

Science Education Tracker 2023

Technical report

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MARCH 2025

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1. Introduction

1.1 Background and objectives of SET 2023

The Science Education Tracker 2023 (SET 2023) is the third survey in a series of studies which track evidence on key indicators for science engagement, education, and career aspirations among young people in England. Previous surveys were conducted in 2016 (SET 2016) and 2019 (SET 2019). All surveys have been carried out by Verian, formerly known as Kantar Public.

Although the surveys are part of the same series, the commissioning and funding arrangements have changed over time. The survey series was initially commissioned by Wellcome, in 2016, with support from the Department for Education (DfE), the Royal Society and the (then) Department for Business, Energy & Industrial Strategy (BEIS). Wellcome also commissioned the 2019 survey, which was supported by the Royal Society, DfE, and UK Research and Innovation (UKRI). For SET 2023, Wellcome provided the Royal Society with a grant to manage the project, who in turn commissioned EngineeringUK to manage the research for the project.

The SET 2023 survey covered 7,256 students in school years 7–13 in state-funded schools across England, which represents a sample of c.1,000 students per school year. This was based on a similar survey design to SET 2019. The SET 2016 survey was smaller in scale and only covered students in years 10–13.

Although many existing questions were retained to allow tracking with SET 2016 and SET 2019, the SET 2023 survey content was adapted to allow for changes in the educational policy landscape since the last survey, and to address some more specific policy requirements of the Royal Society and EngineeringUK. The key differences between SET 2023 and SET 2019 were as follows:

- While many tracking questions still focused on 'science', there was more differentiation in survey questions to allow separate analysis of the separate components of STEM (science, technology, engineering and mathematics).
- More differentiation of the different components of school science (biology, chemistry, physics).
- An expanded focus on practical science in schools.
- A new module on knowledge and attitudes towards engineering as a career.¹
- A new module on interest in climate change.
- New questions on trust in information sources about science.
- An increased focus on vocational STEM pathways.

As in previous SET surveys, all survey data were collected via an online survey platform. The survey was branded the Pathways Survey in all correspondence with young people.

¹ Questions built on selected questions from the Engineering Brand Monitor (EBM) surveys which have explored similar themes among young people at secondary school in the UK (see EngineeringUK, 2022 for the most recent report).

1.2 SET 2023 methodology: summary

The key details regarding the survey methodology are summarised below:

- The sample was a random sample of young people in school years 7–13 (aged 11–18) attending state-funded education in England. It was drawn from a combination of the National Pupil Database (NPD)² and the Individualised Learner Record (ILR).³ Following stratification of the sample frame by key variables such as gender, school performance, region, IDACI⁴ quartiles and establishment type, a systematic sample was drawn from within each year group based on a target achieved sample size of 1,000 interview per school year.
- All sampled individuals were sent a letter inviting them to take part in the online survey. The contact approach for young people varied depending on their age at the start of fieldwork:
 - Young people aged 16 or over were written to directly with no requirement for parental consent.
 - For young people aged 13–15, all correspondence was directed via parents; parents were asked to hand over the survey invitation letter to their child if they were happy for them to take part.
 - For children aged under 13, an additional level of consent was required.⁵ Before the selected child could access the survey online, parents were asked to complete a short consent survey to confirm that they were happy for their child to take part.
- Respondents were asked questions about a range of topics including their experience of science education, their future plans, and their attitudes towards STEM-related careers. Many questions were tailored to suit students of different ages.
- The average interview length was approximately 20 minutes.
- All questions about experiences at school related to the September 2022–July 2023 school year which respondents had recently completed.
- Respondents could complete the survey on any online device, including laptops, PCs, tablets and mobile phones. All new questions were cognitively tested with young people prior to administration.
- A total of 7,256 respondents completed the survey between 4 July and 3 September 2023, representing an overall response rate of 47%.⁶
- This response rate was achieved after sending an initial invitation and up to three reminders. Later reminders were targeted at groups with the lowest response rates to maximise the representativeness of the sample. The achieved sample closely matched the population on a range of demographic variables.

² A database about pupils in schools and colleges in England, maintained by the Department for Education.

³ A database of students enrolled in further education and work-based learning in England, maintained by the Education & Skills Funding Agency (an executive agency of the Department for Education).

⁴ Income Deprivation Affecting Children Index

⁵ To meet consent requirements under GDPR guidelines.

⁶ Response rate is calculated as the number of completed interviews/number of cases issued. This corresponds to Response Rate 1, as calculated by the American Research Association for Public Opinion Research (AAPOR, 2016, Survey Outcome Rate Calculator 4.0).

1.3 Data and findings

The SET 2023 dataset will be deposited with the UK data service at the University of Essex (<https://ukdataservice.ac.uk/>).

Survey findings can be found on the Royal Society website at <https://royalsociety.org/news-resources/projects/science-education-tracker/>.

This link enables access to the main report and a later follow-up report which includes additional analysis. These additional findings were published after the main report due to a delay in the receipt of linked data from the Department for Education's (DfE's) National Pupil Database (NPD) and Individualised Learner Record (ILR), which were required for these additional analyses.

2. Sampling

This chapter describes the process by which the sample was selected.

2.1 Sample sources

The SET sample was drawn from a combination of two DfE databases:

- The **National Pupil Database** (NPD), which covers pupils in state schools, including school sixth forms.
- The **Individualised Learner Record** (ILR), which covers young people in sixth form colleges and further education colleges.

At the time the sample was selected, the latest available *linked* NPD and ILR data related to the 2021/22 academic year. As a result, individuals from school years 6–12 were sampled from these databases. This was done on the basis that these individuals would make up the vast majority of the target population of years 7–13 in the 2022/23 academic year. Specifically, the databases used for the sampling were:

- The Summer 2021/22 School Census Pupil Level – limited to individuals in school years 6–12.
- The final 2021/22 ILR Learner snapshot – limited to individuals aged 16 at the start of the 2021/22 academic year.

A consequence of this approach is that there is a very limited amount of non-coverage of pupils who were not in the state school system in 2021/22 but joined the state school system for the 2022/23 academic year. For example, pupils who had moved from abroad or had previously attended an independent school. It is difficult to provide an exact figure for levels of non-coverage based on publicly available data sources (we did not have access to the relevant NPD files which would have enabled a more precise figure to be calculated). However, an internal analysis of data from the Next Steps longitudinal survey suggests negligible movement from independent schools to state schools. Furthermore, ONS migration statistics⁷ also suggest that the proportion of secondary school age children migrating to England each year is very small.

⁷ [Long-term international migration 2.07, age and sex, UK and England and Wales \(Discontinued after 2019\)](https://www.ons.gov.uk/peoplepopulationandcommunity/migrationandimmigration/datasets/long-terminternationalmigration) - Office for National Statistics (ons.gov.uk)

2.2 Cleaning and combining the databases

DfE provided Verian with anonymised databases from which to draw the sample. Prior to selecting the sample, the NPD and ILR databases were de-duplicated⁸ and combined into a single sample frame. Table 2a shows the number of pupils in the final sample frame by school year.

Table 2a Number of pupils in the sample frame by school year

2021/22 Academic Year	2022/23 Academic Year	N
Y6	Y7	668,299
Y7	Y8	646,638
Y8	Y9	635,892
Y9	Y10	637,780
Y10	Y11	613,814
Y11	Y12	591,755
Y12	Y13	232,175
TOTAL	-	4,026,353

2.3 Sample selection

Selection was limited to young people with an address listed in NPD/ILR (this excluded under 0.1% of the sample frame).

We explicitly stratified the sample frame by school year so that we could sample the correct number of young people per year group. Within each stratum, the sample frame was sorted by the variables listed below (in the order provided):

- **Gender** – Male / Female.⁹
- **Database source** for Y12 (2021/22 Academic year) only – NPD / ILR.
- **Science performance at school** – The definition varied between school year. Key Stage 4 data were used where available, otherwise key stage 2 data were used. Changes in qualifications and / or how qualifications are recorded meant that different approaches had to be used for different years. KS2 assessments were not conducted in 2019/20 and 2020/21 academic years due to the COVID-19 pandemic. This meant that no KS2 outcome data were available for years 7 and 8. An additional category code was used for these cases:
 - Year 6: Outcome for the key stage 2 science teacher assessment – Expected or better / Has not met standard.

⁸ Duplicates were identified using the anonymised Pupil Matching Reference provided by DfE.

⁹ The NPD gender variable only includes these two categories.

- Years 7–8: KS2 outcome not collected due to COVID.
- Years 9–10: National Curriculum level awarded for key stage 2 Science Teacher Assessment: Level 4, 5 or 6 / Other.
- Year 11: Achieved two 9–4 passes in science GCSEs or equivalent – Yes / No.
- Year 12: Achieved two 'good' science GCSEs or equivalent – Yes / No.
- **Overall performance at school:** The definition varied between school year. Key stage 4 data were used where available, otherwise key stage 2 (KS2) data were used. Changes in qualifications and / or how qualifications are recorded meant that different approaches had to be used for different years. KS2 assessments were not conducted for the 2019/20 and 2020/21 academic years due to the COVID-19 pandemic; this meant that years 7 and 8 did not have any KS2 outcome data. An additional category code was used for these cases.
 - Year 6: Quartiles derived from KS2 scores for Reading, Maths, and Grammar, Punctuation and Spelling.¹⁰
 - Years 7–8: KS2 outcome not collected due to COVID.
 - Years 9–10: Quartiles derived from KS2 scores for Reading, Maths and Writing.¹¹
 - Years 11–12: Quartiles based on total GCSE and equivalents new style point score.
- **Region:** Three regions (North/Midlands/South).
- **IDACI:** Quartiles.
- **Establishment type:** Academy / Junior/Middle schools, Comprehensives, FE colleges, other.

Once the frame was stratified, a systematic sample was drawn from a random start point and implemented separately for each year group (as these required different sampling fractions). Table 2b shows the number of young people that were sampled for each school year. The number of cases selected within each school year varied depending on the target sample size and the expected response rate. A reserve sample was also drawn in case the response rate was lower than anticipated.

Table 2b Number of individuals sampled per school year

21/22 Academic Year	22/23 Academic Year	Target number of interviews	N records with an address	Expected response rate	Sampled		
					Original issue	Reserve	Total
Y6	Y7	1,000	668,283	40%	2,500	1,100	3,600
Y7	Y8	1,000	646,611	48%	2,100	700	2,800
Y8	Y9	1,000	635,863	48%	2,100	700	2,800
Y9	Y10	1,000	637,743	48%	2,100	700	2,800
Y10	Y11	1,000	613,788	48%	2,100	700	2,800
Y11	Y12	1,000	591,724	48%	2,100	700	2,800
Y12	Y13	1,000	584,666	40%	2,500	700	3,200
Total		7,000	4,378,678	45%	15,500	5,300	18,000

¹⁰ Note that in the derived "overall score" Maths was given a weight of 50%. Reading, and Grammar, and Punctuation and Spelling, were each given a weight of 25%.

¹¹ Note that in the derived "overall score" Maths was given a weight of 50%. Reading and Writing were each given a weight of 25%.

2.4 Final sample file

The sampled Pupil Matching References (PMRs) were provided to DfE so that they could provide us with the names and addresses. Although databases from the 2021/22 Academic year were used to draw the sample, DfE provided us with the most up to date contact details available.¹² As per DfE rules, we deleted the original NPD and ILR files before the names and addresses of sampled individuals were provided to us.

There were three variables which we created when drawing the sample which DfE allowed us to append to the contact details of the sampled individuals. These variables were required to administer the survey.

- An **age flag** (<13 years old, 13-15 years old, 16 years + (at the start of fieldwork)). This variable was necessary to implement the correct mailing strategy (based on the age of the sampled individual at the beginning of fieldwork). Full details on the mailing strategy can be found in Chapter 5.
- A **selection flag** (Original issue / Reserve). This variable was required so we could identify which individuals were “reserve” cases.
- A **stratum reference variable**. This variable outlined which stratum each case was selected from. It was required for two reasons. First, to enable robust confidence intervals to be calculated for the survey estimates. Second, to implement a responsive survey design (full details provided in Chapter 5).

The stratum reference consisted of:

- Year group – 6 / 7 / 8 / 9 / 10 / 11 / 12.
- NPD or ILR – for year 12 only.
- Overall school performance – three bands (bottom 25%, middle 50%, top 25%).
- Gender – Male / Female.
- Region – North / Midlands / South.
- IDACI – Quartiles.

¹² Where possible details were taken from the Spring 2022/23 NPD, otherwise the details were taken from the Autumn 2021/22 NPD, the Summer 2021/22 NPD or the 2021/22 snapshot 14 ILR.

3. Questionnaire development

The SET 2023 questionnaire was developed by Verian in consultation with EngineeringUK, the Royal Society and the project advisory group. In this chapter we provide information on the initial development of the questionnaire, and the cognitive testing phases.

The questionnaire and fieldwork materials were developed over three stages during the period December 2022 to May 2023:

- A questionnaire consultation exercise with the project advisory group.
- Questionnaire content development in collaboration with EngineeringUK and the Royal Society, building on the consultation findings.
- A cognitive testing phase conducted over two rounds to test understanding of questions among the relevant age groups.

3.1 Questionnaire consultation

The first phase of the questionnaire development was a consultation exercise with members of the project advisory group, which included representatives from EngineeringUK, the Royal Society, ESRC, DfE, Wellcome, Institute of Physics (IOP), DSIT (formerly BEIS), University of Southampton and UCL.

Advisory group members were asked to complete a template to rate questions from 2019 as high, medium or low priority and to offer views on new question areas of interest and how questions could be adapted to meet new and emerging policy agendas and individual areas of interest. Consultation responses were collated and reviewed, and a report was prepared which summarised the findings from the consultation, together with question-level feedback.

This report was then used as a basis for further content development.

3.2 Content coverage

The questions built on those asked in SET 2019 (which in turn built on the 2016 questionnaire). However, many questions were redeveloped to address some more specific policy requirements of the Royal Society and EngineeringUK as well as to allow for changes in the science education policy landscape since 2019.

Questions were developed building on the consultation findings and then refined further via a series of meetings and workshops with EngineeringUK and the Royal Society.

The final questionnaire included questions covering the following topics:

- Parental consent survey (required for all sampled children aged 11–12).
- Opening demographics (year group, household composition).
- Out of school science-related activities.
- Level of interest and self-perception in science vs other school subjects.

- Factors encouraging and discouraging young people to learn science subjects and computing at school.
- Science at GCSE, including triple science vs. other science courses.
- Post-16 subject choices and whether felt able to make the choices they wanted.
- University intentions and subjects considered.
- Experience of practical work in science lessons and extra-curricular science activities.
- Career aspirations and advice and guidance received.
- Attitudes towards and level of interest in engineering as a career.
- Work experience involving STEM activities.
- Attitudes towards science, engineering and climate change.
- Family science connections.
- Closing demographics (gender, ethnicity etc.).
- Permission for re-contact and data linkage.

Given the volume of questions we wanted to cover, some questions were allocated to split-sample modules (Module A or Module B) with each module administered to a random half of the sample. This allowed an extended range of content while still ensuring the survey met the target average length of 20 minutes (see Chapter 6 for more details on interview lengths).

3.3 Cognitive testing

Cognitive testing describes a process of testing survey questions to ensure they work as intended before they are included in the mainstage questionnaire. Interviews are carried out by members of the research team who ask respondents selected survey questions and then spend some time discussing their answers. The researcher probes to check how easily the respondent can understand the question being tested and to explore how they decided on an answer. This provides valuable insight into how the questions are being interpreted and helps improve and refine question wording.

Testing mainly focused on new questions added to the 2023 survey as well as questions that had been changed or adapted since 2019. Two rounds of cognitive testing were conducted, one in March 2023, the other in April 2023. After each round, findings were discussed internally, a written report was prepared, and changes were then discussed and agreed with EngineeringUK and the Royal Society. Changes were implemented, which were then re-tested at subsequent phases. Given that the question formats were very similar to previous SET surveys, no formal usability testing was conducted in 2023. However, researchers conducted internal usability testing on both laptops and mobiles.

The samples for the cognitive testing consisted of young people drawn from across the relevant age spectrum. Respondents were recruited by Criteria Fieldwork Ltd, a specialist qualitative research recruitment agency. To ensure a reasonably broad range of respondents were recruited, Criteria was asked to fulfil quotas on school year, gender, ethnicity, free school meals eligibility, plans post-16 (vocational vs academic pathways), and current educational establishment attending (schools vs FE colleges). Information about other demographic characteristics was collected during the interview.

A total of 24 interviews was conducted across the two rounds (12 at each round). Interviews were conducted by members of the SET survey research team following an agreed probe guide, although researchers also used spontaneous probes to follow-up on any areas of confusion or

miscomprehension. All respondents were provided with an appropriate monetary payment to thank them for their participation.

Due to ethical and consent requirements, interviews for respondents in school years 7–9 aged under 14 were carried out face-to-face in Verian's office in Westminster. Each of these younger respondents was accompanied by a parent/guardian, and parental consent was sought in advance. Respondents in school years 10–13 (age 14+) were interviewed remotely via Zoom, and parental consent was sought for all those aged under 16. The sample across the two stages of cognitive testing included a spread of students according to the following characteristics (table 3a).

Table 3a: Cognitive / usability testing: profile of sample

		Numbers in sample
TOTAL		24
Round	Round 1	12
	Round 2	12
Gender	Male	12
	Female	12
Year Group	Year 7	4
	Year 8	2
	Year 9	4
	Year 10	3
	Year 11	5
	Year 12	3
	Year 13	3
Institution type	School	21
	Further Education College/Sixth form	3
Ethnicity	White British	17
	Black British	2
	British Asian/Indian/Asian	4
	Mixed race	1
Free school meals	Yes	7
	No	17
Post-16 plans (Years 10–13 only)	N/A: Years 7-9	10
	University	9
	Vocational Qualification/Apprenticeship	3
	Undecided	2
Interview type	Online	10
	Online (Zoom)	14

4. Fieldwork

Main survey fieldwork was conducted between 4th July and 3rd September 2023. This period was chosen as it falls after the school exam period and before the start of the new school year.

