaner, c) a deep vein thrombosis device. Other answers are possible. • Ask pairs or groups to discuss which invention they think won the competition. Invite some pairs / groups to give their opinions. A more fluent class can be encouraged to give their reasons and agree and disagree. Give the name of the winner: the collapsible kitchen bin, and the runners-up: the nib-less pen and the mask-like swimming goggles. • Ask the class to say if they agree with the judges and why / why not.
6. Task 4: Describe an invention (10-15 mins)	<ul style="list-style-type: none"> • Write 'microwave oven' on the board. Together with the class, write a short description of the device. You could compare the description with any in a dictionary. Depending on the level of your class, students work in pairs, groups or as a whole class to write definitions of e-mail, playstation, the internet. • In pairs or small groups, students pick an invention from recent years and write a short description of it. Walk around the room and help as students write if necessary. • Invite students to read out their descriptions to the rest of the class. They should not give the name of the invention! Other students guess what the invention is. If you have a large class, students could do this in large groups.

7. Task 5: Society and inventions (10-15 mins)	<ul style="list-style-type: none">• This task is suitable for a whole class or group discussion format, depending on the size / level of your class. If you ask students to work in groups, get some feedback at the end to compare ideas. Encourage students to justify their opinions.
8. Task 6: A new invention (30 mins)	<ul style="list-style-type: none">• Put students into groups or pairs. They need to come up with a new invention. Some students may need help here but try to get them to focus on a problem or difficulty that could be solved with an invention – it doesn't have to be something realistic!• Get them to make notes for each category (the language from Task 4 should help here). Students could optionally make a poster and draw a picture of their invention. Encourage them to come up with a name for it. Walk around as students work and provide help as necessary.• When they are ready, groups can present their ideas, either to other groups or to the whole class. You could use this as an opportunity to provide feedback on language use.• If you want, you could take a vote on which is the best/ most original invention, but try to keep this light hearted!

Contributed by

Clare Lavery