Science at school

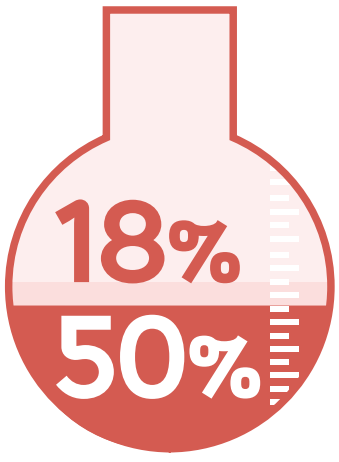
Young people's views on science education

In summer 2016, a representative sample of over 4,000 14- to 18-year-olds at English, state-funded schools and colleges shared their views and experience of science and science careers.

Here we present some of the key results. The full findings are freely available from: **https://wellcome.ac.uk/what-we-do/our-work/young-peoples-views-science-education**

Learning science

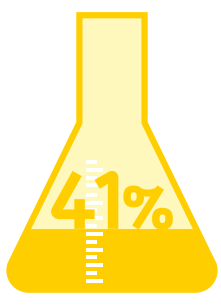
Most young people said they found science lessons at school interesting



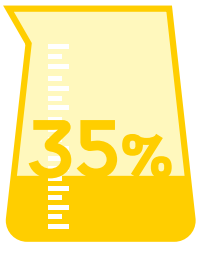
Very interesting

Fairly interesting

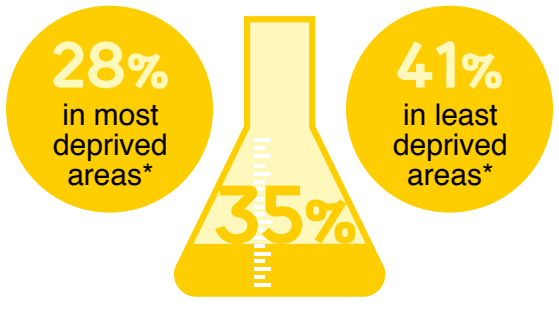
Top factors encouraging young people to learn science



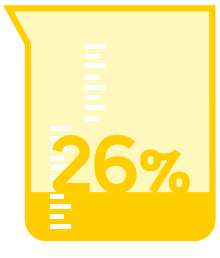
I find science interesting



I like doing practical work/experiments

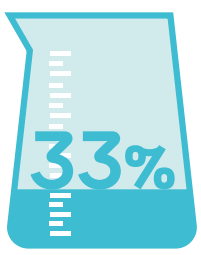


Having a good teacher

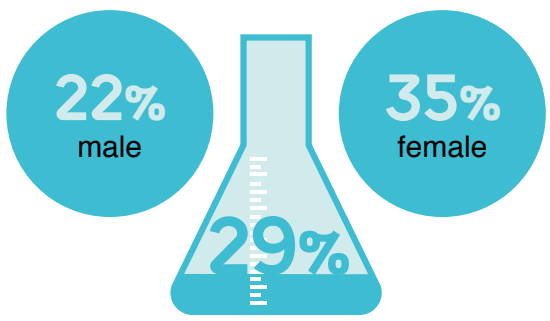


It's relevant to real life

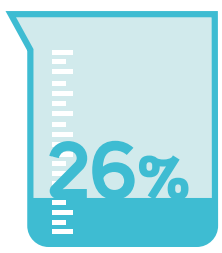
Top factors putting young people off learning science



Having a bad teacher



More difficult than other subjects



Doesn't fit with future study/career plans

*Most deprived areas = young people living in lowest quintile of Income Deprivation Affecting Children Index (IDACI). Least deprived areas = young people living in highest IDACI quintile

Triple science*

37%

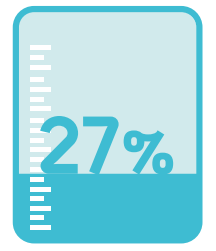
of students said that they studied triple science
But this is higher than official statistics

23%

of pupils were entered for triple science (four year average, DfE)

