

Year 6 Summer 1 Project overview—Lab Rats



Project: Lab Rats

Stepping into the role of scientists, children will develop their expertise in scientific research and will be working in laboratories to test, theorise and conclude in specific areas of science. Becoming experts in a given field, they feedback their findings and teach their peers key learning about their specialisms.

HOOK: Science Demonstrations from Scientists (UoS)

OUTCOME: Year 6 Science Fair

Driving Subject: Science

- Circulation—identify and name the main parts of the human **circulatory system**, and describe the functions of the **heart**, **blood vessels** and **blood**.
- Light—recognise that light appears to travel in straight lines and that we see because objects give out from a **source** or **reflect** light into the **eye**.
- Shadows—Use the idea that light travels in straight lines to explain why **shadows** have the same shape as the objects that cast them
- Electricity - Compare and give reasons for **variations** in how **components** function, including the brightness of **bulbs**, the loudness of buzzers and the on/off position of **switches** and how they relate to the **flow** of **electrons**.

Applied Literacy:

-Reading—*retrieving* and *summarising* key non fiction facts from articles to support scientific understanding

-Writing—presenting findings in a chosen non fiction format

Applied Mathematics:

-Statistics

—collecting and representing data (discrete and continuous graphs)

-analysing data gathered to draw conclusions.

Curriculum Links:

PSHE— Health—Effects of drug use and the law surrounding drugs

Safety—Drug use, the law and the media.

Wellbeing—healthy bodies help healthy minds—keeping fit and keeping mentally healthy.

PE—Fitness and circuit training—weekly build up of fitness levels—personal goal setting.

SMSC and Learning Values:

Co-operation (*Social*) - Working in a small group to undertake scientific investigation

Cultural—respond to roles within the community and learn from a range of scientific professionals.

Independence and Aspiration—learning about key Scientists in biology/physics

Community links/Enterprise/Experiences:

Science demonstration

Scientist talk—What is a scientist?

Scientists from University of Southampton hold a talk about their research and jobs day to day.

Dissection of a pigs heart—practical investigation into the

Pupil Premium Curriculum Enhancement:

Small group focused question and answer session with Southampton Scientists about role, learning and pathway for job. Aspirational talk!