This chapter provides further information on the fieldwork processes for the survey.

4.1 How young people were contacted

In line with the 2019 survey, a parental consent procedure was used, which applied to parents of all children aged 11–12 at the start of fieldwork (the date used for age calculation was 1st July). The procedure for contacting young people of different ages is outlined below.

- **For young people aged 16 to 18:** All correspondence was directed to the young person themselves, with no requirement for parental involvement.
- **For young people aged 13 to 15:** All survey communication was directed via the parent/guardian of the named child. Each mailing contained two letters. The first letter was directed to the parent, explained the nature of the survey, and provided details to allow them to opt out on behalf of their child if they wished. If they were happy for their child to take part, parents/guardians were asked to hand the second letter on to the named young person, which contained details about how they could take part (survey website, login details etc.)
- **For young people aged 11 and 12:** The process was similar to that for 13–15-year-olds but with one added step. The parent letter contained instructions on how to access a parental consent survey, together with a unique set of login details for this. As with the 13–15-year-olds, the parent/guardian was asked to hand over a second letter to their child, which contained unique login details for the child to complete the main survey. However, the child was blocked from taking part in the survey until the parent consent form had been completed and consent had been logged.

These steps fulfil both Market Research Society (MRS) and General Data Protection Regulation (GDPR) guidelines. This consent process was tested in the pilot and was found to work well. More specific details of mailings are provided in section 4.3 below.

4.2 The parental consent form

The parental consent form, applicable to all parents of 11–12-year-olds, consisted of the following questions:

- Introduction to the survey and consent requirements (including a link to Verian's privacy policy which opened in a second screen).
- A question to check if they were the parent or legal guardian of the selected child (if no, the survey was routed to a closing screen).
- A question to ask if they were happy to provide consent for their child to take part (if no, the form was routed to a closing screen).

- A question which asked the parent to type in their full name to confirm consent (if they refused this the form was routed to a closing screen).

The above information was then sufficient to log that consent had been achieved. However, as part of the consent form, we also collected two further permissions. A refusal at either of these secondary questions did not preclude the child from taking part in the main survey.

- Consent to link their child's contact details to the National Pupil Database records (for example exam results, whether in receipt of free school meals etc.). For children aged 13+ this request was sought directly from the young person as part of the main child survey.
- Consent to re-contact their child within two years' time for a follow-up survey. Again, for children aged 13+, this request was sought directly as part of the main child survey.

The mean and median length of the parental consent survey was 2 minutes.¹³ Information about consent for data linkage and re-contact can be found in Chapter 7.

In total, 2,859 parents were sent a letter asking them to complete a consent form. The total number of parents completing a consent form was 1,301, which represents a response rate of 46%.

Most parental consent forms successfully converted to a child survey. In total, of the 1,301 cases where a parental consent form was completed, 1,129 children completed a survey (87%).

Most children (72%) completed the survey on the same day that their parent completed the consent form, suggesting that in most cases the transition was smooth; 88% completed the survey within two days of parental consent being logged.

As noted below, reminder mailings were sent to target young people in situations where the parent had completed the consent form but the young person had not completed the online survey by the time of the reminder cut-off date.

4.3 Fieldwork mailings and dates

Up to 5 mailings were sent. As discussed in Chapter 5, not all reminders were sent on a blanket basis; some were instead targeted to groups with the lowest response rates to help ensure a balanced and representative sample. The mailings were as follows (all fieldwork documents are contained in Appendix A):

- **Launch letter:** This included details on how to access the survey including unique login details. For young people aged under 16 two letters were sent to the same address (young person and parent) as described above.
- **First reminder letter:** A further mailing was sent to all non-responders at this stage.
- **Second reminder postcard + letter:** The second reminder was sent to a targeted selection of non-responders and consisted of a postcard, reminding young people (or their parents) about the study, followed by a letter a few days later. The intention was that the postcard would be more distinctive and as a result be more effective in cases where the original letters had not been opened.

¹³ All cases over 10 minutes were removed from the mean calculation as these were likely to include parents taking a break during the survey completion.

- **Third reminder letter:** A final, highly targeted, letter mailing was sent towards the end of fieldwork mainly to top up year groups which had not quite reached target by this stage.

Previous surveys (SET 2016 and SET 2019) included a pilot stage. No pilot stage was included in SET 2023. However, we sent out a small soft launch mailing ($n=775$) ahead of the main launch. This allowed us to test fieldwork procedures, survey length, and data accuracy ahead of the main launch. The soft launch stage was successful and responses from these interviews were included in the final data.

At each reminder stage, a small number of 'chaser' reminders were sent to young people (and their parents) where a parent had completed the consent survey but the young person had not yet completed the survey. These were sent to all relevant households and were not included as part of the targeted responsive design.

The dates and volumes of mailings are noted in Table 4a below. Although the initial mailing for the soft launch was sent out a week before the main launch, the reminder mailings were sent at the same time for the whole sample. The number of completed returns is based on the soft and main launch combined (issued sample $n=15,500$).

Table 4a: Mailing dates and volumes

Mailing stage, see also figure 4b)	Date	Size of mailing*	Number of completions after mailing	Cumulative no. completions	Cumulative response rate	Remaining non-responders
Soft launch letter (1)	4 July	775	-	-	-	-
Main Launch letter (1)	11 July	14,725	4,947	4,947	31.9%	10,553
First day of fieldwork (letters land)	7 July (soft launch)/14 July (main launch)					
First untargeted reminder: letter (2)	25 July	11,176	1,566	6,513	42.0%	8,987
Second targeted reminder: postcard (3)	7 August	4,644				
Second targeted reminder: letter (4)	11 August	4,506**	565	7,078	45.7%	8,422
Third targeted reminder: letter (5)	23 August	686	178	7,256***	46.8%	
Fieldwork close	3 Sep					

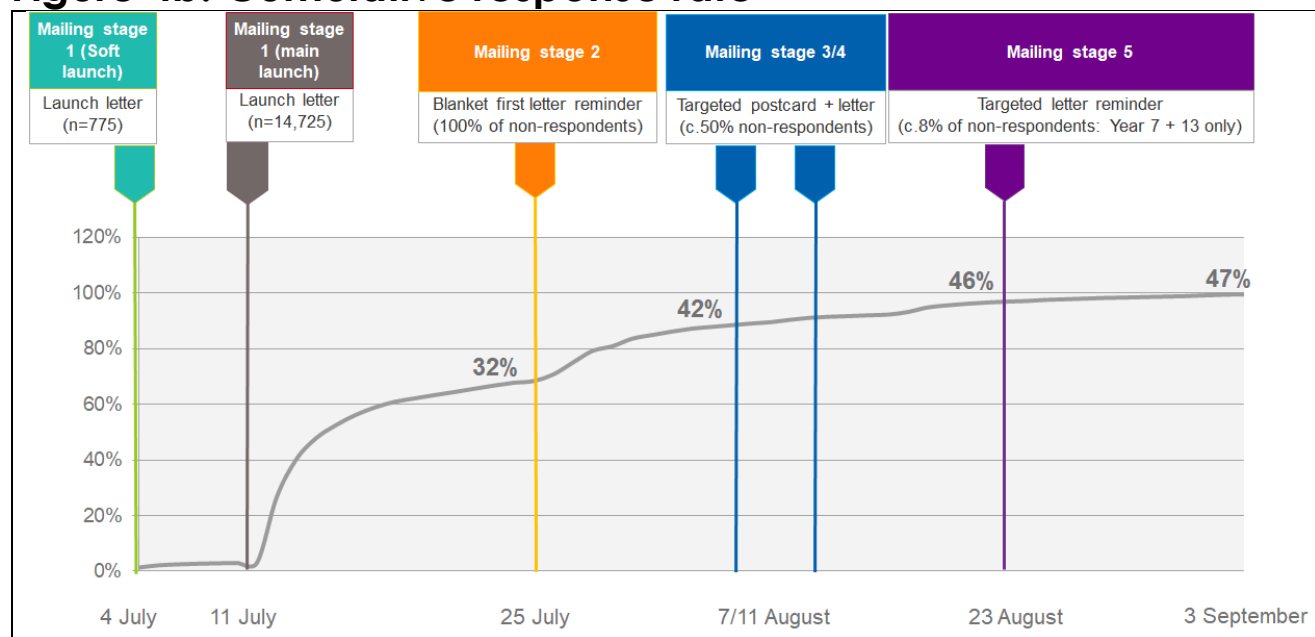
* As noted in the text, the size of the mailings for Reminders 2 and 3 do not correspond to the number of non-responders at each stage as the reminders were targeted to a subset of non-respondents in the lowest responding deciles (see section 5.2). Reminder mailings also excluded any addresses where the respondent (or their parent) had opted out.

** At Reminder 2, slightly fewer letter reminders were sent out compared with the postcard as interim completes as well as some further opt outs were removed in the intervening period.

*** The final number of achieved interviews was originally 7,284. However, a small number of cases were removed as part of quality assurance (see section 8.1).

The cumulative response rate is further illustrated in Figure 4b.

Figure 4b: Cumulative response rate



4.4 Incentive management

A conditional incentive was provided to all young people who completed the survey. This was administered online through Merit, a specialist online incentives provider.

Incentives were administered as follows:

- At the end of the survey, respondents were given instructions and a voucher code to claim a £10 e-voucher. They were able to immediately go to Merit's platform to claim this, or to receive these details via email to claim at a later date.
- Within the Merit platform various e-voucher options were available, chosen specifically for respondents aged 11-18, and including retailers and charities.
- Voucher codes could be claimed until 30th September 2024. Figures noted here are accurate as of 8th January 2024.

In total 93.3% of respondents claimed their incentive. The redemption rates for the different e-vouchers were as follows (table 4c):

Table 4c: Vouchers redeemed

Amazon	63.8%
PayPal	16.3%
Love2Shop	6.6%
Boots	5.6%
H&M	3.5%
ASOS	2.1%
Argos	1.7%
UNICEF (charity)	< 0.5%
MIND (charity)	< 0.5%
Total redeemed	100%

5. Response rates and targeted fieldwork strategy

5.1 Response rates

A total of 7,256 young people completed the survey, a response rate of 47%.^{14 15}

Response rates varied between different groups, and non-response weights were calculated to account for this (see Chapter 9).

The response rates for different survey subgroups (the variables included in the stratum reference) are shown in Table 5a.

The response rate was lower for year 7 compared with the other school year groups, which is to be expected as all young people in this year group would have required parental consent before they could take part (a small proportion of students in year 8 would also have required this).

Response rates were also lower than average for students in the most deprived IDACI quintiles and among students who were classified in the bottom 25% in terms of their overall school academic performance.

Table 5a: Response rates by survey subgroup

Subgroup	Response rate	
Overall		47%
School Year sample frame 2021/22)	6 (Year 7 in 2022/23)	39%
	7 (Year 8 in 2022/23)	49%
	8 (Year 9 in 2022/23)	50%
	9 (Year 10 in 2022/23)	50%
	10 (Year 11 in 2022/23)	51%
	11 (Year 12 in 2022/23)	49%
	12 (Year 13 in 2022/23)	41%
Gender	Male	44%
	Female	50%
IDACI quartiles	Quintile 1 (most deprived)	44%
	Quintile 2	45%
	Quintile 3	47%
	Quintile 4 (least deprived)	51%
Region	South	48%
	Midlands	48%
	North	44%

¹⁴ Response rate is calculated as: number of completed interviews / number of cases issued. This corresponds to Response Rate 1, as calculated by the American Research Association for Public Opinion Research (2016).

¹⁵ The actual number of returns of 7,284, although 28 respondents were removed as a result of quality control checks (see section 8.1)

5.2 Targeted fieldwork strategy and response maximisation

Following the invitation letter, the first reminder was sent to all non-responders.

The second and third reminder letters were targeted at strata with lower levels of response. The purpose of this exercise was to achieve a more balanced final sample and minimise non-response bias.

To target these reminders, a main effects binary logistic regression model was used to estimate each respondent's probability of response. The variables included in the stratum reference (full details on this can be found in section 2.4) were used as the predictors for the modelling. Non-respondents were then sorted by their estimated response probability (separately for each year group¹⁶).

The second reminder was sent to 50% of non-responders, with reminders targeted towards individuals who were least well represented in the sample. The proportion of non-responders in each year group who received a second reminder was adjusted in relation to the response level of the year group. Where performance was lower, a higher share of non-responders was sent the second reminders in the year group. Where performance was higher, fewer non-responders received a second reminder. This adjustment maintained the overall percentage of reminders at 50% for the total non-responders.

Table 5b shows for each year group, the response rate following the first reminder and the share of non-responders within each year group to receive a second reminder.

Table 5b: Selection of second reminder by year group

School year	Response Rate	% of non-responders receive 2 nd reminder
7	30.4%	72.1%
8	40.7%	61.1%
9	43.2%	40.7%
10	43.2%	40.2%
11	46.3%	12.5%
12	41.4%	55.1%
13	33.1%	53.9%

Following the second reminder, year 7 and year 13 respondents were below the target of 1,000 per year group. As such it was decided to target the third reminders to 500 non-responders in year 7 and 200 non-responders in year 13 to help ensure we met the target. As with the second reminder, a main effects binary logistic regression model was used to estimate each respondent's probability of response. Non-responders were sorted by their probability of response and the 500 cases with the lowest probability of response were selected in year 7, and lowest 200 in year 13.

This aimed to help boost year 7 and year 13 numbers and further reduce variation in response rates for these year groups.

There was a time lag of about a week between cases being selected for reminders and these being sent out. As a result, some individuals initially selected for a reminder did participate in the intervening period and these cases were removed from each reminder mailout.

¹⁶ As we expected the response rates to vary for each of these categories.

It is important to note that response probabilities were re-estimated prior to each contact stage. This meant the allocation of each stratum could change during the fieldwork period. For instance, a stratum which we sent no first reminder could then have been sent the second reminder.

Cases for the second reminder were selected based on responses received by the 1st August 2023. Cases for the third reminder were selected based on responses received by the 21st August 2023.

6. Interview length, partial interviews and device choice

6.1 Interview length

The median interview length was 19 minutes and the mean interview length was around 21 minutes.¹⁷ The mean interview length was calculated after removing outliers of 90 minutes+ (as longer interviews could indicate that respondents took a break midway through the survey).

There was relatively little variation by gender and year group and the modular content was evenly matched (Table 6a). As in most surveys, surveys completed on mobile devices were slightly shorter than surveys completed on a laptop or tablet.

Table 6a: Average survey length by survey subgroups

	Mean length**	Median length
TOTAL	20.9	18.7
MODULARISATION		
Sample A	20.8	18.8
Sample B	20.9	18.7
SCHOOL YEAR		
Year 7	- *	- *
Year 8	22.0*	19.9*
Year 9	20.5	18.5
Year 10	21.8	19.9
Year 11	22.0	20.0
Year 12	19.8	17.4
Year 13, or above	19.0	16.8
DEVICE		
PC/laptop/tablet	22.9	20.7
Smartphone	19.9	17.8
GENDER		
Males	20.7	18.3
Females	21.1	19.3

*Refer to footnote below.

** The means have been calculated after removing outliers.

¹⁷ Some cases have been removed from the mean and median analysis. Due to a logistical issue with the script, the timings data exclude young people who required parental consent as the timings data were found to include the gap between parental consent and the young person starting the survey which inflated the interview lengths for this subgroup. This means that the timings data exclude all young people in year 7 and a selection of young people in year 8 who were categorised as being aged under 13 at the time of the survey and therefore required parental consent.

6.2 Partial interviews

There were 187 respondents who started the survey (that is got as least as far as the first question) but did not complete the survey beyond the threshold we set as a useable partial interview; this represents a break-off rate of 2.5%. These respondents have not been included in the final dataset.

6.3 Device choice

Young people could complete the survey on a range of devices. The profile of completions by device is shown in Table 6b.

Overall, 70% completed the survey on a smartphone, which is substantially higher than the equivalent percentage in 2019 (46%) and 2016 (25% based on all in years 10–13).

Younger respondents were slightly more likely than older respondents to use a PC/laptop or tablet, while older respondents were slightly more likely to use a smartphone to complete the survey.

Of those who used a mobile device, 65% said they accessed the survey website using the QR code provided on the advance letter.

Table 6b: Devices used by respondents

(%)		School year (%)						
	All respondents	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13
PC / laptop/tablet	28.9	32.5%	30.7%	29.8%	27.2%	26.3%	27.2%	28.8%
Smartphone	68.4	64.0%	65.7%	66.8%	70.1%	71.2%	70.6%	69.9%
Other device	2.7	3.4%	3.6%	3.4%	2.7%	2.5%	2.2%	1.3%
Base	7,256	993	1,032	1,052	1,057	1,076	1,040	1,006

7. Consent for data linkage and recontact

Two consents were requested at the close of the interview: consent to link answers to DfE records (i.e. NPD/ILR); and consent to re-contact respondents in two years to take part in a follow-up survey.

7.1 Agreement to NPD / ILR linkage

All young people were asked if they were happy for their survey answers to be linked. However, for children aged under 13, parents were additionally asked this as part of the parental consent form. In this situation, if a child agreed and their parent refused, then the parental refusal would take precedent. In other words, both child and parent needed to consent to data linkage for us to be able to link the data.

All respondents were asked for their permission to link their survey answers to NPD / ILR records as follows. A similar question was asked of parents on behalf of their child as part of the parental consent survey for children aged under 13.

The Department for Education holds information about you and your education. This includes information about your ethnicity, schools, exams, special educational needs, and free school meals.

We would like to add this information to your survey answers to create a more accurate picture of your life and experiences. This information will only be used for research purposes.

All information is confidential: this means that your name and address will never be included in the results.

Can we have your permission to link this information to your survey answers? (Yes, No)*

**A help button provided further information as follows: We link survey data to administrative data such as exam results so that we do not need to collect all this information in the survey. Having more data about the individuals who take part in the survey helps the Royal Society and EngineeringUK to ensure that educational services can be planned around the needs of individuals from all types of background.*

Taking the permissions of both young people and their parents (where applicable) into account, 85% gave consent which was slightly lower than the equivalent rate in 2019 (90%). See Table 7a.

