

1. Rain and Fire

On Friday 12th October, 1824, Charles Macintosh started selling his raincoats (macs) and stepped into the history books. Can you imagine our lives without this famous raincoat? Well, there would have been no Columbo (American detective), for a start. Anyway, this week's worksheet looks at how it all came about and the dark story of deception involved in its creation. There are two pages to print. [Click here to get your copies.](#)

<http://www.insideout.net/warehouse/worksheets/October/IO018S-mackintosh.pdf>

Level: Higher Intermediate

How to use the lesson:

1. Ask your students to work in pairs. Tell them you are going to give each pair two parts of the same story.
2. Give Part A of the first worksheet to Student A and Part B to Student B. Tell your students that they have four minutes to read their part, after which they are going to explain, in their own words, the content of their part to their partner. Explain that they needn't look in the dictionary for any words they don't understand as you will be looking at vocabulary later. However, two useful terms to help Student A with are *coal tar* and *naphtha*. *Coal tar* is a thick black liquid produced when gas is made from coal. It is used for making chemical products. *Naphtha* is a type of oil like petrol which catches fire easily. It is used as a fuel or in the production of chemicals.
3. After each student has explained their part to each other, ask them if they know the name of the American inventor in Part B of the story. They will probably say they don't, so give each student a copy of the second worksheet. The name of the American is hidden in the puzzle. Tell them they will need to work together to answer all the vocabulary questions.
4. Check answers in open class.

Answers

- | | |
|-----------------|-------------------|
| 1. factory | 9. solution |
| 2. Hancock | 10. mackintosh |
| 3. rainproof | 11. Scotland |
| 4. malnutrition | 12. gooey |
| 5. sulphur | 13. patent |
| 6. dye | 14. vulcanisation |
| 7. stable | 15. brittle |
| 8. sludge | |

The American was Charles Goodyear. His name is famously associated with tyres, although the Good Year Company only uses his name - it is not connected with the family of Charles Goodyear in any other way.

(By the way, ask your students why the mackintosh is spelt with a 'k' when Macintosh had no 'k' in his name. Answer: The 'k' acknowledges Hancock's involvement in the invention of the mac.)

2. Related Websites

Send your students to these websites, or just take a look yourself.

<http://level2.phys.strath.ac.uk/ScienceOnStreets/charlesmacintosh.html>

a short biography of Macintosh

<http://www.psrc.usm.edu/macrog/exp/rubber/bepisode/coat.htm>

a lovely (and lively) history of rubber

<http://inventors.about.com/library/inventors/blclothing.htm>

the history of clothing inventions with some good links