Science Education in England

Ethnicity, Gender and Disadvantage at GCSE and A level
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Overview

This report presents full data from STEM Learning’s Science Education in England report. The analysis uses data from the Department for Education’s National Pupil Database (NPD) to explore the effects of gender, disadvantage and ethnicity on entries and attainment in science subjects at GCSE (key stage 4) and A level (key stage 5) in 2019.

At GCSE, the report shows entries and attainment in science, including the separate sciences, Combined Science and Computer Science. For comparison, the report also shows data from English and Mathematics GCSEs.

At A Level, the report shows entries and attainment in science, as well as Computing. For comparison, the report also shows data from Mathematics, as the subject with the highest number of student entries.
### Chemistry

#### GCSE Chemistry - FSM Female Students, England

<table>
<thead>
<tr>
<th>Group</th>
<th>Grade Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>White British</td>
<td>[Bars representing grade distribution]</td>
</tr>
<tr>
<td>Black Caribbean</td>
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</tr>
<tr>
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<td>[Bars representing grade distribution]</td>
</tr>
<tr>
<td>Asian Pakistani</td>
<td>[Bars representing grade distribution]</td>
</tr>
<tr>
<td>Asian Bangladeshi</td>
<td>[Bars representing grade distribution]</td>
</tr>
<tr>
<td>Asian Indian</td>
<td>[Bars representing grade distribution]</td>
</tr>
<tr>
<td>Chinese</td>
<td>[Bars representing grade distribution]</td>
</tr>
</tbody>
</table>

#### GCSE Chemistry - Non-FSM Female Students, England

<table>
<thead>
<tr>
<th>Group</th>
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<tbody>
<tr>
<td>White British</td>
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<td>[Bars representing grade distribution]</td>
</tr>
<tr>
<td>Asian Indian</td>
<td>[Bars representing grade distribution]</td>
</tr>
<tr>
<td>Chinese</td>
<td>[Bars representing grade distribution]</td>
</tr>
</tbody>
</table>
Biology

GCSE Biology - FSM Female Students, England

- White British
- Black Caribbean
- Black African
- Asian Pakistani
- Asian Bangladeshi
- Asian Indian
- Chinese

Grade 9 8 7 6 5 4 3 2 1 U Not entered

GCSE Biology - Non-FSM Female Students, England

- White British
- Black Caribbean
- Black African
- Asian Pakistani
- Asian Bangladeshi
- Asian Indian
- Chinese

Grade 9 8 7 6 5 4 3 2 1 U Not entered
Combined Science

**GCSE Combined Science - FSM Female Students, England**

- **White British**
- **Black Caribbean**
- **Black African**
- **Asian Pakistani**
- **Asian Bangladeshi**
- **Asian Indian**
- **Chinese**

**GCSE Combined Science - Non-FSM Female Students, England**

- **White British**
- **Black Caribbean**
- **Black African**
- **Asian Pakistani**
- **Asian Bangladeshi**
- **Asian Indian**
- **Chinese**
Maths

GCSE Maths - FSM Female Students, England

Grade | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | U | Not entered

White British
Black Caribbean
Black African
Asian Pakistani
Asian Bangladeshi
Asian Indian
Chinese

GCSE Maths - Non-FSM Female Students, England

Grade | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | U | Not entered

White British
Black Caribbean
Black African
Asian Pakistani
Asian Bangladeshi
Asian Indian
Chinese
English

### GCSE English - FSM Female Students, England

[Chart showing the percentage of FSM female students achieving different grades by ethnic group in England.]

### GCSE English - Non-FSM Female Students, England

[Chart showing the percentage of non-FSM female students achieving different grades by ethnic group in England.]
Computer Science

**GCSE Computer Science - FSM Female Students, England**

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Grade Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>White British</td>
<td><img src="image" alt="Grade Bar" /></td>
</tr>
<tr>
<td>Black Caribbean</td>
<td><img src="image" alt="Grade Bar" /></td>
</tr>
<tr>
<td>Black African</td>
<td><img src="image" alt="Grade Bar" /></td>
</tr>
<tr>
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</tr>
<tr>
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</tr>
<tr>
<td>Chinese</td>
<td><img src="image" alt="Grade Bar" /></td>
</tr>
</tbody>
</table>

**GCSE Computer Science - Non-FSM Female Students, England**

<table>
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<td>White British</td>
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</tr>
<tr>
<td>Chinese</td>
<td><img src="image" alt="Grade Bar" /></td>
</tr>
</tbody>
</table>

Grade: 9 8 7 6 5 4 3 2 1 U Not entered
A level Physics

A level Physics - FSM Female Students, England

- White British
- Black Caribbean
- Black African
- Asian Pakistani
- Asian Bangladeshi
- Asian Indian
- Chinese

A level Physics - Non-FSM Female Students, England

- White British
- Black Caribbean
- Black African
- Asian Pakistani
- Asian Bangladeshi
- Asian Indian
- Chinese
Chemistry

A level Chemistry - FSM Female Students, England

- White British
- Black Caribbean
- Black African
- Asian Pakistani
- Asian Bangladeshi
- Asian Indian
- Chinese

A level Chemistry - Non-FSM Female Students, England

- White British
- Black Caribbean
- Black African
- Asian Pakistani
- Asian Bangladeshi
- Asian Indian
- Chinese
Biology

A level Biology - FSM Female Students, England

- White British
- Black Caribbean
- Black African
- Asian Pakistani
- Asian Bangladeshi
- Asian Indian
- Chinese

A level Biology - Non-FSM Female Students, England

- White British
- Black Caribbean
- Black African
- Asian Pakistani
- Asian Bangladeshi
- Asian Indian
- Chinese
Ethnicity

White British

GCSE

![GCSE Ethnicity Chart](image)

A level

![A level Ethnicity Chart](image)

Total cohort size: 292183

Grade 9 8 7 6 5 4 3 2 1 U Not entered

Total cohort size: 294984

Grade A* A B C D E U Not entered
Black African
GCSE

Black African students, England

A level

Black African students, England

Total cohort size: 8701
Grade 9 8 7 6 5 4 3 2 1 U Not entered

Total cohort size: 7698
Grade A* A B C D E U Not entered
Asian and Bangladeshi
GCSE

Asian Bangladeshi students, England

Total cohort size: 9724
Grade 9 8 7 6 5 4 3 2 1 U Not entered

A level

Asian Bangladeshi students, England

Total cohort size: 8766
Grade A* A B C D E U Not entered
Asian Indian

GCSE

A level
Chinese GCSE

Chinese students, England

Total cohort size: 1978

A level

Chinese students, England

Total cohort size: 2053