Table 7a: Agreement to NPD linkage by school year

	% who agreed to NPD data linkage by school year							Total
	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	
%	90.2%	87.2%	87.1%	85.7%	84.9%	84.7%	79.9%	85.7%
N	992	1032	1050	1056	1075	1040	1005	7,250*

* This is slightly lower than the overall total of 7,256 due to a small number of people who dropped out towards the end of the survey and therefore did not reach this question.

The level of consent for NPD linkage from parents was very high at 96%. Among children aged under 13, $n=1,018$ (90%) had consented for NPD linkage, though this reduced slightly to $n=992$ (88%) once the data had been checked against parental consent.

7.2 Agreement to re-contact

Respondents aged 13+ were asked their permission to re-contact within 2 years' time for the purposes of further research. For children aged under 13, consent was sought via parents.

Thank you for your help. You can claim your e-voucher in a few moments.

Kantar Public¹⁸ may want to contact you again within the next two years to find out how your attitudes and plans may have changed since this survey. The survey would be a little shorter (10 to 15 minutes) and you would receive another £10 voucher.

Kantar Public would retain your name and contact details for the next two years only for the purposes of getting back in touch. Kantar Public would not pass on your details to anyone else.

If you are re-contacted there will be no obligation for you to take part in any further research.

*Would you be willing to allow us to contact you again within the next two years for this purpose?
(Yes, No)*

The consent rate was very high (94%) and was consistently high across all year groups (between 91% and 96%). For children aged under 13, virtually all parents (96%) consented for their child to be recontacted.

Where respondents gave consent for follow-up, all respondents aged 16+ were asked to provide additional contact information so we could get back in touch with them in two years. MRS guidelines meant that we were unable to ask any respondent aged under 16 for personal information without the consent of their parent.

We decided not to collect recontact details from parents of <13s as part of the parental consent survey. This is because we were concerned that asking for personal information before their child had begun the survey may have put some parents off and might have caused them to remove consent for their child to participate in the survey.

As shown in Table 7b below, the large majority of those who were aged 16+ and who gave consent to follow-up were willing and able to provide at least one additional method of contact (their address details will already be available).

¹⁸ Verian was named Kantar Public at the time of fieldwork.

Table 7b: Agreement to re-contact and provision of additional contact information

	n	%
Base: All	(n=7,256)	
Consented to follow-up (aged 13+)	5,734	
Parent consented to follow-up (aged <13)	1,087	
Total consent to follow-up	6,821	94%
Base: All aged 16+ who agreed to be re-contacted	(2,718)	
Mobile number		
Provided a number	2,035	75%
Household telephone number		
Provided a number	461	17%
Email		
Provided an email address	2,366	87%
Provided at least one additional method of contact	2,483	91%

Based on the percentage where consent to follow-up has been given, this provides the following possible pool of contacts for a follow-up survey by school year (Table 7c). It should be noted that this does not account for respondents who may move or change their contact details in the interim period, or who may have provided incorrect re-contact information.

Table 7c: Potential pool of re-contacts for a follow-up survey

	Total respondents in SET 2023	Number who consented to recontact	% who consented to recontact
Year 7	993	956	96.3%
Year 8	1,032	991	96.0%
Year 9	1,052	999	95.0%
Year 10	1,057	1,003	94.9%
Year 11	1,076	1,002	93.1%
Year 12	1,040	959	92.2%
Year 13	1,006	911	90.6%
All	7,256	6,821	94.0%

8.Data processing

8.1 Data processing, coding and data cleaning

The survey was conducted using Forsta Plus survey software. For each question in the survey respondents were obliged to give an answer in order to move on to the next one; 'Don't know' and 'Prefer not to say' options were available to respondents at all questions.

28 cases which were initially captured as survey completes were removed following data cleaning checks. An inspection was made of all interview lengths and 23 respondents were removed from the final dataset due to unfeasibly short interview lengths (< 30% of the median for each age group). A further 5 cases were removed as the year group collected in the survey mismatched the year group provided by the NPD data by more than one school year which could have indicated that the wrong child took part in the survey.

The survey contained two fully open-ended questions and a number of questions where respondents were able to specify an 'other answer'. Coding was conducted using Ascribe software. A detailed coding plan was produced by the research team which briefed coders on what was required. A sample of coding from each question was checked by the research team to ensure that quality was maintained throughout.

8.2 Linking to NPD data

Where respondents gave permission, it was possible to link their survey answers to administrative data held by the NPD: 86% of respondents agreed for their data to be linked in this way. Their anonymous identification numbers were sent to the NPD team, who sent back the relevant administrative data.

A number of summary variables were then created by Verian and merged with the survey dataset. These variables included:

- eligibility status for free school meals;
- whether English is the young person's first language;
- special educational needs status (SEN).

Respondents who did not give permission to link their survey answers to NPD data were asked a series of follow up questions about subject qualifications they had achieved.

9. Weighting

9.1 Design weighting

The sampling fraction varied by school year and design weighting was required to compensate for this for estimates of the total population of young people across school years.

Table 9a: Design weighting

2021/22 Academic Year	2022/23 Academic Year	N	Sampled	Sampling probability	Design weight
6	7	668,283	2,500	0.0037	267.31
7	8	646,611	2,100	0.0032	307.91
8	9	635,863	2,100	0.0033	302.79
9	10	637,743	2,100	0.0033	303.69
10	11	613,788	2,100	0.0034	292.28
11	12	591,724	2,100	0.0035	281.77
12	13	584,666	2,500	0.0043	233.87
Total	-	4,378,678	15,500		

9.2 Non-response weighting

A main effects binary logistic regression model was used to estimate the response probability of each respondent. The variables included in the stratum reference (full details on this can be found in section 2.4) were used as the predictors for the modelling. We trialled different model specifications and used the Akaike Information Criterion to select the best fitting model:

$$p(\text{response}) = \text{Year Group} + \text{Gender} + \text{Free School Meal eligibility} + \text{SEN} + \text{Overall School performance} + \text{Science Performance} + \text{Year Group} * \text{Gender} + \text{Year Group} * \text{SEN}$$

The non-response weight was calculated by taking the inverse of the probability of response (as estimated by the non-response model).

9.3 Final weight

The final weight was calculated by multiplying the non-response weight by the design weight. The overall design effect due to the weighting was estimated as 1.06.¹⁹ It was therefore decided that there was no need to trim the weights.

¹⁹ Design effect calculated as $1 + \text{cov}(W)^2$, where $\text{cov}(W)$ is the coefficient of variation of the weights.

The profile of the weighted sample was found to be a good match to the population profile (Table 9b).

Table 9b: Weighted sample profile compared with population profile

		Population	Weighted sample
School Year	6	15.3%	15.3%
	7	14.8%	14.7%
	8	14.5%	14.5%
	9	14.6%	14.7%
	10	14.0%	14.0%
	11	13.5%	13.4%
	12	13.4%	13.4%
Gender	Male	51.2%	51.3%
	Female	48.8%	48.7%
Region	South	40.2%	40.4%
	Midlands	31.2%	32.3%
	North	28.6%	27.3%
FSM	Eligible	77.1%	77.3%
	Not eligible	22.9%	22.7%

Appendix A: Fieldwork documents

A copy of all fieldwork materials is provided, and the labelling key is provided below.

Mailing	Letter	Letter content
Launch Letter	1A	Launch letter to parents of a child aged 11-12
	1B	Launch letter to parents of a child aged 13-15
	1C	Launch letter to respondents aged 11-12
	1D	Launch letter to respondents aged 13+
Reminder 1 Letter	2A	First reminder letter to parents of a child aged 11-12
	2B	First reminder letter to parents of a child aged 13-15
	2C	First reminder letter to respondents aged 11-12
	2D	First reminder letter to respondents aged 13+.
Reminder 2 Letter	3A	Second reminder letter to parents of a child aged 11-12
	3B	Second reminder letter to parents of a child aged 13-15
	3C	Second reminder letter to respondents aged 11-12
	3D	Second reminder letter to respondents aged 13+
	3E	Second Reminder letter to parents of a child aged 11-12 – bespoke version where parental consent given but child not yet responded
	3F	Second Reminder letter to respondents aged 11-12 – bespoke version where parental consent given but child not yet responded
Reminder 2 Postcard		The parent version of the second reminder postcard
		The respondent version of the second reminder postcard
Reminder 3 Letter	4A	Third reminder letter to parents of a child aged 11-12
	4B	Third reminder letter to parents of a child aged 13-15
	4C	Third reminder letter to respondents aged 11-12
	4D	Third reminder letter to respondents aged 13+
	4E	Third Reminder letter to parents of a child aged 11-12 – bespoke version where parental consent given but child not yet responded
	4F	Third Reminder letter to respondents aged 11-12 – bespoke version where parental consent given but child not yet responded

Dear Parent or Guardian of {First name}

Pathways study

Your child has been selected to take part in **Pathways**, an important study of 7,000 young people in years 7 to 13. The study covers their thoughts on a range of topics about their education, favourite subjects and their future.

Your child will be able to complete the survey online, and they will receive a **£10 voucher** of their choice that can be spent at a range of high street and online stores.

Before your child can take part, we need you to complete a very short online consent form to check you are happy for your child to take part. This will only take a couple of minutes.

What do I need to do to provide consent?

1. Go to...  pathwaysresearch.co.uk on any device or scan the QR code below. Then click the link in the grey box to access the parental	2. Use your unique parent login details:  Username:xxxx Password:xxxx	3.  Complete the short online consent form and then pass the second letter enclosed in this envelope to your child.
---	--	--

The Pathways survey is being conducted by Kantar Public, an independent research company, on behalf of the Royal Society, Wellcome and EngineeringUK, with support from the Department for Education.

Further details about the survey, including how to contact the survey team, can be found on the other side of this letter and on the survey website.

Thank you for your help,

Yours sincerely,

[signature]

Craig Watkins
UK CEO
Kantar Public

QR CODE

A.2. Launch letter 1B text

Dear Parent or Guardian {First name}

Pathways study

Your child has been selected to take part in **Pathways**, an important study of 7,000 young people in years 7 to 13. The study covers their thoughts on a range of topics about their education, favourite subjects, and future.

Your child will be able to complete the survey online, and they will receive a **£10 voucher** of their choice that can be spent at a range of high street and online stores.

What do I need to do next?

All you have to do is hand the second letter included in the envelope to your child. This includes information about the survey and their unique login details to complete the survey online.

Further information

This survey is being conducted by Kantar Public on behalf of the Royal Society and EngineeringUK, with support from Wellcome and the Department for Education.

Further details about the survey, including how to contact the survey team, can be found on the other side of this letter.

Thank you for your help,

Yours sincerely,

[signature]

Craig Watkins
UK CEO
Kantar Public

A.3. Launch letter 1C text

Dear {First name}

Pathways study: We need your help!

I am writing to invite you to take part in **Pathways**, an important study of 7,000 young people in years 7 to 13. The study covers your experiences at school and what subjects or future jobs you might be most interested in.

We really value **your** views and opinions. The survey will be used by the Government and other organisations to help improve education and careers advice for young people.

The online survey will take around 20-25 minutes to complete and as a 'thank you' can claim a **£10 voucher** immediately after completing the survey. You can choose from a range of vouchers including Amazon, Love2Shop or PayPal.

On a separate letter, we have asked your parent or guardian to complete a short online consent form so we can check they are happy for you to take part. If this has been done, the details you need to log into the survey are provided below.

How to take part

1. Go to...  pathwaysresearch.co.uk on your laptop, phone or tablet or scan the QR code below	2. Use your unique login details:  Username:xxxx Password:xxxx	3. Complete the online survey and receive a £10 e-voucher 
--	--	---

This survey is being conducted by Kantar Public on behalf of the Royal Society and EngineeringUK, with support from Wellcome and the Department for Education.

Everything you tell us in the survey will be treated privately. Further information about the survey, including how to contact us, can be found on the other side of this letter and on the survey website.

Thank you for your help.

Yours sincerely,

[signature]

Craig Watkins
UK CEO
Kantar Public

QR CODE

A.4. Launch letter 1D text

Dear {First name}

Pathways study: We need your help!

I am writing to invite you to take part in **Pathways**, an important study of 7,000 young people in years 7 to 13. The study covers your experiences at school, college, or employment, what subjects you are most interested in, and any plans you may have for the future.

You have been selected as part of a sample to represent young people in your age group and we really value **your** unique views and opinions. The survey will be used by the Government and other organisations to help improve education and careers advice for young people.

The online survey will take 20-25 minutes to complete and as a thank-you, you can claim a **£10 voucher** immediately after completing the survey. You can choose from a range of vouchers including Amazon, Love2Shop or PayPal.

How to take part

1. Go to...  pathwaysresearch.co.uk on your laptop, phone or tablet or scan the QR code below	2. Use your unique login details:  Username: xxxx Password: xxxx	3. Complete the online survey and receive a £10 e-voucher 
---	--	--

This survey is being conducted by Kantar Public on behalf of the Royal Society and EngineeringUK, with support from Wellcome and the Department for Education.

Everything you tell us in the survey will be treated in the strictest of confidence. Further details about the survey, including how to contact us, can be found on the other side of this letter and on the survey website.

Thank you for your help,

Yours sincerely,

[signature]

Craig Watkins
UK CEO
Kantar Public

QR CODE

A.5. First reminder letter 2A text

Dear {First name}

Pathways study

We recently invited your child to take part in **Pathways**, an important study of 7,000 young people in years 7 to 13. Already thousands of young people across England have completed the survey and we hope your child will be able to do the same.

The online survey lasts 20-25 minutes and as a thank each participant can claim a **£10 voucher** of their choice including Amazon, Love2Shop or PayPal.

Before your child can take part, you will need to complete a short online consent form so we can check you are happy for your child to take part. This will only take a couple of minutes.

How do I provide consent?

1. Go to...  pathwaysresearch.co.uk on your laptop, phone or tablet or scan the QR code below	2. Use your unique login details:  Username:xxxx Password:xxxx	3. Complete the short online consent form. 
---	---	---

This survey is being conducted by Kantar Public on behalf of the Royal Society and EngineeringUK, with support from Wellcome and the Department for Education.

Further details about the survey, including how to contact us, can be found on the other side of this letter and on the survey website.

If your child has already completed the survey, then thank you and you can ignore this letter.

Thank you for your help,

Yours sincerely,

[signature]

Craig Watkins
UK CEO
Kantar Public

QR CODE

A.6. First reminder letter 2B text

Dear Parent or Guardian of {First name}

Pathways study

We recently invited your child to take part in **Pathways**, an important study of 7,000 young people in years 7 to 13. Already thousands of young people across England have completed the survey and we hope your child will be able to do the same.

The online survey lasts 20-25 minutes and as a thank each participant can claim a **£10 voucher** of their choice including Amazon, Love2Shop or PayPal.

What do I need to do next?

All you have to do is hand the letter included in the envelope to your child. This has information about the survey and their unique login details to complete the survey online.

Further information

This survey is being conducted by Kantar Public on behalf of the Royal Society and EngineeringUK, with support from Wellcome and the Department for Education.

Further details about the survey, including how to contact us, can be found on the other side of this letter and on the survey website.

If your child has already completed the survey, then thank you and you can ignore this letter.

Thank you for your help,

Yours sincerely,

[signature]

Craig Watkins
UK CEO
Kantar Public

QR CODE

A.7. First reminder letter 2C text

Dear {First name}

Pathways study: Have your say

We recently contacted you to invite you to take part in **Pathways**, an important study of 7,000 young people in years 7 to 13.

We really value **your** contribution. The study covers your experiences at school, what subjects you are most interested in, and any thoughts you might have about the future.

The online survey will take 20-25 minutes to complete, and you will immediately receive a **£10 voucher** of your choice including Amazon, Love2Shop or PayPal.

On a separate letter, we have asked your parent or guardian to complete a short online consent form so we can check they are happy for you to take part. If this has been done, the details you need to log into the survey are provided below.

How to take part

1. Go to...  pathwaysresearch.co.uk on your laptop, phone or tablet or scan the QR code below	2. Use your unique login details:  Username:xxxx Password:xxxx	3. Complete the online survey and receive a £10 e-voucher 
---	---	--

Further details about the survey can be found on the other side of this letter, and on the survey website.

If you have already completed the survey, then thank you and you can ignore this letter.

Thank you for your help,

Yours sincerely,

[signature]

Craig Watkins
UK CEO
Kantar Public

QR CODE

A.8. First reminder letter 2D text

Dear {First name}

Pathways study: Have your say

We recently contacted you to invite you to take part in **Pathways**, an important study of 7,000 young people in years 7 to 13.

We really value **your** contribution, as you have been chosen as part of a sample selected to represent the views of all young people in your age group.

The study covers your experiences at school, college, or employment, and what subjects or careers you are most interested in.

The online survey will take around 20-25 minutes and when you finish you will immediately receive a **£10 voucher** of your choice including Amazon, Love2Shop or PayPal.

How to take part

1. Go to...  pathwaysresearch.co.uk on your laptop, phone or tablet or scan the QR code below	2. Use your unique login details:  Username: xxxx Password: xxxx	3. Complete the online survey and receive a £10 e-voucher 
---	---	--

Further details about the survey can be found on the other side of this letter, and on the survey website.

If you have already completed the survey, then thank you and you can ignore this letter.

Thank you for your help,

Yours sincerely,

[signature]

Craig Watkins
UK CEO
Kantar Public

QR CODE

A.9. Second reminder letter 3A text

Dear Parent of {First name}

Pathways study

We wanted to remind you that there is still time for your child to take part in **Pathways**, and as a thank you they can claim a **£10 voucher** of their choice including Amazon, Love2Shop or PayPal.

Pathways is an important study of young people which covers their thoughts on a range of topics about their education, favourite subjects and their future.

If you are happy for your child to take part, please follow the instructions below. This will only take a couple of minutes.

How do I provide consent?

