



Technical Report

Science Education Tracker 2019

Wave 2

March 2020



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1. Introduction

1.1 Background and objectives of SET 2019

Wellcome is an independent global charitable foundation dedicated to improving health and wellbeing through the funding and support of biomedical research and innovation. More specifically, Wellcome has an education and learning agenda which focuses on improving science education for young people in the UK.

The Science Education Tracker 2019 (SET 2019) is the second wave of a survey series that began in 2016 (SET 2016). The survey series is commissioned by Wellcome, with additional funding from the Department for Education (DfE), United Kingdom Research and Innovation (UKRI) and the Royal Society. The survey has been branded the Pathways survey in all correspondence with young people.

The survey provides evidence on key indicators for science engagement, education and career aspirations among young people in England. It also provides evidence to support specific areas of interest for Wellcome and their funding partners.

The SET 2016 survey¹, also conducted by Kantar, covered just over 4,000 students in school years 10 to 13 in state-funded schools across England. The SET 2019 survey was broader in scope and the key differences between SET 2016 and SET 2019 were as follows:

- The age range for the 2019 survey was expanded to cover all students in school years 7 to 13 in state-funded schools across England.
- The sample size was increased to accommodate this extended coverage. In SET 2019, the survey findings are based on a total achieved sample of 6,409 young people.
- Although the focus was still on science and STEM², the questionnaire coverage was broadened to also cover engagement and aspirations in relation to school subjects more broadly. This allowed comparisons to be drawn between STEM and non-STEM subjects and ensured that the survey remained relevant to all students, regardless of their interests and future aspirations.
- The SET 2019 survey built in explicit consent to allow the research team to follow up survey participants in the future.

As in SET 2016, all survey data were collected via an online survey platform.

1.2 SET 2019 methodology: summary

This report provides a full account of the methodology used for SET 2019. An overview is provided below.

The sample is a random sample of young people in school years 7 to 13 (aged 11–18) attending state-funded education in England. It was drawn from a combination of the National Pupil Database (NPD) and the Individualised Learner Record (ILR).

¹ <https://wellcome.ac.uk/what-we-do/our-work/young-peoples-views-science-education>

² Science, engineering, technology and mathematics.

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 and there was no requirement for parental consent.
- For young people aged 13 to 15, all correspondence was directed via their 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 required³. Before the selected child could access the survey online, their parent was 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 plans for the future and their attitudes towards science-related careers. The questions built on those asked in SET 2016, although many questions were redeveloped to allow for changes in policy priorities since 2016 and also to build new content suitable for the younger age group (school years 7 to 9) that was covered for the first time in SET 2019.

All questions were related to the September 2018–July 2019 school year which respondents had recently completed.

Respondents could complete the survey on any online device, including PCs, laptops, tablets and mobile phones. All new questions were cognitively tested with young people prior to administration. In addition, once the survey was scripted, user-interface testing was conducted on a range of online devices.

A field pilot of c.500 online completions was conducted before the main survey to test survey procedures.

Between 13 July and 2 September 2019, 6,409 respondents completed the survey, representing an overall response rate of 49%.

This response rate was achieved after sending an initial invitation and up to three reminders. Reminders were targeted at groups with the lowest response rates to maximise the representativeness of the sample.

1.3 Data and findings

The survey findings can be found on the Wellcome website at www.wellcome.ac.uk/set2019

³ To meet consent requirements under the GDPR.

2. Sampling

This chapter describes the process that was used to select the sample.

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 2017/2018 academic year. As a result, individuals from school years 6 to 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 to 13 in the 2018/2019 academic year. The following databases were used for the sampling:

- The Summer 2017/2018 School Census Pupil Level – limited to individuals in school years 6–12
- The final 2017/2018 ILR Learner snapshot – limited to individuals aged 16 at the start of the 2017/2018 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 2017/2018 but joined the state school system for the 2018/2019 academic year, for example pupils who had moved to the UK from abroad or had previously attended an independent school. It is difficult to provide an exact figure for levels of non-coverage. It is also 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 statistics⁴ also suggest that the proportion of secondary school age children migrating to England each year is very small.

2.2 Cleaning and combining the databases

The DfE provided Kantar with anonymised databases from which to draw the sample. Prior to selecting the sample, the NPD and ILR databases were de-duplicated⁵ and combined into a single sample frame. The following table, Table 2a, shows the number of pupils in the final sample frame by school year.