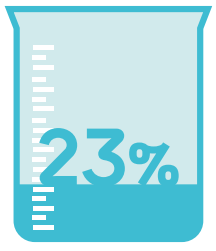
Reasons for not studying triple science

Too difficult/lacked confidence



Not interested

Didn't achieve grade needed/ not in the right set



29% in most deprived areas**

14% in least deprived areas**

Not offered by school

Practical work

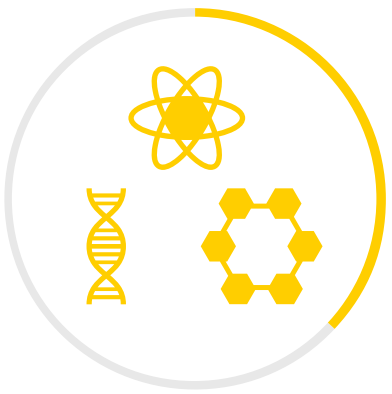
45%

Did hands-on practical work at least once a fortnight

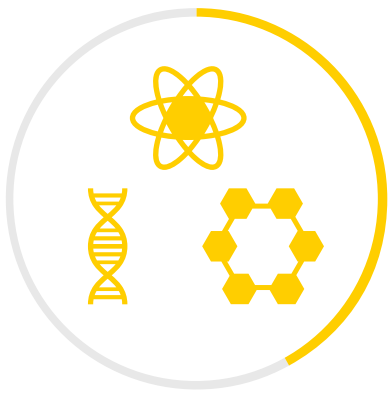
36% in most deprived areas**

54% in least deprived areas**

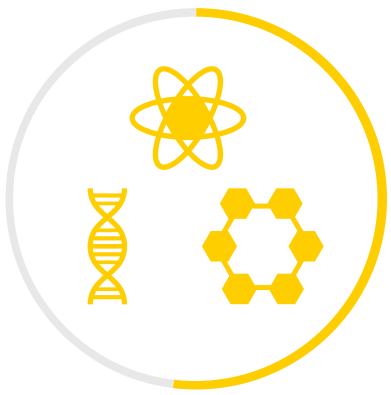
Percent of young people who did hands-on practical work at least once a fortnight



37% Single science



42% Double science

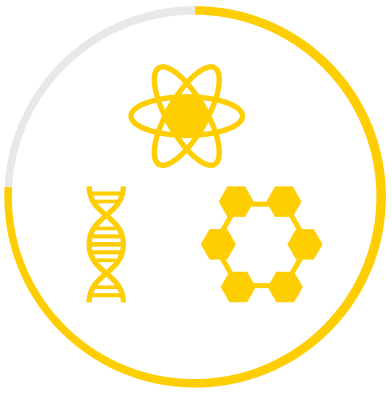


52% Triple science

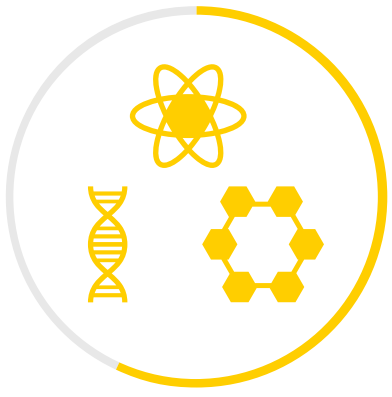
58%

Would prefer to do more practical work

Percent of young people who would prefer to do more practical work



76% Single science



57% Double science

49% Triple science

*GCSE science course worth three GCSEs. This may involve studying biology, chemistry and physics as separate GCSE subjects or studying Core, Additional and Further Additional Science GCSEs
**Most deprived areas = young people living in lowest quintile of Income Deprivation Affecting Children Index (IDACI). Least deprived areas = young people living in highest IDACI quintile

STEM careers

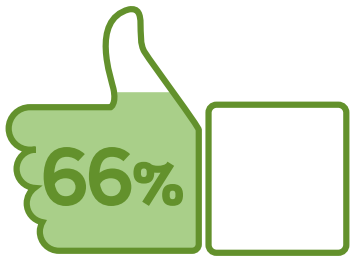
43%

Interested in a career involving science, computer science, engineering or maths (STEM)

19% Very interested

24% Fairly interested

Reasons for interest in a science-related career



Enjoy the subject/career

Careers are well paid

Good at the subject

Relates to real world

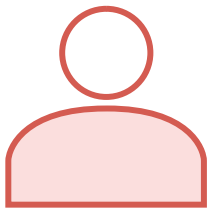
Wide range of career options

Work experience

30%

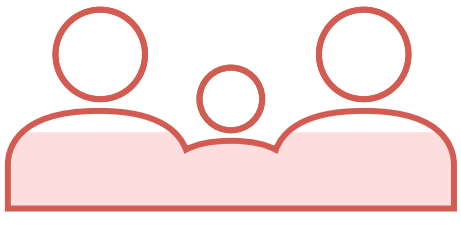
Among those with a firm interest in a science-related career did STEM-related work experience