1. Go to...  pathwaysresearch.co.uk on any device or scan the QR code below. Then click the link in the grey box to	2. Use your unique parent login details:  Username: xxxx Password: xxxx	3. Complete the short online consent form and then pass the second letter enclosed in this envelope to your child 
---	--	--

This survey is being conducted by Kantar Public on behalf of the Royal Society and EngineeringUK, with support from Wellcome and the Department for Education.

Further details about the survey, including how to contact us, can be found on the other side of this letter and on the survey website.

If your child has already completed the survey, then thank you and you can ignore this letter.

Thank you for your help,

Yours sincerely,

[signature]

Craig Watkins
UK CEO
Kantar Public

QR CODE

A.10 Second reminder letter 3B text

Dear Parent or Guardian of {First name}

Pathways study

We wanted to remind you that there is still time for your child to take part in **Pathways** and as a thank you they can claim a **£10 voucher** of their choice including Amazon, Love2Shop or PayPal.

Pathways is an important study of young people which covers their thoughts on a range of topics about their education, favourite subjects and their future.

What do I need to do next?

If you are happy for your child to take part, please give them the second letter included in the envelope. This includes their unique login details so they can complete the survey online.

Further information

This survey is being conducted by Kantar Public on behalf of the Royal Society and EngineeringUK, with support from Wellcome and the Department for Education.

Further details about the survey, including how to contact us, can be found on the other side of this letter and on the survey website.

If your child has already completed the survey, then thank you and you can ignore this letter.

Thank you for your help,

Yours sincerely,

[signature]

Craig Watkins
UK CEO
Kantar Public

A.11 Second reminder letter 3C text

Dear {First name}

Pathways study: Have your say

There is still time to take part in **Pathways** and as a thank you for your participation you can receive a **£10 voucher** of your choice including Amazon, Love2Shop or PayPal.

The online survey is an important study of 7,000 young people and we really value **your** contribution. The study covers your experiences at school and what subjects you are most interested in.

On a separate letter, we have asked your parent or guardian to complete a short online consent form so we can check they are happy for you to take part. If this has been done, the details you need to log into the survey are provided below.

How to take part

1. Go to...  pathwaysresearch.co.uk on your laptop, phone or tablet or scan the QR code below	2. Use your unique login details:  Username:xxxx Password:xxxx	3. Complete the online survey and receive a £10 e-voucher 
---	--	---

Further details about the survey can be found on the other side of this letter, and on the survey website.

If you have already completed the survey, then thank you and you can ignore this letter.

Thank you for your help,

Yours sincerely,

[signature]

Craig Watkins
UK CEO
Kantar Public



A.12 Second reminder letter 3D text

Dear {First name}

Pathways study: Have your say

There is still time for you to take part in **Pathways** and as a thank you for your participation you will receive a **£10 voucher** of your choice including Amazon, Love2Shop or PayPal.

The online survey will take around 20 minutes and is an important study of young people which covers your experiences at school, college, or employment, and any plans you might have for the future.

We really value **your** contribution, as you have been chosen as part of a sample selected to represent the views of all young people in your age group.

How to take part

1. Go to...  pathwaysresearch.co.uk on your laptop, phone or tablet or scan the QR code below	2. Use your unique login details:  Username:xxxx Password:xxxx	3. Complete the online survey and receive a £10 e-voucher 
---	---	--

Further details about the survey can be found on the other side of this letter, and on the survey website.

If you have already completed the survey, then thank you and you can ignore this letter.

Thank you for your help,

Yours sincerely,

[signature]

Craig Watkins
UK CEO
Kantar Public

QR CODE

A.13 Second Reminder letter 3E text

Dear Parent or Guardian of {First name}

Pathways study

Thank you for completing the consent form to let us know you are happy for your child to take part. We wanted to let you know that according to our records we haven't yet received any response from your child.

Please simply pass the second letter which is enclosed in this envelope to your child. This explains how they can take part. Please let us know if they are having trouble accessing the survey.

As a thank you they can claim a **£10 voucher** at the end of the survey.

The Pathways survey is being conducted by Kantar Public on behalf of the Royal Society and EngineeringUK, with support from Wellcome and the Department for Education.

Further details about the survey, including how to contact us, can be found on the other side of this letter and on the survey website.

If your child has recently completed the survey, then thank you and you can ignore this letter.

Thank you for your help,

Yours sincerely,

[signature]

Craig Watkins
UK CEO
Kantar Public

A.14 Second reminder letter 3F text

Dear {First name}

Pathways study: Have your say

There is still time for you to take part in **Pathways** and receive a **£10 voucher** of your choice including Amazon, Love2Shop or PayPal.

The online survey is an important study of 7,000 young people and we really value **your** contribution. The study covers your experiences at school and what subjects you are most interested in.

Your parent or guardian has already let us know that they are happy for you to take part, so simply go to the website, use the login details and at the end you can claim your voucher.

How to take part

1. Go to...  pathwaysresearch.co.uk on your laptop, phone or tablet or scan the QR code below	2. Use your unique login details:  Username:xxxx Password:xxxx	3. Complete the online survey and receive a £10 e-voucher 
---	---	--

Further details about the survey can be found on the other side of this letter, and on the survey website.

If you have already completed the survey, then thank you and you can ignore this letter.

Thank you for your help,

Yours sincerely,

[signature]

QR CODE

Craig Watkins
UK CEO
Kantar Public

A.15 2nd Reminder postcard – Parent

Dear Parent or Guardian of [CHILD FIRSTNAME CHILD SURNAME],

We recently invited your child to take part in the Pathways survey, an important survey of young people in England.

As a reminder, the survey only takes around 20 minutes and as a thank you for your child's time, we will give them a **£10 e-voucher** which can be used in shops such as Amazon, Love2Shop or PayPal.

Your child can access the survey at www.pathwaysresearch.co.uk. **In the next few days, we will be sending you a letter reminding you how to consent to your child taking part and will provide your child's unique login details.**

This survey is entirely voluntary. If you have any questions or concerns, please contact the survey helpline on Freephone 0800 008 3245 or email pathways@kantarc.com.

Thanks for your help!

[signature]

xxxxxx
Craig Watkins
UK CEO
Kantar Public

A.16 2nd Reminder postcard – YP

Dear [CHILD FIRSTNAME CHILD SURNAME],

We recently invited you to take part in the Pathways survey, an important survey for young people in England.

As a reminder, the survey only takes around 20 minutes and as a thank you for your time, we will give you a **£10 e-voucher** which can be used in shops such as Amazon, Love2Shop or PayPal.

You can access the survey at www.pathwaysresearch.co.uk. **In the next few days, we will be sending you a letter reminding you of your unique login details.**

This survey is entirely voluntary. If you have any questions or concerns, please contact the survey helpline on Freephone 0800 008 3245 or email pathways@kantarc.com.

Thanks for your help!

[signature]

xxxxxx
Craig Watkins
UK CEO
Kantar Public

A.17 Third reminder letter 4A text

Dear Parent of {First name}

Pathways study

A final reminder that there is still time for your child to take part in **Pathways**, an important study to understand the experiences of young people at school and their futures.

We are particularly keen to hear from young people in Years 7 and 8 so we really hope that they are able to take part.

As a thank you they can claim a **£10 voucher** of their choice including Amazon, Love2Shop or PayPal.

If you are happy for your child to take part, please follow the instructions below.

It will only take a couple of minutes to provide consent:

1. Go to...  pathwaysresearch.co.uk on any device or scan the QR code below. Then click the link in the grey box to	2. Use your unique parent login details:  Username: xxxx Password: xxxx	3. Complete the short online consent form and then pass the second letter enclosed in this envelope to your child 
---	--	--

This survey is being conducted by Kantar Public on behalf of the Royal Society and EngineeringUK, with support from Wellcome and the Department for Education.

Further details about the survey, including how to contact us, can be found on the other side of this letter and on the survey website.

The deadline for survey completion is **Thursday 31st August**. If your child has already completed the survey, then thank you and you can ignore this letter.

Thank you for your help,

Yours sincerely,

[signature]

Craig Watkins
UK CEO
Kantar Public

QR CODE

A.18 Third reminder letter 4B text

Dear Parent or Guardian of {First name}

Pathways study

A final reminder that there is still time for your child to take part in **Pathways** an important study to understand the experiences of young people and their futures.

As a thank you they can claim a **£10 voucher** of their choice including Amazon, Love2Shop or PayPal.

What do I need to do next?

If you are happy for your child to take part, please give them the second letter included in the envelope. This includes their unique login details so they can complete the survey online.

Further information

This survey is being conducted by Kantar Public on behalf of the Royal Society and EngineeringUK, with support from Wellcome and the Department for Education.

Further details about the survey, including how to contact us, can be found on the other side of this letter and on the survey website.

The deadline for survey completion is **Thursday 31st August**. If your child has already completed the survey, then thank you and you can ignore this letter.

Thank you for your help,

Yours sincerely,

[signature]

Craig Watkins
UK CEO
Kantar Public

A.19 Third reminder letter 4C text

Dear {First name}

Pathways study: Have your say

A final reminder that there is still time to take part in **Pathways** an important study to understand the experiences of young people at school. We really value **your** contribution.

We are particularly keen to hear from young people in Years 7 and 8 so we really hope that you can take part. The online survey will take about 20 minutes.

As a thank you for your participation you can immediately receive a **£10 voucher** of your choice after finishing the survey, including Amazon, Love2Shop or PayPal.

On a separate letter, we have asked your parent or guardian to complete a short online consent form so we can check they are happy for you to take part. If this has been done, the details you need to log into the survey are provided below.

How to take part

1. Go to...  pathwaysresearch.co.uk on your laptop, phone or tablet or scan the QR code below	2. Use your unique login details:  Username:xxxx Password:xxxx	3. Complete the online survey and receive a £10 e-voucher 
---	---	--

The deadline for survey completion is **Thursday 31st August**. If you have already completed the survey, then thank you and you can ignore this letter.

Further details about the survey can be found on the other side of this letter, and on the survey website.

Thank you for your help,

Yours sincerely,

[signature]

Craig Watkins
UK CEO
Kantar Public

QR CODE

A.20 Third reminder letter 4D text

Dear {First name}

Pathways study: Have your say

A final reminder that there is still time for you to take part in **Pathways**, an important study to understand the experiences of young people at school, college or beyond

As a thank you for your participation you will receive a **£10 voucher** of your choice including Amazon, Love2Shop or PayPal. The online survey will take about 20 minutes.

We really value **your** contribution, as you have been chosen as part of a sample selected to represent the views of all young people in your age group.

How to take part

1. Go to...  pathwaysresearch.co.uk on your laptop, phone or tablet or scan the QR code below	2. Use your unique login details:  Username: xxxx Password: xxxx	3. Complete the online survey and receive a £10 e-voucher 
---	---	--

The deadline for survey completion is **Thursday 31st August**. If you have already completed the survey, then thank you and you can ignore this letter.

Further details about the survey can be found on the other side of this letter, and on the survey website.

Thank you for your help,

Yours sincerely,

[signature]

Craig Watkins
UK CEO
Kantar Public

QR CODE

A.21 Third reminder letter 4E text

Dear Parent or Guardian of {First name}

Pathways study

Thank you again for completing the consent form to let us know you are happy for your child to take part. We wanted to let you know that according to our records we haven't yet received any response from your child.

Please simply pass the second letter which is enclosed in this envelope to your child. This explains how they can take part. Please let us know if they are having trouble accessing the survey.

As a thank you for taking part they can claim a **£10 voucher** at the end of the survey.

The deadline for survey completion is **Thursday 31st August**. If your child has recently completed the survey, then thank you and you can ignore this letter.

About Pathways

The Pathways survey is being conducted by Kantar Public on behalf of the Royal Society and EngineeringUK, with support from Wellcome and the Department for Education.

Further details about the survey, including how to contact us, can be found on the other side of this letter and on the survey website.

Thank you for your help,

Yours sincerely,

[signature]

Craig Watkins
UK CEO
Kantar Public

A.22 Third reminder letter 4F text

Dear {First name}

Pathways study: Have your say

A final reminder that there is still time for you to take part in **Pathways**, an important study to understand the experiences of young people at school, college or beyond.

As a thank you for taking part you can immediately claim a **£10 voucher** of your choice after you finish the survey, including Amazon, Love2Shop or PayPal. The online survey will take about 20 minutes.

Your parent or guardian has already let us know that they are happy for you to take part, so simply go to the website, use the login details and at the end you can claim your voucher.

How to take part

1.
Go to...



pathwaysresearch.co.uk on your laptop, phone or tablet or scan the QR code below

2.

Use your unique login details:



Username:xxxx

Password:xxxx

3.

Complete the online survey and receive a £10 e-voucher



The deadline for survey completion is **Thursday 31st August**. If you have already completed the survey, then thank you and you can ignore this letter.

Further details about the survey can be found on the other side of this letter, and on the survey website.

Thank you for your help,

Yours sincerely,

[signature]

QR CODE

Craig Watkins
UK CEO
Kantar

Appendix B: Questionnaire

Science Education Tracker 2023 SURVEY

- 1. PARENTAL CONSENT SURVEY
- 2. RESPONDENT DETAILS AND HOUSEHOLD INFORMATION.....
- 3. OUT OF SCHOOL ACTIVITIES.....
- 4. SCHOOL/COLLEGE SUBJECTS.....
- 5. GCSE SCIENCE COURSE
- 6. POST 16 STUDY
- 7. STEM LEARNING AT SCHOOL
- 8. CAREERS IN STEM.....
- 9. ENGINEERING AS A CAREER.....
- 11.ATTITUDES TOWARDS SCIENCE AND ENGINEERING
- 12.FAMILY SCIENCE CONNECTIONS.....
- 13.DEMOGRAPHICS
- 14.NPD LINKAGE AND EDUCATION DETAILS FOR YEARS 10-13 WHO DO NOT CONSENT
- 15.RE-CONTACT DETAILS

Researcher use only:
Green=Tracker from 2016
Blue=Tracker from 2019
Black=New or amended question (not possible to track)

FEED FORWARD VARIABLES FROM SAMPLE

SCRIPTING NOTE:

Feed through the following from the NPD sample.

Hidden variables, but for testing purposes please set up as dummy variables which can be entered manually.

NPDAGEBAND: Age band of child at start of survey

1. Under 13,
2. 13-15
3. 16+

NPDYEAR: NPD School Year

7. Year 7
8. Year 8
9. Year 9
10. Year 10
11. Year 11
12. Year 12
13. Year 13

NPDFIRSTNAME: <Child's first name>

NPDLASTNAME: <Child's last name>

NPDADDRESS1 – NPDADDRESS7, NPDPOSTCODE
: <Child's address> - allow 8 fields

SCRIPTING NOTE:

CREATE HIDDEN (DUMMY) VARIABLE FOR SPLIT SAMPLE

For testing purposes please set up as dummy variable which can be entered manually.

MODULE

1. Module A
 2. Module B
-

PARENTAL CONSENT SURVEY

SCRIPTING NOTE: ADD TIMESTAMP 1A

NOTE FOR THE SCRIPTERS:

WHERE NPDAGEBAND =1 THEN THIS PARENTAL CONSENT SURVEY NEEDS TO BE ASKED. ONCE IT IS COMPLETED AND PARNOWIS REACHED THEN THE ACCOMPANYING YOUNG PERSON INTERVIEW CAN BE ACTIVATED FOR COMPLETION.

WHERE NPDAGEBAND = 2 OR 3 THEN THE PARENTAL CONSENT SURVEY DOES NOT NEED TO BE COMPLETED, AND THE YOUNG PERSON INTERVIEW ALWAYS BE ACTIVE. Please refer to JN: 262400392 which uses a similar set up for child consent. The set up is the same but the question text is not identical.

ASK PARENT OF <13 (NPDAGEBAND =1)

ParIntro (*Display*)

Welcome to the **Pathways survey** for young people in school years 7 to 13.

This survey is being conducted by Kantar Public on behalf of the Royal Society and Engineering UK, with support from Wellcome and the Department for Education.

The survey will include questions about your child's life at school and plans for the future. It will take them around 20 minutes and they will be able to claim a £10 voucher at the end of the survey.

Please click the 'Next' button to continue.

ASK PARENT OF <13 (NPDAGEBAND =1)

ParIntroX (*Display*)

Due to data protection laws we need to have your consent before your child can take part, so we just need to collect a few details from you first.

If you would like to read the survey privacy policy it can be found here *{SCRIPTING NOTE: INSERT LINK TO PRIVACY POLICY}*.

ASK PARENT OF <13 (NPDAGEBAND =1)

ParPar (*Single*)

Are you the parent or legal guardian of [NPDFIRSTNAME NPDLASTNAME]?

1. Yes
2. No

SCRIPTING NOTE: If no, screen out (SCREENOUT1) and do not activate child serial number

SCREENOUT1 TEXT:

Sorry we are only able to obtain consent from a parent or legal guardian.

If a parent or guardian is available, please go back to the previous question and ask them to complete these consent questions.

Otherwise please click the 'Next' button to close this consent form.

[ASK IF ParPar = 1]

ParConsent (Single)

Are you happy for your child to participate in this survey?

1. Yes
2. No, I do not want them to take part

SCRIPTING NOTE: If no, screen out (SCREENOUT2) and do not activate child serial number

SCREENOUT2 TEXT:

Sorry but due to data protection laws we are only able to survey children aged under 13 if we obtain consent from a parent or legal guardian.

Please click the 'Next' button to end this survey.

[ASK IF ParConsent = 1]

ParName (2 X Open text fields)

Please type your full name to confirm you are the parent or legal guardian and you agree for [NPDFIRSTNAME] [NDPLASTNAME] to take part in the survey.

ENTER YOUR FIRST NAME

ENTER YOUR LAST NAME

98 - Do not wish to provide my name

SCRIPTING NOTE: Allow type-in text. If refusal (98), screen out (SCREENOUT 3) and do not activate child serial number

Feed through the following from the NPD sample.

Hidden variable (but for testing purposes please set up as dummy variables which can be entered manually).