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<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/datasets/longterminternationalmigrationageandsextable207>

⁵ Duplicates were identified using the anonymised Pupil Matching Reference provided by the DfE.

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

2017/2018 academic year	2018/2019 academic year	N
Y6	Y7	621,122
Y7	Y8	595,648
Y8	Y9	583,579
Y9	Y10	571,274
Y10	Y11	555,290
Y11	Y12	531,144
Y12	Y13	549,294
Total	-	4,007,351

2.3 Sample selection

Selection was limited to young people with an address listed in the 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
- **Database source** for year 12 (2017/2018 academic year) only – NPD/ILR
- **Science performance at school** – The definition varied between school years. Key stage 4 data was used where available, but otherwise key stage 2 data was used. Changes in qualifications and/or how qualifications are recorded meant that different approaches had to be used for different years.
 - Years 6–8: Outcome for the key stage 2 science teacher assessment – Expected or better/Has not met standard
 - Years 9–10: National Curriculum level awarded for key stage 2 Science Teacher Assessment – Level 4, 5 or 6/Other
 - Year 11: Achieved 2 9–4 passes in science GCSEs or equivalent – Yes/No
 - Year 12: Achieved 2 'good' science GCSEs or equivalent – Yes/No
- **Overall performance at school** – The definition varied between school years. Key stage 4 data was used where available, but otherwise key stage 2 data was used. Changes in qualifications and/or how qualifications are recorded meant that different approaches had to be used for different years.
 - Years 6–8: Quartiles derived from key stage 2 scores for reading, maths and grammar, punctuation and spelling⁶
 - Years 9–10: Quartiles derived from key stage 2 scores for reading, maths and writing⁷
 - Years 11–12: Quartiles based on total GCSE and equivalents new style point score
- **Region** – Nine regions (former government office regions)
- **IDACI** – Quartiles
- **Establishment type** – Academy/Free school/LA maintained/FE College or 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. For individuals in years 10–13 (in the 2018/2019 academic year), the response rate was expected to be c.50% (in line with SET 2016). The response rates for younger year groups was expected to be lower. In particular, the response rates for years 6 and 7 were expected to be impacted by the need to gain explicit parental permission (for children aged under 13). Our response rate assumptions for these younger year groups were informed by the response rates achieved with these age groups as part of the DfE pupil and parent's omnibus⁸. A reserve sample was also drawn in case the response rate was lower than anticipated.

⁶ Note that in the derived 'overall score', maths was given a weight of 50%. Reading, grammar, punctuation and spelling were each given a weight of 25%.

⁷ Note that in the derived 'overall score', maths was given a weight of 50%. Reading and writing were each given a weight of 25%.

⁸

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/786040/survey_of_pupils_and_their_parents_or_carers-wave_5.pdf

Table 2b: Number of individuals sampled per school year

2017/2018 academic year	2018/2019 academic year	Target number of interviews	N records with an address	Expected response rate	Sampled		
					Original issue	Reserve	Total
Y6	Y7	667	621,106	35%	1,906	1,109	3,015
Y7	Y8	667	595,624	40%	1,668	972	2,640
Y8	Y9	667	583,560	45%	1,482	863	2,345
Y9	Y10	1,000	571,248	50%	2,000	500	2,500
Y10	Y11	1,000	555,267	50%	2,000	500	2,500
Y11	Y12	1,000	531,119	50%	2,000	500	2,500
Y12	Y13	1,000	549,287	50%	2,000	500	2,500
Total		6,000	4,007,211	46%	13,056	4,944	18,000

2.4 Final sample file

The sampled Pupil Matching References (PMRs) were provided to the DfE so that they could provide us with the names and addresses. Although databases from the 2017/2018 academic year were used to draw the sample, the DfE provided us with the most up-to-date contact details available⁹. In accordance with DfE rules, we deleted the original NPD and ILR files before the names and addresses of sampled individuals were provided to us.

We created three variables when drawing the sample, and the DfE allowed us to append these 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 allow us to calculate robust confidence intervals for the survey estimates. Second, to implement a responsive survey design (full details are provided in Chapter 6). The stratum reference consisted of the following:
 - Year group – 6, 7, 8, 9, 10, 11 and 12
 - NPD or ILR – for year 12 only
 - Overall school performance – three bands (bottom 25%, middle, top 25%)
 - Gender – Male/Female
 - Region – North/Midlands/South
 - IDACI – Quartiles

⁹ Where possible, details were taken from the Spring 2018/19 NPD, but otherwise the details were taken from the Autumn 2018/19 NPD, the Summer 2017/18 NPD or the 2017/18 snapshot 14 ILR.

