

# Dolly, DNA & Me



THE UNIVERSITY of EDINBURGH  
Easter Bush  
Science Outreach Centre

Look at your cells, learn about DNA, extract your own and take it home!

**Learning Level:** S1 – S3

**Availability:** On demand

**Cost:** £5 per pupil

## Learning objectives

- To understand that living things are made of cells
- To explore the structure of cells
- To learn about the structure of DNA, how to extract and precipitate it
- To explore the difference between inherited and learned traits
- To follow simple patterns of inheritance
- To appreciate the contribution that DNA technology has contributed to scientific discovery, and the impact this has made on society
- To reveal the world of work in scientific research

## Workshop activities

- Using microscopes to look at pupil's own cheek cells
- Isolating pupil's own DNA from their cheek cells
- Carrying inheritance activities to understand the genetics behind their own characteristics
- Carrying out an "alien inheritance" activity to understand the genetics behind our own characteristics
- Discussion with scientists from The Roslin Institute

## Curriculum links

### Biological systems

#### Body systems and cells

Using a microscope, I have developed my understanding of the structure and variety of cells and their functions.

**SCN 3-13a**

#### Inheritance

I have extracted DNA and understand its function. I can express an informed view of the risks and benefits of DNA profiling. **SCN 3-14b**

### Topical Science

#### Topical Science

I have collaborated with others to find and present information on how scientists from Scotland and beyond have contributed to innovative research and development. **SCN 3-20a**

## Developing the Young Workforce

**The following *I can* statements are supported through EBSOC's workshops:**

- "I can discuss the relevance of skills to the wider world and make connections between skills and the world of work."
- "I can explain to others my ambitions/what I would like to do and look for ways to achieve them/that."
- "I believe I can maximise my potential in any type of work."

Get hands-on  
with real-life  
science