ParentalConsentStatus: consent from parent at ParConsent and ParName

1. Full consent provided/not needed [(IF NPDAGEBAND=1 AND ParConsent=1 AND ParName<>98) OR (IF NPDAGEBAND=2 or 3)]
 2. Full consent not/not yet provided [(IF NPDAGEBAND=1 AND (ParConsent=2) OR (ParConsent=1 AND ParName=98)]
-

SCREENOUT3 TEXT:

Sorry but in order to interview children aged under 13 we need to collect the full name of the parent or guardian who provided consent.

If you would like to go back and add your name, you can go back to the previous question
Otherwise please click the 'Next' button to end this survey.

[ASK IF ParConsent=1 and ParName <> 98]

ParIntro2 (*Display*)

Thank you very much. We would now like to ask you a couple more questions about permissions.

Your answers to these will not affect your child being able to take part in the survey.

Please click 'Next' to continue

[ASK IF ParConsent=1 and ParName <> 98]

ParLink (*Single*)

The Department for Education holds information about your child and their education. This includes information about their ethnicity, schools, exams, any special educational needs, and free school meals.

We would like to add this information to your child's survey answers to create a more accurate picture of their life and experiences. This information will only be used for research purposes.

All information is confidential: this means that their name and address will never be included in the results.

Can we have your permission to link this information to your survey answers? ADD HELP
ICON HERE

HELP TEXT:

We link survey data to administrative data such as exam results so that we do not need to collect all this information in the survey. Having more data about the individuals who take part in the survey helps the Royal Society and Engineering UK to ensure that educational services can be targeted to the needs of individuals from all types of background.

1. Yes
 2. No
-

[ASK IF ParConsent=1 and ParName <> 98]

ParMail (*Single*)

Kantar Public may like to contact you and your child again, with questions relating to this survey or other connected research.

Would it be okay for us to contact you and your child again within the next 2 years? They will receive another voucher at that time.

If they are re-contacted there will be no obligation for them to take part in any further research.

This will involve us keeping a secure record of you and your child's name along with your contact details for 2 years. Your contact details will not be used for any other purposes.

1. Yes, I give consent for them to take part in another survey within the next two years.
 2. No, I do not want them to take part in another survey in the future.
-

[ASK IF ParConsent=1 and ParName <> 98]

ParNow (*Display*)

Thank you.

Please now hand over the child letter to your child so they can take part if they want to. This contains the details they will need to log in and claim their £10 voucher at the end of the survey.

Your child should be able to access the survey within 5 minutes from now, but it could take a little longer (up to an hour) for your consent to be processed. If your child cannot access the survey straightaway, please try again later.

You may now close this browser.

SCRIPTING NOTE: If Parconsent = 1 and ParName <> 98 ACTIVATE CHILD SERIAL

IF CHILD TRIES TO LOG INTO THEIR SURVEY BEFORE PARENTAL CONSENT HAS BEEN LOGGED OR WHILE CONSENT IS STILL BEING PROCESSED PLEASE DISPLAY SCREENOUT4 TEXT.

SCREENOUT4 TEXT:

Thank you for your participation. You are not able to log into the survey yet.

This might be because we haven't yet obtained consent from your parent or guardian. Please ask your parent or guardian to complete the parental consent survey using the login and password details included in the survey letter addressed to them.

If your parent or guardian has already completed the parental consent survey, it is likely that this consent has not yet been processed. This can take 30 minutes to an hour so please try again a little later.

You can now close this browser and log on again later.

SCRIPTING NOTE: ADD TIMESTAMP 1B

RESPONDENT DETAILS AND HOUSEHOLD INFORMATION

SCRIPTING NOTE: THIS PART OF THE INTERVIEW IS FOR THE CHILD ONCE THEY LOG IN.

CHILDREN AGED 13+ CAN ACCESS THE SURVEY DIRECTLY.

CHILDREN AGED UNDER 13 NEED PARENTAL PERMISSION SURVEY CONSENT FIRST (SEE PREVIOUS PAGE)

SCRIPTING NOTE: ADD TIMESTAMP 2

ASK ALL

QRCode (Single)

Firstly just to check, did you scan the QR code on the invitation letter to access the survey website?

1. Yes
 2. No
-

ASK ALL

Intro1 (Display)

Welcome to the **Pathways** survey.

This survey is being conducted on behalf of the Royal Society and Engineering UK, with support from Wellcome and the Department for Education. Your answers will be kept private.

If there is any question that you don't know the answer to or you don't wish to answer, you can just move on to the next one.

Please click the 'Next' button to confirm you are happy to take part and to start the survey.

ASK ALL

RespDet (single)

First, we need to make sure we have the correct details for you.

Are all of these correct?

SCRIPTING NOTE: Display respondent's name, address from sample

[NPDFIRSTNAME] [NDPLASTNAME]

[NPDADDRESS]

[NPDPOSTCODE]

1. Yes
 2. No (you can correct this at the next question)
-

ASK IF RESPONDENT DETAILS ARE NOT CORRECT (IF RespDet = 2)

RespDetC (open fields)

Please correct any details which are incorrect. When you are finished please click to continue

SCRIPTING NOTE: Display respondent's name and address from sample as on previous screen, but allow respondent to amend these.

[NPDFIRSTNAME] [NDPLASTNAME]

[NPDADDRESS]

[NPDPOSTCODE]

ASK ALL

SYCheck (single)

And can I check that during this past academic year you have been in Year <NPDYEAR>?

If you have finished the school year, this should be the year group you have just finished.

[IF NPDYEAR= 12-13] If you are no longer in school or college, this should be the year you would you have been in if you were still studying.

1. Yes, correct
2. No, incorrect

SCRIPTING NOTE: Pipe additional text as specified

ASK IF DISPUTES NPD YEAR INFO (SYCHECK=2)

XYear (single)

Which school/college year have you been in this past academic year (September 2022 to July 2023)?

If you have finished the school year, please select the year group you have just finished.

[IF NPDYEAR=12-13] If you are no longer in school or college, which year would you have been in if you were still studying?

6. Year 6, or below
7. Year 7
8. Year 8
9. Year 9
10. Year 10
11. Year 11
12. Year 12
13. Year 13, or above

SCRIPTING NOTE: Pipe additional text as specified

Note that it is intentional that codes start from 6 rather than 1.

Respondents who answer code 6 should be screened out of the survey (SCREENOUT 5)

SCREENOUT5 TEXT:

Sorry but we are only including young people in Years 7 and above in this survey. Please click the 'Next' button to end this survey.

SCRIPTING NOTE: CREATE HIDDEN (DUMMY) VARIABLE FOR ALL RESPONDENTS

SurveySY (*single*)= School Year from sample (NPDYEAR) unless SYCheck=2 in which case replace with answer at XYear.

From this point SurveySY should be the school year filter.

- 7. Year 7
- 8. Year 8
- 9. Year 9
- 10. Year 10
- 11. Year 11
- 12. Year 12
- 13. Year 13, or above

SCRIPTING: Note that it is intentional that codes start from 7 rather than 1.

OUT OF SCHOOL ACTIVITIES

SCRIPTING NOTE: ADD TIMESTAMP 3

ASK ALL

IntroAct (*Display*)

Firstly, a few questions about your family and activities outside school.

ASK ALL

SciVisit²⁰ (*multi*)

Which of these have you been to in the last 12 months?

Think about trips with family and friends, school trips or trips abroad.

Choose all that apply.

1. A science museum, science attraction or planetarium
2. Another type of museum or art gallery
3. A theatre to see a play or musical
4. A zoo or aquarium
5. A science festival, fair or event
6. A science talk or lecture outside of school
7. Other science event/activity (please tell us what)
8. None of the above
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Code 8, 97, 98 should be exclusive.

Code 7: allow type-in response

²⁰ Tracking question but code 3 and code 6 have been slightly amended

ASK ALL

SciMediaA-SciMediaF (*Grid*)

Thinking about activities you have done **outside of school**.

In the past 12 months, how often, if at all, have you done the following?

- A. Saw or read something about science online (e.g. Instagram, TikTok, YouTube, news websites)
- B. Read about science in a book, newspaper, or magazine
- C. Watched a programme or documentary about science on TV or streaming site
- D. Listened to a podcast or radio programme about science
- E. Created your own computer game, blog, website, or animation
- F. Attended an online science talk, webinar or an online museum activity about science

- 1. At least once a fortnight in the past year
 - 2. At least once a month in the past year
 - 3. A few times in the past year
 - 4. Once or twice in the past year
 - 5. Not at all in the past year
 - 97. Don't know
 - 98. Prefer not to say
-

SCHOOL/COLLEGE SUBJECTS

SCRIPTING NOTE: ADD TIMESTAMP 4

ASK ALL YEAR 10 TO 13 (SURVEYSY=10-13)

YPEconAc²¹ (single)

Which of these best describes what you have been doing during this academic year (September 2022 to July 2023)?

If you moved from one place to another mid-year choose the one you spent most time at.

1. School
2. Sixth form attached to school
3. Sixth form college (not attached to school)
4. Further Education College
5. Paid work
6. Government training scheme / Traineeship / Apprenticeship
7. Something else (please tell us what)
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Code 7: allow type-in response

ASK ALL YEAR 10 TO 13 (SURVEYSY=10-13)

Schoolintro (Display)

The next questions will ask you about subjects you have studied at school/college.

If you no longer study some of these subjects, please think back to when you did study them.

²¹ Tracking question but 'traineeship' has been added to code 6.

ASK ALL

Good1-9 (*grid*)²²

Thinking about some subjects at school, how good would you say you are [IF YEARS 10-13: or were] at the following subjects.

[IF SURVEYSY= 10-13] If you no longer study some of these subjects, think back to when you were studying them.

1. ...Maths? [ALL]
2. ...English? [ALL]
3. ...Science? [IF SURVEYSY= 7 TO 9]
4. ...History? [ALL]
5. ...Computer Science/Computing? [ALL]
6. ...Design and Technology? [ALL]
7. ...Biology? [IF SURVEYSY= 10 TO 13]
8. ...Chemistry? [IF SURVEYSY= 10 TO 13]
9. ...Physics? [IF SURVEYSY= 10 TO 13]

1. Very good
2. Fairly good
3. OK
4. Not very good
5. Not good at all
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Pipe additional text as specified.

Some response options are often asked of certain school years as specified.

²² Tracking question but Computer science and DT added as new options in 2023

ASK ALL YEAR 10 TO 13 **AND MODULE A** (SURVEYSY=10-13 AND MODULE=1)

SchSubEnj²³ (Ranking by click question)

Please **scroll through the whole list to the bottom and then** rank **all** these subjects in order with 1 being the subject you enjoyed the most and 11 the subject you enjoyed the least.

If you no longer study these subjects, think back to when you were studying them.

1. English
2. Maths
3. Biology
4. Chemistry
5. Physics
6. History
7. Foreign Language(s)
8. Computer Science/Computing
9. Geography
10. Art
11. Design and Technology
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Randomise answer list, but keep code 97 and code 98 separate. Don't know (97) and Prefer not to say (98) should be exclusive codes such that if these are selected then no ranking should be recorded..

²³ Tracking question but some small edits to stem question and Art and DT added as new options in 2023

ASK ALL YEAR 10 TO 13 (SURVEYSY=10-13)

OtherInt1-6²⁴ (grid)

How interesting do you find the following lessons at school?

If you no longer study these subjects, think back to when you were studying them.

- 1...Biology
- 2...Chemistry
- 3...Physics
- 4...English
- 5...Computer Science/Computing
- 6...Design and Technology

1. Very interesting
2. Fairly interesting
3. Not very interesting
4. Not at all interesting
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Randomise grid options OtherInt1 to OtherInt6

ASK ALL YEAR 7-9 (SURVEYSY=7-9)

SchSubEnj2²⁵ (Ranking by click question)

Please **scroll through the whole list to the bottom and then** rank **all** these subjects in order with 1 being the subject you enjoy the most and 9 the subject you enjoy the least.

If you no longer study a subject, please think back to when you were studying it.

1. English
2. Maths
3. Science
4. History
5. Foreign Languages
6. Computer Science/Computing
7. Geography
8. Art
9. Design and Technology
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Randomise answer list, but keep code 97 and code 98 separate. Don't know (97) and Prefer not to say (98) should be exclusive codes such that if these are selected then no ranking should be recorded.

²⁴ Tracking question but DT added as a new option in 2023

²⁵ Tracking question but some small edits to stem question and Art and DT added as new options in 2023

ASK ALL YEAR 7-9 (SURVEYSY=7-9)

SciIntA-B(grid)

How interesting do you find the following lessons at school?

A...Science?

B...Computer Science/Computing?

1. Very interesting
2. Fairly interesting
3. Not very interesting
4. Not at all interesting
97. Don't know
98. Prefer not to say

ASK ALL YEAR 7 TO 9 (SURVEYSY=7-9)

SciEnc²⁶ (multi)

What has **encouraged** you to learn science?

Choose all that apply.

1. Nothing has encouraged me
2. It's easier than other subjects
3. I get good marks
4. I find science interesting or enjoyable
5. It's relevant to real life
6. Having a good teacher
7. Encouraged by family
8. Encouraged by friends
9. Fits with my future study or career plans
10. I like doing practical work or experiments
11. I enjoy the maths involved in science
12. It's important to do well in science
13. Something else (please tell us what)
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Randomise answer list.

Code 1 at should be fixed position (always at start).

Code 13, 97 and 98 should be fixed position (always at end)

²⁶ Tracking question but code 11 changed to 'I enjoy the maths involved in science'. Also in 2019 there was one single option 'Encouraged by family/friends' which has now been split into codes 7 and 8 in 2023.

Codes 1, 97, 98 should be exclusive
Code 13: allow type-in response

ASK ALL YEAR 7 TO 9 (SURVEYSY=7-9)

SciDis²⁷ (multi)

And what has **put you off** learning science?

Choose all that apply.

1. Nothing has put me off
2. It can be difficult
3. I don't get good marks
4. I don't find some topics interesting or enjoyable
5. There is a lot to learn or remember
6. The teacher or one of my teachers
7. Doesn't fit with my future study or career plans
8. I find the maths difficult
9. Not enough practical work or experiments
10. Too many substitute or cover teachers
11. The behaviour of the class or other students
12. Too much repetition
13. Something else (please tell us what)
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Randomise answer list

Code 1 at should be fixed position (always at start)

Code 13, 97 and 98 should be fixed position (always at end)

Codes 1, 97, 98 should be exclusive

Code 13: allow type-in response

²⁷ Tracking question but quite a lot of changes so only broad changes can be made: codes 10,11, 12 added in 2023 and small edits at code 4 and code 8

ASK ALL YEAR 10 to 13 (SURVEYSY=10-13)

SciEncB (Multi)

What has **encouraged** you to learn Biology?

[IF SURVEYSY= 12-13] If you no longer study this subject, think back to when you were studying it.

Choose all that apply.

1. Nothing has encouraged me
2. It's easier than other subjects
3. I get good marks
4. I find the subject interesting or enjoyable
5. It's relevant to real life
6. Having a good teacher
7. Encouraged by parents or other family
8. Encouraged by friends or classmates
9. Fits with my future study or career plans
10. I like doing practical work or experiments
11. I enjoy the maths involved
12. It's important to do well in this subject
13. Something else (please tell us what)
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Randomise answer list

Code 1 at should be fixed position (always at start)

Code 13, 97 and 98 should be fixed position (always at end)

Codes 1, 97, 98 should be exclusive

Also add piping as specified

Code 13: allow type-in response

ASK ALL YEAR 10 to 13 (SURVEYSY=10-13)

SciEncP (Multi)

What has **encouraged** you to learn Physics?

Choose all that apply.

[IF SURVEYSY= 12-13] If you no longer study this subject, think back to when you were studying it.

1. Nothing has encouraged me
2. It's easier than other subjects
3. I get good marks
4. I find the subject interesting or enjoyable
5. It's relevant to real life
6. Having a good teacher
7. Encouraged by parents or other family
8. Encouraged by friends or classmates
9. Fits with my future study or career plans
10. I like doing practical work or experiments
11. I enjoy the maths involved
12. It's important to do well in this subject
13. Something else (please tell us what)
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Randomise answer list

Code 1 at should be fixed position (always at start)

Code 13, 97 and 98 should be fixed position (always at end)

Codes 1, 97, 98 should be exclusive

Also add piping as specified

Code 13: allow type-in response

ASK ALL YEAR 10 to 13 (SURVEYSY=10-13)

SciEncC (Multi)

What has **encouraged** you to learn Chemistry?

[IF SURVEYSY= 12-13] If you no longer study this subject, think back to when you were studying it.

Choose all that apply.

1. Nothing has encouraged me
2. It's easier than other subjects
3. I get good marks
4. I find the subject interesting or enjoyable
5. It's relevant to real life
6. Having a good teacher
7. Encouraged by parents or other family
8. Encouraged by friends or classmates
9. Fits with my future study or career plans
10. I like doing practical work or experiments
11. I enjoy the maths involved
12. It's important to do well in this subject
13. Something else (please tell us what)
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Randomise answer list

Code 1 at should be fixed position (always at start)

Code 13, 97 and 98 should be fixed position (always at end)

Codes 1, 97, 98 should be exclusive

Also add piping as specified

Code 13: allow type-in response

ASK ALL YEAR 10 TO 13 (SURVEYSY=10-13)

SciDisB (*multi*)

And what has **put you off** learning Biology?

[IF SURVEYSY=12-13] If you no longer study this, think back to when you were studying it.

Choose all that apply.

1. Nothing has put me off
2. It can be difficult
3. I don't get good marks
4. I don't find some topics interesting or enjoyable
5. There is a lot to learn or remember
6. The teacher or one of my teachers
7. Doesn't fit with my future study or career plans
8. I find the maths difficult
9. Not enough practical work or experiments
10. Too many substitute or cover teachers
11. The behaviour of the class or other students
12. Too much repetition of topics
13. Something else (please tell us what)
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Randomise answer list

Code 1 at should be fixed position (always at start)

Code 13, 97 and 98 should be fixed position (always at end)

Codes 1, 97, 98 should be exclusive

Also add piping as specified

Code 13: allow type-in response

ASK ALL YEAR 10 TO 13 (SURVEYSY=10-13)

SciDisP (*multi*)

And what has **put you off** learning Physics?

