## *Genius John in a brave new world*: Invent, design and make

Before you begin look through the John Muir graphic novel and read the Genius John in a Brave New World section that describes some of John’s inventions. We know there was a period in John Muir’s life when he ‘began a frenzy of invention . . . clocks, an anemometer, a machine to feed horses and a wake-you-up bed’. In 1860 he displayed some of his inventions at the State Fair in Madison where, newspaper reports tell us, people queued around the block to have a turn.

The aim of this activity is to find out about other Scots engineers, inventors and scientists such as: John Logie Baird who invented the TV; James McCune Smith who studied medicine at Glasgow University; Sophia Jex-Blake one of the ‘Edinburgh Seven’; the astronomer Williamina Fleming. Or, you can choose another pioneering Scot from history of your choice. Once you have found out more about them and their achievements, discuss them and their work in pairs, then answer the following questions.

What inventions do you use today that are really helpful to your everyday life?

Where do you think the inventors, scientists and engineers today and those in the past got their ideas from?

John Muir was interested in the natural world around him. If he were alive today he would probably invent something that would help the environment such as ‘using pedal power to run the TV’. In groups, think of ideas for new inventions that would encourage people, or make it easier for them, to look after the natural world. Note your ideas down here.

(Refer to the supporting information provided by your teacher.) Choose one of your ideas for a new invention and draw it and/or design and make a model showing what it looks like and describe how it would work.

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