How work experience was arranged



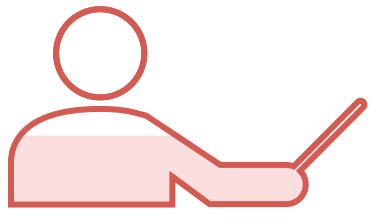
46%

Myself



39%

Through family/friends



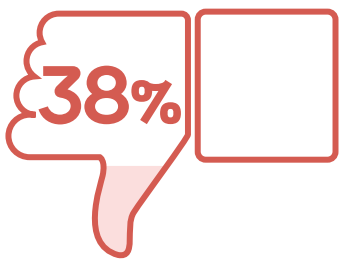
35%

Through school/college

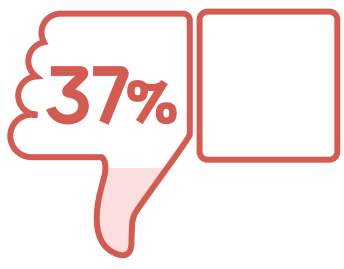
28%

Wanted to but were unable to do STEM related work experience

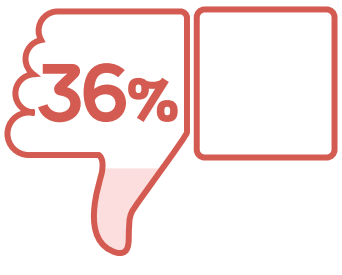
Reasons why they could not do STEM work experience



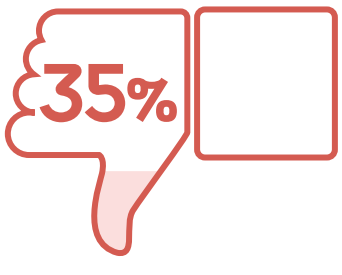
Didn't know how to find opportunities



Couldn't find relevant opportunities



School didn't offer

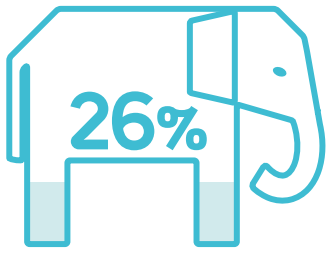


Didn't have right contacts

Informal science learning

Young people's varied engagement with science outside school in the last 12 months

Engaged with science content outside school (e.g. TV, radio, newspapers, online)



Visited a zoo or aquarium

Visited a science museum, science centre or planetarium

Visited a historical or cultural museum

Extra-curricular science activities

Any activity:

30% Male

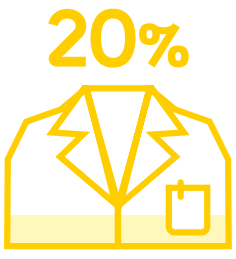
31% Female

But male students were more likely to say that these activities had encouraged them to study science

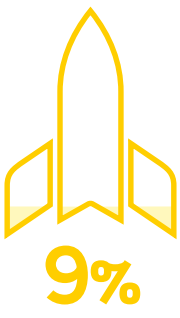
46% Male

36% Female

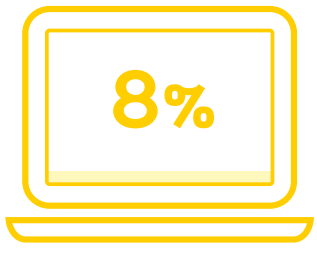
Extra-curricular activities by young people in the last 3 years



Talk at school by someone in a science-related job (e.g. STEM ambassador)



Science event, fair (e.g. Big Bang Fair)

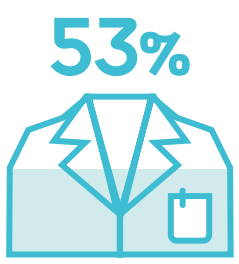


Science, computer science, engineering or maths club

Science Extended Project Qualification* or CREST award

* An Extended Project Qualification can be taken as a post-16 Level 3 course, comparable to half an A level.

Interest in hearing from scientists



Are interested in hearing more from scientists about their research