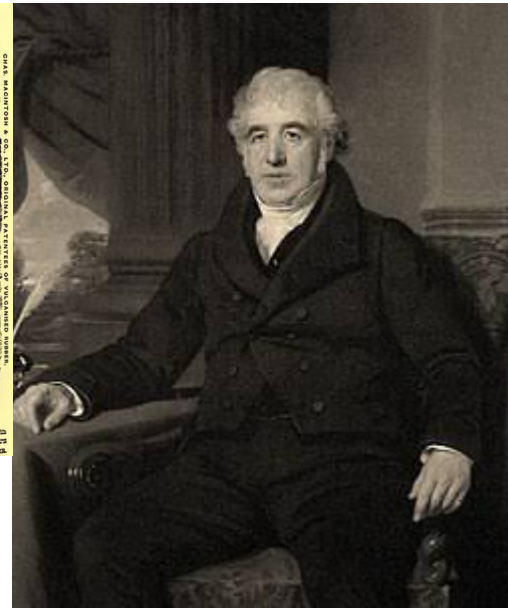
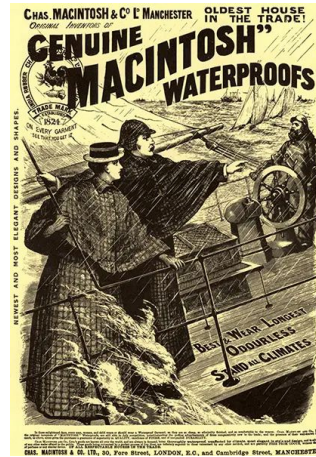


MONDAY 12TH OCTOBER

Scottish chemist Charles Macintosh was born in Glasgow in December 1766. He studied at Edinburgh University and then started his own chemical business. He was experimenting with naphtha, a cheap liquid made from coal tar, when he discovered it could dissolve natural rubber. He sandwiched this solution between two layers of fabric making them completely waterproof. He patented this process in June 1823.



He started making waterproof raincoats from his new fabric and the first was thought to be sold in a Glasgow store on 12th October 1823. His Macintosh coats were very popular and people began shortening the name to 'Macs', a name that we still use for raincoats more than 200 years later. The first Macs weren't perfect; they became sticky in hot weather and stiff in the cold, they also weren't very **breathable** and sweat was trapped inside.

But his invention soon found unexpected uses. In 1825, British explorer John Franklin took waterproof clothing, food packages and a small boat covered in Macintosh's fabric on an expedition to the Canadian Arctic. The boat, nicknamed 'Walnut-shell', weighed just 39 kg and could be carried overland to cross rivers. Twenty years later, another inventor even developed an inflatable boat using Mackintosh fabric that could be worn as a cape when deflated!

- Why do you think people were willing to wear uncomfortable early raincoats?
- What everyday item do you think still needs a better design?

MONDAY 12TH OCTOBER

Scottish chemist Charles Macintosh was born in Glasgow in 1766. He combined naphtha and rubber to make a solution which made fabric completely waterproof. He patented this process in June 1823.

He started making raincoats and the first was thought to be sold in a Glasgow store on 12th October 1823. His Macintosh coats were very popular and people began shortening the name to 'Macs', a name that we still use for raincoats more than 200 years later. It wasn't perfect though as it wasn't **breathable** and it trapped sweat under the coat.

- Why do you think people were willing to wear uncomfortable early raincoats?