[IF SURVEYSY=12-13] If you no longer study this, think back to when you were studying it.

Choose all that apply.

1. Nothing has put me off
2. It can be difficult
3. I don't get good marks
4. I don't find some topics interesting or enjoyable
5. There is a lot to learn or remember
6. The teacher or one of my teachers
7. Doesn't fit with my future study or career plans
8. I find the maths difficult
9. Not enough practical work or experiments
10. Too many substitute or cover teachers
11. The behaviour of the class or other students
12. Too much repetition of topics
13. Something else (please tell us what)
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Randomise answer list

Code 1 at should be fixed position (always at start)

Code 13, 97 and 98 should be fixed position (always at end)

Codes 1, 97, 98 should be exclusive

Also add piping as specified

Code 13: allow type-in response

ASK ALL YEAR 10 TO 13 (SURVEYSY=10-13)

SciDisC (*multi*)

And what has **put you off** learning Chemistry?

[IF SURVEYSY=12-13] If you no longer study this, think back to when you were studying it.

Choose all that apply.

1. Nothing has put me off
2. It can be difficult
3. I don't get good marks
4. I don't find some ~~science~~ topics interesting or enjoyable
5. There is a lot to learn or remember
6. The teacher or one of my teachers
7. Doesn't fit with my future study or career plans
8. I find the maths difficult
9. Not enough practical work or experiments
10. Too many substitute or cover teachers
11. The behaviour of the class or other students
12. Too much repetition of topics
13. Something else (please tell us what)
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Randomise answer list

Code 1 at should be fixed position (always at start)

Code 13, 97 and 98 should be fixed position (always at end)

Codes 1, 97, 98 should be exclusive

Also add piping as specified

Code 13: allow type-in response

ASK ALL

CompEnc (multi)

What has **encouraged** you to learn Computer Science/Computing?

[IF YEARS 10-13] If you no longer study this, think back to when you were studying it.

Choose all that apply.

1. Nothing has encouraged me
2. It's easier than other subjects
3. I get good marks
4. I find the subject interesting / enjoyable
5. It's relevant to real life
6. Having a good teacher
7. Encouraged by family / friends
8. Fits with my future study / career plans
9. I enjoy the maths involved
10. I find it creative
11. It's important to do well in Computing
12. Something else (please tell us what)
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Randomise answer list

Code 1 at should be fixed position (always at start).

Code 12, 97 and 98 should be fixed position (always at end)

Codes 1, 97 and 98 should be exclusive

Also add piping as specified

Code 12: allow type-in response

ASK ALL

CompDis (multi)

And what has **put you off** learning Computer Science/ Computing?

[IF YEARS 10-13] If you no longer study this, think back to when you were studying it.

Choose all that apply.

1. Nothing has put me off
2. It can be difficult
3. I don't get good marks
4. I don't always find it interesting/enjoyable
5. There is a lot to learn/remember
6. The teacher/One of my teachers
7. Doesn't fit with my future study / career plans
8. I find the maths difficult
9. I find it repetitive
10. Something else (please tell us what)
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Randomise answer list.

Code 1 at should be fixed position (always at start)

Code 10, 97 and 98 should be fixed position (always at end)

Codes 1, 97, 98 should be exclusive

Also add piping as specified

Code 10: allow type-in response

GCSE SCIENCE COURSE

SCRIPTING NOTE: ADD TIMESTAMP 5

ASK YEARS 10-13 (SURVEYSY=10-13)

GCSESciA²⁸ (single)

Which science course [IF SURVEYSY=11-13:did you take] [IF SURVEYSY=10: are you taking] in Year 10 and 11?

[IF SURVEYSY=10: If you don't know yet, please say which course is most likely].

1. Double Science/Combined Science (two GCSE grades awarded)
2. Triple Science, also known as 'single sciences' or 'separate sciences' (three GCSE grades awarded)
3. One or two separate sciences (e.g. just Biology, or just Chemistry and Physics)
4. Another science course (e.g. BTEC) (please tell us what)
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Add piping as specified

Code 4: allow type-in response

IF YEARS 10-13 AND TOOK/TAKING SCIENCE GCSE (CODES 1,2,3 AT GCSESciA)

GCSECheck (single)

IF SURVEYSY=10: Just to check, when you take your GCSE science exams, how many GCSEs will this be this worth?

IF SURVEYSY 11-12: Just to check, when you took your GCSE science exams, how many GCSEs was this worth?

IF SURVEYSY 13: Just to check, when you took your GCSE science exams or assessments, how many GCSEs was this worth?

1. One
2. Two
3. Three
4. Other (please tell us what)
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Add piping as specified

Code 4: allow type-in response

²⁸ All questions in this section are tracking question, with some small amends to reflect changes in terminology (triple science is more commonly referred to as separate sciences in 2023)

IF YEARS 10-13 AND NOT TAKEN TRIPLE SCIENCE (IF GCSESciA =1,3,4)

TripSciSch (single)

When you were choosing your GCSE options, did your school offer Triple Science (also known as separate sciences) to any students?

By this we mean the opportunity to achieve **three separate** exam grades, one for each for Biology, Chemistry and Physics.

1. Yes, this was offered to all students
2. Yes, this was offered to some students
3. No, triple science was not offered to any students at my school
97. Don't know
98. Prefer not to say

ASK IF TRIPLE SCIENCE NOT OFFERED BY SCHOOL (IF TripSciSch = 3)

TripSciNo (single)

Would you have wanted to study Triple Science if your school had offered it?

Triple Science GCSE: Biology, Chemistry and Physics, where you receive one GCSE for each subject.

1. Yes
2. No
97. Don't know
98. Prefer not to say

ASK IF NOT TAKEN TRIPLE SCIENCE BUT IT WAS OFFERED BY SCHOOL (IF TripSciSch = 1 or 2)

TripSci (single)

At the time, did you want to study [IF GCSESCIA=1:Double Science] [IF GCSESCIA=3,4] this science course] or would you have preferred to take Triple Science?

Triple Science GCSE: Biology, Chemistry and Physics, where you receive one GCSE for each subject

1. I wanted to study [IF GCSESCIA=1:Double Science] [IF GCSESCIA=3,4] this science course]
2. I would have preferred Triple Science (separate sciences)
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Add piping as specified

ASK IF NOT TAKEN TRIPLE SCIENCE BUT IT WAS OFFERED BY SCHOOL (IF TripSciSch = 1 or 2)

TripSciWhy (multi)

Why didn't you [IF TRIPSCI=1: want to] study Triple Science (separate sciences)?

Choose all that apply.

1. Not interested in studying Triple Science
2. Prioritised other subjects
3. Timetabling / didn't fit with other subjects
4. Not needed for my future plans / career
5. Didn't achieve the level / grade I needed
6. Thought it would be too difficult / lacked confidence
7. Too much extra work/pressure
8. Wasn't in the right set
9. Teacher(s) advised me not to
10. Not needed for my choices in Year 12 (A levels, BTECs, T levels etc.)
11. Another reason (please tell us why)
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Piping as specified

Randomise answer list but keep code 11, 97, 98 in a fixed position at the end.

Codes 97, 98 should be exclusive

Code 11: allow type-in response

ASK YEAR 10-13 (IF SURVEYSY=10-13)

CompGCSE (single)

[IF SURVEYSY=10: Are you studying] [IF SURVEYSY=11, 12, 13: Did you study] Computer Science/Computing at GCSE?

1. Yes
2. No
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Add piping as specified

ASK YEAR 10-13 (IF SURVEYSY=10-13)

SciTutor (Multi)

[IF SURVEYSY=10-11: Have you received] [IF SURVEYSY=12-13: Thinking about when you studied GCSE science, did you receive] any additional help with GCSE science subjects outside of school in any of these ways?

Choose all that apply.

1. A family member or someone else paid for me to have private lessons outside of school (online or in person)
2. I had help or support from a parent, brother/sister/sibling or other family member
3. I had other help or support outside of school (please tell us what)
4. No
97. Don't know
98. Prefer not to say

*SCRIPTING NOTE: Codes 4, 97, 97 should be exclusive. Add piping as specified.
Code 3: allow type-in response*

POST 16 STUDY

SCRIPTING NOTE: ADD TIMESTAMP 6

ASK IF YEARS 10 or 11 (SURVEYSY=10-11)

FutL3Plans (*multi*)

Now for some questions about your future study plans.

In the next academic year, are you planning to do any of the following types of further study or training in **any subject**?

Choose all that apply.

1. A levels/AS levels
2. International Baccalaureate (IB)
3. Extended Project Qualification (EPQ)
4. Apprenticeship
5. Traineeship or training course
6. T levels/T level transition programme
7. NVQ
8. BTEC National Certificate / ONC / OND
9. Core Maths Level 3 qualification *SCRIPTING LINK, ADD HELP ICON HERE*
10. Another qualification, course or training (please tell us what)
11. None of the above
97. Don't know
98. Prefer not to say

*SCRIPTING NOTE: Codes 11, 97 and 98 should be exclusive. Add piping as specified.
Code 10: allow type-in response*

SCRIPTING NOTE: Add help icon text after code 9 with text 'Maths qualification equivalent to an AS level, designed for students who wish to develop mathematical skills to support their studies, training or employment, without taking a full maths A level'.

IF YEAR 10/11 AND NOT PLANNING TO STUDY BEYOND Y10 OR Y11 (FutL3Plans=11 OR 97)

FutL3Other (multi)

What else do you think you might do after Year 11?

Choose all that apply.

1. Do paid work
2. Voluntary work
3. Take a break from work or study
4. Something else (please tell us what)
5. Haven't decided yet
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Codes 5, 97, 98 should be exclusive.

Code 4: allow type-in response

ASK IF YEAR 11 AND PLANNING FURTHER QUALS OR TRAINING (SURVEYSY= 11 AND ANY FUTL3PLANS = 1 TO 10)

P16Sub (single)

Have you chosen what you plan to study or do next year (subjects, courses, type of apprenticeship or training course)?

1. Yes
2. No
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Add piping as specified

ASK IF YEAR 11 AND CHOSEN A LEVEL/IB SUBJECTS FOR YEAR 12 (SURVEYSY=11 AND FUTL3PLANS=1/2 AND P16Sub = 1)

Y12SubL3²⁹ (multi)

Are you intending to study any of the following subjects in Year 12?

If a subject is not on the list, please select 'Something else' at the bottom of the list and type it in.

Choose all that apply.

1. Art/Design
2. Biology
3. Business Studies
4. Chemistry
5. Computer Science/Computing
6. Design and Technology
7. Drama/Theatre Studies
8. Economics
9. Engineering
10. English Literature/Language
11. History
12. Geography
13. Languages (e.g. French, German)
14. Law
15. Maths / Further Maths/Statistics
16. Media/Film/TV Studies
17. Music/Music technology
18. Philosophy
19. Physical Education (PE)
20. Physics
21. Politics/Political Studies
22. Psychology
23. Religious Studies
24. Sociology
25. Something else (please tell us what)
26. None of these
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Codes 26, 97, 98 should be exclusive.

Code 25: allow type-in response

²⁹ Tracking question but filter has changed as those intending to study vocational subjects are no longer included in this route

ASK IF YEAR 11 AND CHOSEN VOCATIONAL SUBJECTS FOR YEAR 12 (SURVEYSY=11 AND FUTL3PLANS=4-8 AND P16Sub = 1)

Y12SubVoc (*multi*)

Are you intending to study any of the following subjects in Year 12?

Choose all that apply.

1. Administration and Business Management
2. Animal Care and Veterinary Science
3. Building and Construction
4. Child Development
5. Creative Arts and Design
6. Education
7. Engineering
8. Hair and Beauty
9. Health and Social Care
10. Horticulture
11. Hospitality and Catering
12. Languages, Literature and Culture
13. Manufacturing
14. Marketing and Sales
15. Media and Communications
16. Public Services
17. Science
18. Sport, Leisure and Recreation
19. Transport
20. Travel and Tourism
21. Warehousing and Distribution
22. Something else (please tell us what)
23. None of these
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Codes 23, 97, 98 should be exclusive.

Code 22: allow type-in response

ASK IF YEAR 12-13 (SURVEYSY=12-13)

L3QualIntro (text)

Now for some questions about your future study plans.

ASK IF YEAR 12 or 13 AND AT SCHOOL SIXTH FORM, SIXTH FORM COLLEGE OR FE COLLEGE (IF SURVEYSY=12 or 13 and YPEconAc = 1, 2, 3 or 4)

L3Qual (multi)

Have you been studying towards any of these qualifications in Year 12 or 13?

Choose all that apply.

1. A levels/AS levels
2. International Baccalaureate (IB)
3. Extended Project Qualification (EPQ)
4. T levels/T level transition programme
5. NVQ
6. BTEC National Certificate / ONC / OND
7. Core Maths Level 3 qualification [SCRIPTING LINK, ADD HELP ICON HERE](#)
8. Another type of qualification, course or training (please tell us what)
9. None of the above
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Codes 9, 97, 98 should be exclusive.

Code 8: allow type-in response

SCRIPTING NOTE: Add help icon text after code 7 with text 'Maths qualification equivalent to an AS level, designed for students who wish to develop mathematical skills to support their studies, training or employment, without taking a full maths A level'.

ASK IF YEAR 12 OR 13 AND STUDYING A LEVELS, IB (IF L3QUAL=1,2)

CurSubL3³⁰ (multi)

Which of these subjects have you been studying in Year 12 or 13?

If a subject is not on the list, please select 'Something else' at the bottom of the list and type it in.

Choose all that apply.

1. Art/Design
2. Biology
3. Business Studies
4. Chemistry
5. Computer Science/Computing
6. Design and Technology
7. Drama/Theatre Studies
8. Economics
9. Engineering
10. English Literature/Language
11. History
12. Geography
13. Languages (e.g. French, German)
14. Law
15. Maths / Further Maths/Statistics
16. Media/Film/TV Studies
17. Music/Music technology
18. Philosophy
19. Physical Education (PE)
20. Physics
21. Politics/Political Studies
22. Psychology
23. Religious Studies
24. Sociology
25. Something else (please tell us what)
26. None of these
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Codes 26, 97, 98 should be exclusive.

Code 25: allow type-in response

³⁰ Tracking question but filter has changed as those studying vocational subjects are no longer included in this route

IF STUDYING APPRENTICESHIP/TRAINING COURSE OR VOCATIONAL QUALS [IF SURVEYSY=12 or 13 AND (YPECONAC=6-7 OR L3QUAL=4-6))]

CurSubVoc (multi)

Which of these subjects have you been studying in Year 12 or 13?

If a subject is not on the list, please select 'Something else' at the bottom of the list and type it in.

Choose all that apply.

1. Administration and Business Management
2. Animal Care and Veterinary Science
3. Building and Construction
4. Child Development
5. Creative Arts and Design
6. Education
7. Engineering
8. Hair and Beauty
9. Health and Social Care
10. Horticulture
11. Hospitality and Catering
12. Languages, Literature and Culture
13. Manufacturing
14. Marketing and Sales
15. Media and Communications
16. Public Services
17. Science
18. Sport, Leisure and Recreation
19. Transport
20. Travel and Tourism
21. Warehousing and Distribution
22. Something else (please tell us what)
23. None of these
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Codes 23, 97, 98 should be exclusive.

Code 22: allow type-in response

ASK IF YEAR 12/13 OR Y11 AND ALREADY CHOSEN Y12 OPTIONS [(IF SURVEYSY=12-13) OR (SURVEYSY=11 AND P16SUB=1)]

AllSub (Single)

At the time you made your choices for Year 12 or 13 or the equivalent years at college, were you able to take all of the subjects you wanted to?

1. Yes
 2. No, I would have liked to study different subjects or a different number or combination of subjects if this had been possible
 97. Don't know
 98. Prefer not to say
-

ASK IF NOT ABLE TO TAKE ALL THE SUBJECTS WANTED IN YEAR 12 OR 13 AT TIME OF CHOOSING (ALLSUB=2)

ALLSUBWHY (Multi)

What were the main reasons you were not able to take all the subjects or courses you wanted?

Choose all that apply.

1. The subject or course wasn't offered in my school or college
2. I had to choose between academic subjects and technical/vocational subjects or courses
3. Entry to some subjects or courses required minimum grades that I didn't (expect to) achieve
4. There was a limit to how many subjects or courses I was allowed to take
5. The subject or course I wanted to take couldn't be combined with subjects I wanted to do more
6. I didn't like the teacher(s)
7. My teachers/family advised me not to take more subjects or courses
8. I had to prioritise between what I wanted to study and future study/career plans
9. Doing more subjects or courses may have affected the grades I would get
10. Doing more subjects or courses would have been too much work
11. Too many people had already signed up for the subject or course I wanted to take
12. Due to health reasons
13. Other reason (please tell us what)
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Codes 97, 98 should be exclusive.

Code 13: allow type-in response

ASK IF IN YEARS 12-13 AND HAPPY WITH CHOICES AT THE TIME (SURVEYSY=12-13 AND ALLSUB=1)

AllSubNow (*Single*)

And how do you currently feel about the subjects you have chosen to study in Years 12-13?

1. I am still happy with the subjects I have chosen
2. If choosing now, I would choose different subjects or a different number or combination of subjects
97. Don't know
98. Prefer not to say

ASK IF NOT ABLE TO TAKE ALL THE SUBJECTS WANTED IN YEAR 12 OR 13 OR LATER REGRETTED CHOICES (ALLSUB=2 OR ALLSUBNOW=2)

AllSubComb (*Multi*)

[IF ALLSUB=2: Which if any of the following applies to what you would have ideally chosen if you had been able to?]

[IF ALLSUBNOW=2: Which if any of the following applies to you?]

Choose all that apply.

1. I would have liked to study more subjects or a wider range of subjects or courses
2. I would have liked to study a combination of academic subjects and vocational/technical courses
3. I would have liked to study the same number of subjects or courses, but would have chosen different ones
4. I would have liked to study fewer subjects or courses
5. Something else (please type in)
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Codes 97, 98 should be exclusive.

