

What is an inventor?

An inventor creates and discovers new things. They look to solve problems. Charles Macintosh solved the problem of materials getting wet in the rain when he invented waterproof materials. Inventors work in lots of different workplaces, including:

- ▶ research labs
- ▶ their homes
- ▶ universities.

Key Learning and **Science Skills** needed:

- ▶ Solve problems that have been observed.
- ▶ Set up investigations and draw conclusions to understand if their invention solves the problem.



This is Charles Macintosh. He was a Scottish inventor. He invented waterproof fabric and the macintosh raincoat is named after him.

Everyday materials

What is a toy maker?

A toy maker designs and makes new toys. They choose materials carefully to make toys that work. For example, a bouncy ball needs a stretchy material and building blocks need to be strong. They might work in:

- ▶ shops
- ▶ their homes
- ▶ game design.

Key Learning and **Science Skills** needed:

- ▶ Be creative when designing, making and evaluating new toys.
- ▶ Research using secondary sources to find out how to make a new toy.



This is Arvind Gupta. He is an Indian toy inventor and expert in science.

What is a structural engineer?

A structural engineer designs structures such as buildings and bridges. They use materials to make sure the structures are strong and stable so they do not fall over or break. They work in different places with different people, including:

- ▶ architects
- ▶ builders
- ▶ other engineers.

Key Learning and **Science Skills** needed:

- ▶ Be a team worker with lots of other people to make strong structures.
- ▶ Draw conclusions and communicate findings when working together with other people.



This is Sophie. She is a structural engineer in Cardiff, Wales.

Would you like to use your learning about everyday materials when you are older?