3. Questionnaire development

The SET 2019 questionnaire was developed by Kantar in consultation with Wellcome and their funding partners and with Dr Jen DeWitt, an independent academic with expertise in science education surveys. In this chapter we provide information on the initial development of the questionnaire and the cognitive and usability testing phases.

The questionnaire and fieldwork materials were developed in the following four stages during the period March to May 2019:

- Initial content development based on discussions with Wellcome and the wider team
- A cognitive testing phase conducted over two rounds to test the understanding of the questions among the relevant age groups
- A final usability testing stage to ensure that the questionnaire worked well across different online devices including smartphones; the final round of testing also served as a final test of question wording
- A larger scale pilot of 529 young people to provide a more robust assessment of the parental consent procedures, questionnaire, mailing procedures, fieldwork and average survey length (Chapter 4)

3.1 Content coverage

The questions built on those asked in SET 2016. However, many questions were redeveloped to allow for changes in policy priorities since 2016 and to build new content suitable for the younger age group (school years 7 to 9) that was included for the first time in SET 2019.

Content was developed and refined over the course of a series of meetings and workshops with Wellcome and others. The 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
- Reflections on primary school science (years 7–9 only)
- Level of interest and self-perception in science vs other school subjects
- Factors affecting subject choice at GCSE and post-16, including triple science vs other science courses
- Learning mindset (is how well you do in different subjects linked more to natural ability or hard work?)
- Experience of science lessons at school, including practical work and attitudes towards teaching styles
- Higher education and career aspirations, and advice and guidance received
- Science-related work experience
- STEM activities (such as CREST, Science EPQs, employer encounters)

- Science capital (whether young people have access to family or social networks who work in or have an interest in science)
- Machine learning (this module is funded by the Royal Society)
- Science quiz to provide a measure of science knowledge (different versions for those in years 7–9 and those in years 10–13)
- 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 (sample A or sample B), with each module administered to a random half of the sample. This allowed an extended range of content while still ensuring that the survey remained a reasonable length (see Chapter 7 for more details on interview lengths).

3.2 Cognitive and usability testing methodology

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

Two rounds of cognitive testing were conducted in March 2019 and were followed by a round of usability testing in April 2019. After each round, the findings were discussed and changes were implemented which were then re-tested at subsequent phases. Testing mainly focused on new questions added to the 2019 survey and questions which had changed or been adapted since 2016. There was also a need to test questions (both tracking questions and new questions) among students in years 7–9 to ensure that the questions were clear, relevant and comprehensible for this younger group.

The samples for the cognitive and usability stages consisted of young people drawn from across the relevant age spectrum. Interviews were conducted in a mixture of settings: in-school, in-home and in-office. A mixture of recruitment methods was used. For all in-office interviews, recruitment of respondents was carried out by Kantar’s specialist qualitative recruitment team. School-based respondents were recruited on site via teachers, and home-based respondents were recruited through researcher networks.

A total of 31 interviews was conducted across the three rounds (13 at round 1, 11 at round 2 and 7 at round 3). The interviews were conducted by members of the SET survey research team following an agreed probe guide, although the researchers also used spontaneous probes to follow up on any areas of confusion or miscomprehension. All respondents were provided with a PayPal money transfer or shopping voucher to thank them for their participation. For children aged under 16 interviewed at Kantar’s offices, parents were asked to accompany their child to the testing venue and provide written (signed) consent to state that they were happy for their child to take part.

At the usability phase (round 3), we tested the survey across a range of devices including laptop and mobile devices. The researchers closely observed completion and noted any questions which were difficult to answer due to layout issues. Where necessary, question layout was amended to take account of any issues encountered. This was supported by further internal testing conducted on a range of devices.

3.3 Cognitive and usability testing sample profile

The sample across the three stages of cognitive and usability testing included a spread of students according to the characteristics set out in Table 3a.