Add piping as specified

Code 5: allow type-in response

ASK ALL YEAR 10-13 (SURVEYSY=10-13)

FutHEQu (Single)

Are you thinking about going on to study for a higher education qualification in **any area of study**?

Please choose one only.

1. Yes, university degree
2. Yes, another higher education qualification (e.g. HNC, HND, Higher Education Diploma)
3. Yes, degree apprenticeship
4. No
5. Maybe/Undecided
98. Prefer not to say

ASK IF CONSIDERING STUDYING FOR HE EDUCATION DEGREE (IF FutHeQu = 1 or 2)

FutHESu (open text)

Thinking about university or higher education qualifications, what are you interested in studying? Please type in your answer.

97. I don't know / haven't decided which subject

SCRIPTING NOTE: OPEN TEXT QUESTION

ASK ALL YEAR 7-9 (SURVEYSY=7-9)

SciGCSELik (single)

Everyone has to study sciences at GCSE. After that, students can choose what they want to study, for example at A levels.

Which of the following best describes your view?

1. I don't think I will study science subjects after GCSE
2. I might study science subjects after GCSE
3. I definitely want to study science subjects after GCSE
97. Don't know
98. Prefer not to say

ASK ALL YEAR 7-9 (SURVEYSY=7-9)

UniWant (single)

Do you think you will want to go to university after you finish school?

1. Definitely
 2. Probably
 3. Probably not
 4. Definitely not
 97. Don't know
 98. Prefer not to say
-

STEM LEARNING AT SCHOOL

SCRIPTING NOTE: ADD TIMESTAMP 7

ASK ALL YEARS 7 TO 11 (SURVEYSY=7-11)

SciLes (single)

Over the last school year (*PIPE IN SURVEYSY*), how many hours of science lessons (Biology, Chemistry, Physics) did you have each week on average?

1. Less than 3 hours
2. 3 hours
3. 3.5 hours
4. 4 hours
5. 4.5 hours
6. 5 hours
7. 5.5 hours
8. 6 hours
9. 6.5 hours
10. 7 hours
11. 7.5 hours
12. 8 hours
13. 8.5 hours
14. 9 hours
15. 9.5 hours
16. 10 hours or more
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Pipe in text as specified so it appears as '(Year X)'.

ASK IF YEARS 7 TO 9 OR YEARS 10-11 AND MODULE A [(SURVEYSY=7-9) OR (SURVEYSY=10-11 AND MODULE=1)]

PracQuanA-C (grid)

Still thinking about this last school year (*PIPE IN SURVEYSY*), about how often did you generally do the following in science lessons?

- A... Watch a teacher demonstration of a practical
B... Watch a video of a practical
C... Hands-on practical work

1. At least once a week
2. At least once a fortnight
3. At least once a month
4. Once every couple of months
5. Less often
6. Never
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Pipe in text as specified so it appears as '(Year X)'..

ASK IF YEARS 7 TO 9 OR YEARS 10-11 AND **MODULE A** [(SURVEYSY=7-9) OR (SURVEYSY=10-11 AND MODULE=1)]

PracRes (*single*)

Which of these best applies to you?

1. I would have preferred to do **more** practical work
2. I would have preferred to do **less** practical work
3. I was happy with the amount of practical work we did
97. Don't know
98. Prefer not to say

ASK IF WOULD LIKE TO DO MORE PRACTICAL WORK (PracRes=1)

PracResM (*multi-choice*)

Which types of practical work would you like to do more of?

Choose all that apply.

1. Watch a teacher demonstration of a practical
2. Watch a video of a practical
3. Hands-on practical work (that I do by myself or with others)
4. Another kind of practical work (please tell us what)
- 97 Don't know
- 98 Prefer not to say

*SCRIPTING NOTE: Codes 97, 98 should be exclusive.
Code 4: allow type-in response*

ASK IF YEARS 10-11 AND **MODULE A** (SURVEYSY=10-11 AND MOCULE=1)

PracRes1011 (*Grid*)

Now thinking about Biology, Chemistry and Physics separately, which of these statements best applies to each subject?

- A. Biology
- B. Chemistry
- C. Physics

1. I would prefer to do **more** practical work
 2. I would prefer to do **less** practical work
 3. I am happy with the amount of practical work we do
 97. Don't know
 98. Prefer not to say
-

ASK IF YEARS 7 TO 9 OR YEARS 10-11 AND **MODULE A** [(SURVEYSY=7-9) OR (SURVEYSY=10-11 AND MODULE=1)]

PracQual (*multi-choice*)

Thinking about the whole of this last school year (*PIPE IN SURVEYSY*), have you done any of these kinds of work in science lessons?

Choose all that apply.

1. Fieldwork (experiment that takes place outside a school classroom or laboratory)
2. Carried out an experiment by myself
3. Carried out an experiment with others
4. Analysed results from an experiment
5. Written up conclusions from an experiment
6. Taken part in a class discussion about the results of an experiment
7. Carried out a simulated experiment rather than in real life, using a website or special computer software
8. None of these
97. Don't know
98. Prefer not to say

*SCRIPTING NOTE: Codes 8, 97, 98 should be exclusive.
Pipe in text as specfied so it appears as '(Year X)'.*

ASK IF YEARS 7 TO 9 OR YEARS 10-11 AND **MODULE A** [(SURVEYSY=7-9) OR (SURVEYSY=10-11 AND MODULE=1)]

PracOftA-D (*Grid*)

Thinking about the whole of this last school year (*PIPE IN SURVEYSY*), when doing practical work, how often would you say that ...

- A. ...you understood the aim of the practical work rather than just following the instructions?
- B...you discussed the results with other members of your class?
- C...you analysed the results or drew conclusions from the practical work?
- D...the teacher explained the relevance of the practical work to everyday life?

1 Always

2 Usually

3 Sometimes

4 Rarely

5 Never

97. Don't know

98. Prefer not to say

SCRIPTING NOTE: Pipe in text as specified so it appears as '(Year X)'..

ASK ALL

STEMPrac (multi)

During this past school year, have you taken part in any of these activities related to **Science, Computer science, Engineering or Maths?**

Choose all that apply.

1. [Years 12-13 only] An EPQ (Extended Project Qualification) relating to these subjects
2. A school club, for example a lunchtime or after-school club relating to these subjects
3. A competition relating to these subjects
4. A special project relating to these subjects, that you completed outside normal lesson time
5. A project that involves working with a scientist, computer scientist, engineer or mathematician
6. A talk at school from someone who works in these areas (not including your teacher)
7. A school visit to a company or organisation involved in these areas
8. A careers fair at your school which involved learning about future study or careers in these subjects
9. Another type of activity relating to these subjects (please tell us what)
10. None of these
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Only include code 1 if in SURVEYSY=12 OR 13

SCRIPTING NOTE: Codes 10, 97, 98 should be exclusive.

Code 9: allow type-in response

IF ANY NAMED ACTIVITY CHOSEN AT STEMPRAC (ANY IN STEMPRAC = 1 TO 8)

SCRIPTING NOTE: LOOP FOR EACH ACTIVITY CHOSEN AT STEMPRAC

STEMImp1-9 (Loop)

You said you had taken part in the following activity that is related to Science, Computer science, Engineering or Maths:

[PIPE IN ACTIVITY FROM STEMPRAC]

Which of the following statements comes closest to your view?

Taking part in this activity has...

1. ... encouraged me to carry on studying Science, Computer science, Engineering or Maths
 2. ... put me off studying these subjects
 3. ... made no difference to whether I would carry on studying any of these subjects
 97. Don't know
 98. Prefer not to say
-

CAREERS IN STEM

SCRIPTING NOTE: ADD TIMESTAMP 8

ASK ALL YEAR 10 TO 13 (SURVEYSY=10-13)

CarAdv (multi)

Have you ever received any information or advice from any of these sources about what you may do for a job or career in the future?

Choose all that apply.

1. Friends
2. Parent(s)/guardian(s)
3. Brother/sister/sibling
4. Other family member
5. Someone working in a related area
6. Careers advisor at school / college
7. Teacher at school / college
8. Searching online
9. Presentations by employers
10. Careers fair / event
11. Someone or something else (please tell us what)
12. None
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Codes 12, 97, 98 should be exclusive.

Code 11: allow type-in response

ASK ALL

CarSure (single)

Do you have some idea about what jobs or careers you are interested in?

1. Yes, I have a firm idea
 2. Yes, I have some idea
 3. I have little or no idea
 97. Don't know
 98. Prefer not to say
-

ASK ALL IN YEARS 10 TO 13 WITH SOME IDEA OF CAREER (CARSURE=1/2)

CarWht (open text)

What careers are you interested in?

SCRIPTING NOTE: OPEN TEXT QUESTION

ASK ALL

SciCarA-B (grid)

How much do you agree or disagree with the following statements?

Careers that use science...

A... Are suitable for someone like me

B... Require high grades

1. Strongly agree
2. Agree
3. Neither agree nor disagree
4. Disagree
5. Strongly disagree
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Randomise statements A and B

ASK ALL

CarIntA-D (grid)

How interested are you in a future career that involves any of the following?

A. Science

Jobs that involve scientific knowledge and investigation skills. People in science work in a range of areas including medicine, space, nature, energy and the environment.

B. Engineering

Jobs that involve finding solutions to problems. The work of engineers involves designing, creating, fixing and improving things like products, transport, software, buildings and machines.

C. Computing or technology

Jobs that involve creating, maintaining or improving technology, equipment or devices, including computer software and hardware.

D. Maths

Jobs across many areas of employment that involve an expert knowledge of mathematics, using calculations and analysing data to solve problems.

1. Very interested
2. Fairly interested
3. Not very interested
4. Not at all interested
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Please display text in italics under each response option (see scripting guidelines doc)

ASK IF YEAR 10 TO 13 AND INTERESTED IN STEM CAREER (IF SURVEY SY=10-13 AND ANY OF CARINTA - CARINTD = 1 or 2)

CarWhy (multi)

You said that you are interested in a future career or job that involves [IF CARINTA=1/2=Science], [IF CARINTB=1/2=Engineering], [IF CARINTC=1/2=Computing or technology], [IF CARINTD=1/2=Maths].

Why are you interested in these types of jobs or career?

Choose all that apply.

1. I enjoy the subject(s)/ would enjoy the career
2. I'm good at the subject(s)
3. Wide range of career options
4. I can see how the subject(s) relate to the real world
5. Advised by family member
6. A teacher encouraged or inspired me
7. I want to help others
8. These careers are well paid
9. These careers are beneficial to society
10. These careers can help tackle environmental challenges (e.g. climate change)
11. Jobs in this area are well-respected
12. Previous experience of role (such as work experience, training course, after-school)
13. Another reason (please tell us what)
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Apply piping as specified and add commas between items.

SCRIPTING NOTE: Randomise answer list but keep code 13, 97, 98 in a fixed position at the end.

Codes 97, 98 should be exclusive

Code 13: allow type-in response

ASK IF YEAR 10 TO 13 AND NOT INTERESTED IN STEM CAREER (IF SURVEYSY=10-13 AND IF ALL OF CARINTA – CARINTD = 3 or 4)

CarWhyNo (multi)

Are there any particular reasons why you are not interested in careers involving Science, Engineering, Computing, Technology or Maths?

Choose all that apply.

1. Don't enjoy the subject(s) / would not enjoy these careers
2. Prefer other subjects
3. Not good at these subjects
4. I don't think I will get the grades needed
5. I have other career plans
6. I don't know enough about these jobs
7. I haven't really thought about it
8. Another reason (please tell us what)
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Randomise answer list but keep code 8, 97, 98 in a fixed position at the end.

Codes 97, 98 should be exclusive

Code 8: allow type-in response

ASK ALL

CarKnowA-C (grid)

How much do you know about the different types of things the following people do in their jobs?

A...Engineers

B...Scientists

C...People working in computing or technology

1. A lot
2. A fair amount
3. A little
4. Not very much
5. Nothing at all
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Randomise statements A, B, C

ENGINEERING AS A CAREER

SCRIPTING NOTE: ADD TIMESTAMP 9

ASK IF YEARS 7-9 OR YEARS 10-13 **AND MODULE B** OR **MODULE A** AND INTERESTED IN ENGINEERING [(SURVEYSY=7-9) OR (SURVEYSY=10-13 AND MODULE=2) OR (SURVEYSY=10-13 AND MODULE=1 AND CARINTB=1/2)]

EngIntro (*Display*)

And now a few questions about jobs or careers in Engineering [*SCRIPTING NOTE: ADD HELP ICON HERE*].

We are interested in everyone's views, whether or not you see this as a future pathway for yourself.

SCRIPTING NOTE: ADD Helptext: 'Engineers find solutions to problems. Their work involves designing, creating, fixing and improving things like products, transport, software, buildings and machines].

ASK IF YEARS 7 TO 9 OR YEARS 10-13 AND **MODULE B** [(SURVEYSY=7-9) OR (SURVEYSY=10-13 AND MODULE=2)]

EngUseA-E (*grid*)

How much do you agree or disagree with the following statements?

- A. Engineering is a suitable career for someone like me
 - B. Being an Engineer fits well with who I am
 - C. I see examples of engineering in my everyday life
 - D. Engineering is a career that allows people to work in various different roles
 - E. Engineering is a career that allows people to be creative
-
- 1. Agree strongly
 - 2. Tend to agree
 - 3. Neither agree nor disagree
 - 4. Tend to disagree
 - 5. Disagree strongly
 - 97. Don't know
 - 98. Prefer not to say
-

ASK IF YEARS 7 TO 9 OR YEARS 10-13 AND **MODULE B** [(SURVEYSY=7-9) OR (SURVEYSY=10-13 AND MODULE=2)]

EngClim (*Single*)

Which **one** of the following statements comes closest to your view about engineering and the environment?

On the whole, the engineering industry does ...

1. ...more to **help** the environment than harm it
 2. ...more to **harm** the environment than help it
 3. ...an equal amount of both harm and good when it comes to the environment
 97. Don't know
 98. Prefer not to say
-

ASK ALL YEARS 10 TO 13 AND INTERESTED IN ENGINEERING (IF SURVEYSY=10-13 AND CARINTB=1/2)

EngRoute (*single*)

You said earlier that you were fairly or very interested in a career in Engineering.

If you did decide to pursue a career in engineering, which of the following routes would you be **most likely** to consider?

1. University/Higher education route
 2. Technical or vocational route (e.g. apprenticeship / degree apprenticeship/ BTEC / NVQ / HND / T Levels)
 3. I don't know enough about the different options
 4. I don't have a preference
 97. Don't know
 98. Prefer not to say
-

ASK IF VOCATIONAL ROUTE (IF EngRoute=2)

EngRouteVoc (*multi*)

You said you would choose a technical or vocational route into Engineering. Why would you choose this route?

Choose all that apply.

1. So I could start earning money straight away
2. Prefer to learn by doing things rather than being in a classroom
3. To set me on a clear career path
4. More likely to get a job once I have qualified
5. Not sure if I would get into university
6. Never considered going to university
7. It is a practical activity that is well suited to on-the-job learning
8. So I can avoid high student fees/debt
9. It would allow me to study a specific field of engineering
10. Faster route to getting a job
11. To keep my career options more open
12. Other reason (please tell us what)
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Randomise response options but keep code 12, 97, 98 in a fixed position at the end

Codes 97, 98 should be exclusive

Code 12: allow type-in response

ASK IF UNIVERSITY OR HIGHER EDUCATION ROUTE (IF EngRoute=1)

EngRouteAca (*multi*)

You said you would choose university/higher education as a route into Engineering. Why would you choose this route?

Choose all that apply.

1. To keep my career options more open
2. A degree is a better recognised qualification than technical or vocational qualifications
3. A degree would lead to better paid jobs in the long run
4. Might need a degree to get promoted / progress further
5. I would want the experience of going to university
6. Because you need a degree to get a job in engineering
7. Other reason (please tell us what)
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Randomise statements but keep code 7, 97, 98 in a fixed position at the end

Codes 97, 98 should be exclusive

Code 7: allow type-in response

ASK IF YEARS 7 TO 9 OR YEARS 10-13 AND **MODULE B** [(SURVEYSY=7-9) OR (SURVEYSY=10-13 AND MODULE=2)]

EngCould (*single*)

Regardless of whether you would want to do this as a career, do you think you **could** become an Engineer in the future?

1. Definitely
 2. Probably
 3. Probably not
 4. Definitely not
 97. Don't know
 98. Prefer not to say
-

WORK EXPERIENCE

SCRIPTING NOTE: ADD TIMESTAMP 10

ASK ALL YEARS 10 TO 13 (SURVEYSY=10-13)

WorkExp³¹ (multi)

Have you ever done any work experience, either in person or online?

Choose any that apply.

1. Yes, involving Science, Computer Science, Engineering or Maths
2. Yes, in another area
3. No
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Codes 3, 97, 98 should be exclusive.

ASK IF DONE WORK EXPERIENCE IN SCIENCE (IF WorkExp = 1)

WorkExpType (single)

Thinking about any work experience you have done involving Science, Computer science, Engineering or Maths, was this...

1. In person/on site
2. Online/virtual
3. I have done both
97. Don't know
98. Prefer not to say

ASK IF DONE WORK EXPERIENCE IN SCIENCE (IF WorkExp = 1)

WorkExpArr (multi)

Thinking about your most recent work experience involving Science, Computer science, Engineering or Maths, how was this arranged?

Choose all that apply.

1. I arranged it myself
2. I arranged it through my family / friends
3. It was arranged through my school
4. Some other way (please tell us how)
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Codes 97, 98 should be exclusive.

Code 4: allow type-in response

³¹ Tracking question, amended in 2023 to add 'in person or online' to question stem.

ASK ALL YEAR 10 TO 13 (SURVEYSY=10-13)

WorkExpWant (single)

Have you ever wanted to do [IF WorkExp=1=other] work experience in Science, Computer science, Engineering or Maths, but not been able to do so?

