

## Properties and changes of materials

### What is a battery research scientist?

A battery scientist tries to make better batteries using different materials.



*This is Lizzie. She is a battery research scientist. Her research looks at making new battery materials for batteries in smart phones and tablets.*

This is important in lots of workplaces, such as:

- ▶ research labs
- ▶ universities
- ▶ industry, including automotive companies.

#### Key Learning and Science Skills:

- ▶ Team worker and patient when investigating.
- ▶ Make predictions about suitable materials to use based on their understanding of electricity.

### What is a colour technician?

A colour technician is a hairdresser. They use science and design and technology to create different dyes to colour hair.



*This is Alisha Dobson. She specialises in colouring hair.*

They might be found working in:

- ▶ hairdressing salons
- ▶ spas or beauty parlours
- ▶ hotels or cruise ships.

#### Key Learning and Science Skills:

- ▶ Creativity and collaboration to make dyes to suit different hair types.
- ▶ Careful observations of how dyes alter hair colour.

### What is a physical chemist?

A physical chemist studies how materials change and how chemical reactions occur.



*This is Ruth Benerito. She invented wrinkle-resistant cotton fabric.*

The work of physical chemists is important in lots of workplaces, such as:

- ▶ clothing retail stores
- ▶ universities
- ▶ research laboratories.

#### Key Learning and Science Skills:

- ▶ Being able to set up a range of practical enquiries to solve problems.
- ▶ Using a range of tests.
- ▶ Looking for patterns in results.

*Would you like to use your learning about properties and changes of materials when you are older? I wonder if there are more jobs that use properties and changes of materials learning?*