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

		Numbers in sample
Total		31
Round	Round 1	13
	Round 2	11
	Round 3	7
Gender	Male	15
	Female	16
Year group	Year 7	5
	Year 8	5
	Year 9	3
	Year 10	7
	Year 11	7
	Year 12	2
	Year 13	2
Device (round 3 only)	Laptop	4
	Smartphone	3
Location	London	22
	Oxford/Hertford/Other	9
Institution type	School	27
	Sixth form	2
	FE college	2

4. Pilot survey

A pilot survey was conducted among 529 young people between 16 and 23 May 2016. Details of the method used for the pilot are covered in this chapter.

4.1 Pilot sample composition

In 2016, the pilot was based on an achieved sample of around 200 young people in years 10 to 13 (n=212). However, SET 2019 introduced several changes to the fieldwork model: the survey age range was extended to cover years 7 to 13 and the procedures for contacting parents of children aged 11–12 were new to the SET 2019 survey (section 5.2). Therefore, a larger pilot sample was recruited to allow these procedures to be tested more fully. To allow a full test of the parental consent procedures, the sample was selected to ensure that about half the sample would comprise young people aged 11–12. The full pilot sample profile is shown in Table 4a below.

Table 4a: Pilot achieved sample profile by age

	Achieved
Ages 11–12	236
Age 13	111
Age 14	43
Age 15	45
Age 16	41
Age 17	32
Ages 18–19	21
Total	529

4.2 Pilot sample selection and fieldwork

The preferred scenario would have been to select the pilot sample using the same method used for the main stage, that is, to select cases from the NPD/ILR. However, as in 2016, we were not able to access these records in time for the pilot stage. Therefore, as in 2016, we selected cases from a 'lifestyle database' provider, Sample Answers¹⁰, which allowed for speedy delivery of a sample of parents with at least one child within the relevant age range.

The pilot sample was a convenience sample, and there are some key differences to note between the sample used for the pilot survey and that used for the main-stage sample survey:

- The pilot sample was lower quality than the main-stage sample and would have contained a relatively high proportion of non-eligible addresses compared with the NPD/ILR (though the rate of ineligible addresses was unknown).

¹⁰ <https://www.sampleanswers.com/>

- For all young people within the survey age range, the pilot sample included a parent's name but not the name of the child (as would be available in the NPD/ILR). This meant that we could not direct the survey to a specific named child. This had several implications:
 - o In the main survey we could target communications directly to all young people aged 16 or over at the time of sampling. However, for the pilot survey we needed to direct all survey communication for young people via the parent.
 - o Although the sample was selected to target parents of children of specific ages, in practice the named parent may have had more than one child within the survey-eligible age range, and we had no control over which child completed the survey in this situation; in this situation parents were asked to pick one age-eligible child at random.
- Given the limitations of the sample source, and as we were not able to stratify and select the sample in the same way as the NPD, we could not ensure that the sample was representative of our target audience. However, we were able to ensure a spread by age and region.
- As we did not have data that would be provided via the NPD (such as name, age, gender, year group), we needed to include some additional questions in the pilot survey to capture the data directly.

Despite these differences, this approach allowed us to easily target a pilot sample within the project timescale and also allowed a detailed inspection of questionnaire data. It also permitted us to draw some indicative conclusions about response rates and the impact of the parental consent survey.

A sample of 3,700 cases was selected for the pilot, representative by region within England. The sample was selected on the basis of issuing 2,350 invite letters to parents of 12-year-olds, and 225 invite letters to parents with children of each of the following ages: 13, 14, 15, 16, 17 and 18. A screening question was included at the start of the questionnaire to ensure that only those in the correct year groups completed the survey.

The fieldwork was based on the fieldwork model for the main stage (Chapter 5), including correspondence to ensure that a parent of children aged 12 or under completed a consent form before their child could access the survey. However, for pragmatic reasons, and due to timing constraints, only one mailing was included, and no reminders were sent. All children received a £10 e-voucher which they were able to claim at the end of the survey; these were claimed via the Perks website, as in the main stage (section 5.5).

The aim was to achieve 400 interviews. The target was achieved (and in fact exceeded) within the first few days of fieldwork and therefore a decision was made to close the survey after a week, on Thursday 23 May 2019.

4.3 Pilot response rates

The total number of pilot completions was 529. Based on the initial mailout figure of 3,700, this represented an overall conversion rate of 14%. It is likely that the pilot response rate was in reality higher than this as we would expect a proportion of issued addresses to be out of scope (for example a non-valid address, no-one in the relevant age range).