1. Yes
2. No
97. Don't know
98. Prefer not to say

ASK IF UNABLE TO DO WORK EXPERIENCE IN SCIENCE, Computer Science, Engineering or Maths (IF WorkExpWant = 1)

WorkExpWhy³² (multi)

Why were you unable to do this work experience?

Choose all that apply.

1. Couldn't find relevant opportunities
2. Didn't know how to find opportunities
3. Didn't have the right contacts
4. Was too young
5. Because of the COVID-19 pandemic
6. Applied through my school / college but was unsuccessful
7. Applied directly to an employer, but was unsuccessful
8. Work experience not offered to **any** students at my school
9. Work experience not offered to **all** students at my school
10. The type of work experience I wanted wasn't available
11. Didn't apply because places were limited
12. Another reason (please tell us what)
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Randomise statements but keep code 12, 97, 98 in a fixed position at the end.

Also keep 8 and 9 together in the list.

Codes 97, 98 should be exclusive

Code 12: allow type-in response

³² Tracking question but code 5 was added in 2023

ATTITUDES TOWARDS SCIENCE AND ENGINEERING

SCRIPTING NOTE: ADD TIMESTAMP 11

ASK ALL

AttIntro (*Display*)

And now a few questions about your attitudes towards some areas of science.

ASK ALL

TrustSciA-H (*Grid*)

To what extent, if at all, do you trust information **about science** from each of the following sources?

A. Doctors, nurses and other healthcare professionals

B. Scientists

C. TV news such as the BBC, ITV or Sky (including TV news websites and apps)

D. Social media such as TikTok, Twitter, Instagram, Snapchat

E. The UK government

H. Friends and family

1. Completely

2. A great deal

3. Somewhat

4. Very little

5. Not at all

97. Don't know

98. Prefer not to say

ASK ALL

SciUse (*grid*)

How much do you-agree or disagree with the following.

Understanding science is important for...

... Me in my future career

... Me in my everyday life

... Society in general

1. Strongly agree
 2. Agree
 3. Neither agree nor disagree
 4. Disagree
 5. Strongly disagree
 97. Don't know
 98. Prefer not to say
-

ASK ALL

IDENTSCI (*Single*)

Which of these statements best describes your relationship with science?

1. I actively seek out science news, events, activities or entertainment
 2. I'm interested in science but I don't make a special effort to keep informed about it
 3. Science is not for me
 97. Don't know
 98. Prefer not to say
-

ASK IF YEARS 7 TO 9 OR YEARS 10-13 AND **MODULE B** [(SURVEYSY=7-9) OR (SURVEYSY=10-13 AND MODULE=2)]

EnvironInt (*multi*)

Which, **if any**, of these topics related to the environment are you most interested in?

You can choose one, two or three answers.

1. Climate change
2. Loss of plant and/or animal life (biodiversity loss)
3. Air pollution
4. Waste and recycling
5. Reducing single use plastic
6. Sustainable or environmentally friendly fashion
7. Water pollution/ water supply
8. Transport that has less impact on the environment
9. Eating less meat and dairy (e.g. vegetarian or vegan)
10. I'm interested in another area related to the environment (please tell us what)
11. None of these
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Randomise statements but keep code 10, 11, 97 and 98 in a fixed positions at the end.

Codes 11, 97, 98 should be exclusive.

One, two or three responses allowed (maximum of three) except if one of the exclusive codes are selected in which case only one code allowed.

Code 10: allow type-in response

ASK IF YEARS 7 TO 9 OR YEARS 10-13 AND **MODULE B** [(SURVEYSY=7-9) OR (SURVEYSY=10-13 AND MODULE=2)]

ClimIntro (*Display*)

Now a few questions about climate change, sometimes referred to as 'global warming'

ASK IF YEARS 7 TO 9 OR YEARS 10-13 AND **MODULE B** [(SURVEYSY=7-9) OR (SURVEYSY=10-13 AND MODULE=2)]

ClimInt (*Grid*)

How interested are you in....

A. ... issues related to climate change?

B. ... a future job or career that will help to reduce the impact of climate change?

1. Very interested
 2. Fairly interested
 3. Not very interested
 4. Not at all interested
 97. Don't know
 98. Prefer not to say
-

ASK IF YEARS 7 TO 9 OR YEARS 10-13 AND **MODULE B** [(SURVEYSY=7-9) OR (SURVEYSY=10-13 AND MODULE=2)]

Climatt (*Grid*)

How much do you agree or disagree with the following statements?

- A. It's pointless doing things to help reduce the impacts of climate change unless others do the same
 - B. When it comes to climate change, it is difficult to know what to believe
 1. Agree strongly
 2. Tend to agree
 3. Neither agree nor disagree
 4. Tend to disagree
 5. Disagree strongly
 97. Don't know
 98. Prefer not to say
-

FAMILY SCIENCE CONNECTIONS

SCRIPTING NOTE: ADD TIMESTAMP 12

ASK ALL

SocNSci (*single*)

Apart from your doctor, do you know anyone with a **medical or science-related job** that you could talk to about health, medicine or other scientific issues outside of school?

1. No
 2. Yes, one or two people
 3. Yes, three or four people
 4. Yes, at least five people
 97. Don't know
 98. Prefer not to say
-

ASK ALL

IntYPPar (*single*)

Do you think your parent(s) or guardian(s) are interested in science?

Choose one only.

1. Yes, one of my parent(s) or guardian(s) is interested
 2. Yes, both parents are interested
 3. No, neither parent is interested
 4. This question is not applicable to me
 97. Don't know
 98. Prefer not to say
-

ASK ALL

Unipar (*single*)

Did at least one of your parent(s) or guardian(s) go to university?

1. Yes one did
 2. Yes, both did
 3. No, neither
 4. This question is not applicable to me
 97. Don't know
 98. Prefer not to say
-

ASK ALL

SciParA (multi)

Does anyone in your family work in any of the following areas?

Firstly, does anyone in your family work in **medicine**?

Please include extended family, for example aunts, uncles, cousins.

Choose all that apply.

1. Parent or guardian
2. Brother(s)/sister(s)/sibling(s)
3. Other family member (living with you)
4. Other family member (not living with you)
5. No, no-one
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Codes 5, 97, 98 should be exclusive.

SciParB (multi)

And does anyone in your family work as a **scientist**?

Please include extended family, for example aunts, uncles, cousins.

Choose all that apply.

1. Parent or guardian
2. Brother(s)/sister(s)/sibling(s)
3. Other family member (living with you)
4. Other family member (not living with you)
5. No, no-one
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Codes 5, 97, 98 should be exclusive.

SciParC (multi)

And does anyone in your family work in **engineering**?

Please include extended family, for example aunts, uncles, cousins.

Choose all that apply.

1. Parent or guardian
2. Brother(s)/sister(s)/sibling(s)
3. Other family member (living with you)
4. Other family member (not living with you)
5. No, no-one
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Codes 5, 97, 98 should be exclusive.

SciParD (multi)

And lastly does anyone in your family work in **computing or technology**?

Please include extended family, for example aunts, uncles, cousins.

Choose all that apply.

1. Parent or guardian
2. Brother(s)/sister(s)/sibling(s)
3. Other family member (living with you)
4. Other family member (not living with you)
5. No, no-one
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Codes 5, 97, 98 should be exclusive.

DEMOGRAPHICS

SCRIPTING NOTE: ADD TIMESTAMP 13

ASK ALL

DemIntro (*display*)

You only have a few minutes of the survey left.

Next, we need a bit more information about you. This will help us to see how experiences and opinions vary between different groups of young people.

ASK ALL

Gender(*single*)

Do you think of yourself as...?

1. Male
2. Female
3. Non-binary
4. Identify in another way (*please type in*)

97 Don't know

98 Prefer not to say

ASK ALL

Age (*numeric*)

What is your age?

TYPE IN :

SCRIPTING NOTE: SET A RANGE OF 10-20

ASK ALL

Ethnic (*single*)

What is your ethnic group?

Please select one option only from the full list.

White

1. White – English/Welsh/Scottish/Northern Irish/British
2. White – Irish
3. White – Gypsy or Irish Traveller
4. Any other White background

Mixed/multiple ethnic groups

5. White and Black Caribbean
6. White and Black African
7. White and Asian
8. Any other mixed/multiple ethnic background

Asian or Asian British

9. Indian
10. Pakistani
11. Bangladeshi
12. Chinese
13. Any other Asian background

Black/African/Caribbean/Black British

14. African
15. Caribbean
16. Any other Black/African/Caribbean background

Other ethnic group

17. Arab
 18. Any other ethnic group
 97. Don't know
 98. Prefer not to say
-

ASK ALL

Disab (*single*)

Do you have a long-term illness or disability?

This is any illness or disability that is likely to or has affected you for more than 3 months.

1. Yes
 2. No
 97. Don't know
 98. Prefer not to say
-

IF HAVE DISABILITY (DISAB=1)

DisLimit (*single*)

Does this illness or disability limit your activities in any way?

- 1. Yes
 - 2. No
 - 97. Don't know
 - 98. Prefer not to say
-

ASK ALL

DiffEmot (*single*)

Overall, do you think that you have difficulties in one or more of the following areas:
Emotions, concentration, behaviour or getting on with other people?

- 1. No
 - 2. Yes: minor difficulties
 - 3. Yes: definite difficulties
 - 4. Yes: severe difficulties
 - 97. Don't know
 - 98. Prefer not to say
-

NPD LINKAGE AND EDUCATION DETAILS FOR YEARS 10-13 WHO DO NOT CONSENT

SCRIPTING NOTE: ADD TIMESTAMP 14

ASK ALL

NPDConsent (*single*)

The Department for Education holds information about you and your education. This includes information about your ethnicity, schools, exams, special educational needs, and free school meals.

We would like to add this information to your survey answers to create a more accurate picture of your life and experiences. This information will only be used for research purposes.

All information is confidential: this means that your name and address will never be included in the results.

Can we have your permission to link this information to your survey answers? ADD HELP TEXT HERE

HELP TEXT: We link survey data to administrative data such as exam results so that we do not need to collect all this information in the survey. Having more data about the individuals who take part in the survey helps the Royal Society and Engineering UK to ensure that educational services can be planned around the needs of individuals from all types of background

1. Yes
 2. No
-

YEAR 10 TO 13 AND REFUSED NPD LINK (IF SURVEYSY=10-13 AND NPDConsent = 2)

PstQual (multi)

Have you passed any of these qualifications?

Do not include qualifications if you are still waiting for the results.

Choose all that apply.

1. GCSEs / IGCSEs
2. A levels/AS levels
3. International Baccalaureate (IB)
4. T levels/T level transition programme
5. Intermediate (Level 2) Apprenticeship
6. Advanced (Level 3) Apprenticeship
7. NVQ level 1 / BTEC First Certificate / RSA stage I-III / City and Guilds Part 1 / Junior Certificate
8. NVQ level 2 / GNVQ Intermediate / BTEC First Diploma / RSA Diploma / City and Guilds Craft or Part II
9. NVQ level 3 / GNVQ Advanced / BTEC National Certificate / ONC / OND / City and Guilds Advanced Craft or Part III / RSA
10. Diploma or Advanced Diploma
11. None of these
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Codes 11, 97, 98 should be exclusive.

ASK IF PASSED A LEVELS/AS LEVELS AND REFUSED NPD CONSENT (IF PstQual = 2)

PstLev3A (*multi*)

Have you passed A levels or AS Levels in any of these subjects?

Choose all that apply.

1. Biology
2. Chemistry
3. Physics
4. Maths / Further Maths/Statistics
5. Computer Science
6. Psychology
7. Engineering
8. Another science or technical subject (e.g. Electronics, Geology, Environmental Science) (please tell us what)
9. None of these
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Codes 9, 97, 98 should be exclusive.

Code 8: allow type-in response

ASK IF PASSED LEVEL 3 VOCATIONAL QUALIFICATION AND REFUSED NPD CONSENT
(IF PstQual = 9)

PstLev3Voc (*multi*)

Have you passed any level 3 vocational qualification (e.g. NVQ) in any of these subjects?

Choose all that apply.

SCRIPTING NOTE: ADD HELP TEXT ICON AFTER 'qualification' above

1. Biology
2. Chemistry
3. Physics
4. Maths / Further Maths/Statistics
5. Computer Science
6. Psychology
7. Engineering
8. Another science or technical subject (e.g. Electronics, Geology, Environmental Science) (please tell us what)
9. None of these
97. Don't know
98. Prefer not to say

SCRIPTING NOTE:

HELP TEXT: Level 3 vocational qualifications include:

- NVQ Level 3
- BTEC National Certificate
- ONC / OND
- City and Guilds Advanced Craft or Part III
- RSA Advanced Diploma

Codes 9, 97, 98 should be exclusive.

Code 8: allow type-in response

ASK IF PASSED GCSEs AND REFUSED NPD LINK (IF PstQual = 1)

PstGCSE (*multi*)

Have you passed GCSEs at grades 9 to 4 in any of these subjects?

Choose all that apply.

1. Maths
2. Biology
3. Chemistry
4. Physics
5. Applied Science / Environmental Science / Sports Science
6. Computer Science / Computing
7. ICT
8. Electronics / Engineering
9. Design and Technology
10. Geology
11. Psychology
12. Another science or technical subject (please tell us what)
13. None of these
97. Don't know
98. Prefer not to say

SCRIPTING NOTE: Codes 13, 97, 98 should be exclusive.

Code 12: allow type-in response

RE-CONTACT DETAILS

SCRIPTING NOTE: ADD TIMESTAMP 15

ASK ALL AGED 13+ (IF NPDAGEBAND=2,3)

Contact (*single*)

Thank you for your help. You can claim your e-voucher in a few moments.

Kantar Public may want to contact you again within the next two years to find out how your attitudes and plans may have changed since this survey. The survey would be a little shorter (10 to 15 minutes) and you would receive another £10 voucher.

Kantar Public would retain your name and contact details for the next two years only for the purposes of getting back in touch. Kantar Public would not pass on your details to anyone else.

If you are re-contacted there will be no obligation for you to take part in any further research.

Would you be willing to allow us to contact you again within the next two years for this purpose?

1. Yes
 2. No
-

ASK IF AGREED FOR RECONTACT AND 16+ (IF Contact = 1 AND NPDAGEBAND=3)

MobTel (*Numeric*)

So that we can get back in touch with you in two years' time we would like to collect some contact details.

What is your mobile phone number? (*Please enter your number starting with a 0 and without any spaces*)

98 Prefer not to answer

99 Don't have mobile number

SCRIPTING NOTE: Allow type in text and include validation: number should 11 digits starting with a zero. Error message 'Please enter a valid phone number format. Please enter your number starting with a 0 and without any spaces'.

ASK IF AGREED FOR RECONTACT AND 16+ (IF Contact = 1 AND NPDAGEBAND=3)

HHTel (numeric)

What is your household telephone number? *(Please enter your number starting with a 0 and without any spaces)*

98 Prefer not to answer

99 Don't have a household number

SCRIPTING NOTE: Allow type in text and include validation: number should 11 digits starting with a zero.

ASK IF AGREED FOR RECONTACT AND 16+ (IF Contact = 1 AND NPDAGEBAND=3)

RespEmail (open text)

What is your email address? *(If possible, please provide an email address not linked to your school)*

98 Prefer not to answer

99 Don't have an email address

SCRIPTING NOTE: Allow type in text and please include validation for correct email format.

ASK IF AGE 13-15 (NPDAGEBAND=2)

ParName2 (open text)

We sent your parent(s) or guardian(s) a letter giving them information about this survey. We asked them to pass the letter on to you so that you could log in to the survey.

For our records, please tell us the name of the person who gave you this letter or told you about the survey.

ENTER FIRST NAME

ENTER LAST NAME

98 Do not wish to provide this

SCRIPTING NOTE: Open text boxes for names.

ASK ALL

MERIT1 (*Single*)

Thank you, you have been a great help. This is the end of the survey.

As a thank you for completing the Pathways survey we would like to give you a £10 voucher. You can claim your e-voucher straight away by following the instructions and link we will provide in a moment.

We can also send you your voucher code and these instructions via email, so you can claim it later if you prefer. Email receipt will take up to 24 hours. Your email address will be kept confidential and will not be used for any marketing purposes.

Please select your preference from the following options.

1. I would like to receive my voucher link by email
 2. I do not wish to receive my voucher link by email
 3. I do not have an email address to provide
 4. I do not wish to claim a voucher at all
-

ASK IF WANT TO RECEIVE VOUCHER LINK VIA EMAIL (MERIT1=1)

MERIT2 (*Open*)

Please can you confirm the email address to send the voucher link to, even if it is the same as one you have already provided.

TYPE IN EMAIL:

SCRIPTING NOTE: Allow type in text and include validation for correct email format. This will need to trigger an email (text for this will be provided later).

ASK IF MERIT1=1,2,3

MERIT3 (*display*)

Your unique voucher code is: [*PIPE IN MERIT VOUCHER CODE* **[VoucherCode]**]

[IF MERIT1=2,3: To redeem your voucher immediately, please follow the instructions below.]

[IF MERIT1=1: We will send an email confirming your voucher code, and instructions for redeeming it, within 24 hours. However, you are still able to redeem your voucher immediately by following the instructions below.]

1. Click on the link below to be taken to Merit Incentives
2. Your voucher code will appear on screen (if for any reason it is not there, please copy it from above and paste in)
3. Click 'Yes' to proceed and select a voucher from the options available in the catalogue
4. Choose the value of the voucher you want to redeem, enter your email to receive it digitally, and click on 'Redeem now'
5. The voucher will be available in the 'My wallet' section and will be sent to you by email (if you chose to receive it that way)
6. You will be able to see your remaining balance in the top-right corner

To claim your voucher immediately, please click here [*PIPE IN CLICKABLE MERIT LINK* **[VoucherURL]**]

SCRIPTING NOTE: Pipe in text, voucher code and Merit link as specified.

IF DON'T WANT A VOUCHER (IF MERIT1=4)

CAWICLOSE (*Display*)

This is the end of the survey, thank you very much for your time and help.