As noted above, the pilot conversion rate was not seen as indicative of main-stage response rates for a variety of reasons: it involved a different sample source; a shorter fieldwork window; different fieldwork scheduling (the pilot was conducted during term time whereas the main survey overlapped with school holidays); all letters were directed via a parent whereas in the main stage those aged 16+ would have direct mailings; and there were no reminder mailings in the pilot.

4.4 Recommendations arising from the pilot survey

The pilot survey was used to help inform several decisions for the main stage:

- The estimated conversion rates for children of different ages helped us to calculate predicted response rates for the main stage, for both the under-13 and the 13+ samples. Our expectation before the pilot was that the dual opt-in process would mean that the response rate would be lower for young people aged under 13. This was confirmed by the pilot – the conversion rate for under-13s was 13% compared with 16% for those aged 14+.
- The cumulative return rate was used to help inform what the ideal window between mailings should be.
- Incentive redemptions were inspected and used to help inform which incentives should be offered to young people in the main stage.
- The pilot survey provided an estimated interview length and confirmed that no further cuts were required to meet interview length targets.
- A detailed inspection of pilot questionnaire responses and data quality (e.g. level of don't knows, flat-lining across attitude batteries) was conducted. This did not reveal any major causes for concern, though a small number of questions were amended or tweaked as a result of this inspection.

5. Fieldwork

The main survey fieldwork was conducted between 13 July and 2 September 2019. This period was chosen as it fell after the school exam period and before the start of the new school year. The fieldwork window was slightly shorter compared with SET 2016 (which ran from 29 June to 31 August 2016). This was because the sample from the NPD/ILR was received around two weeks later than the equivalent timetable for SET 2016.

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

5.1 How young people were contacted

In 2019, a new parental consent procedure was introduced which applied to parents of all children aged 11–12 at the start of fieldwork (the date used for age calculation was 1 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 13s–15s but with one added step. The letter to the parent contained instructions on how to access a parental consent survey, together with a unique set of login details for this. As with the 13s–15s, the parent was asked to hand over a second letter to their child, which contained unique login details for the child to access the main survey. However, the child was blocked from taking part in the survey until the parental consent form had been completed and consent had been logged.

These steps fulfil both the Market Research Society (MRS) and the 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 sections 5.3 and 5.4 below.

5.2 The parental consent form

The parental consent form, applicable to all parents of 11–12-year-olds, consisted of 5 short questions:

- Introduction to the survey and consent requirements (including a link to Kantar’s privacy policy, which opened in a second screen)
- A question to check whether 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 whether 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 to do this, the form was routed to a closing screen)

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

- A question asking if the parent consents to their child's contact details being linked to the National Pupil Database records (which include, 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.
- A question asking if the parent consents to their child being re-contacted in 2 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 minutes¹¹. Information about consent for data linkage and re-contact can be found in Chapter 8.

5.2.1 Parent consent rates

In total, 2,190 parents were sent a letter asking them to complete a consent form. The total number of parents completing a consent form was 938, which represents a response rate of 43%.

Most parental consent forms successfully converted to a child survey. In total, of the 938 cases where a parental consent form was completed, 889 children completed a survey (95%).

Most children (90%) completed the survey on the same day that their parent completed the consent form, suggesting that in most cases the transition was smooth; 94% completed the survey within 2 days of parental consent being logged, and 96% within 7 days.

As noted below, reminder mailings were sent to target young people 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.

5.3 Fieldwork mailings and dates

Up to six mailings were sent. As discussed in Chapter 6, reminders were not sent on a blanket basis but were instead targeted at 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):

- **Pre-notification letter:** This was sent a few days before the start of fieldwork to inform young people and (where applicable) their parents that they had been selected for the survey and that they would soon receive a further letter with instructions on how to complete the survey. For young people aged under 16, two letters were sent, as described in section 5.1 above.
- **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 as described above.
- **First reminder letter:** A further mailing was sent to a targeted selection of non-responders.
- **Second reminder postcard + letter:** The second targeted reminder 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.
- **Third reminder letter:** A final letter was sent towards the end of the fieldwork period.

¹¹ All cases over 10 minutes long were removed from the mean calculation as these were likely to include parents taking a break during the survey completion.

In addition, at each reminder stage, a very 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 5a below. The original intention had been to send the pre-notification letter 10–14 days before the launch letter. However, due to it taking a longer than anticipated time to receive the sample from the NPD/ILR, a decision was made to reduce this interval to just a few days in order to maximise the fieldwork window for completions.

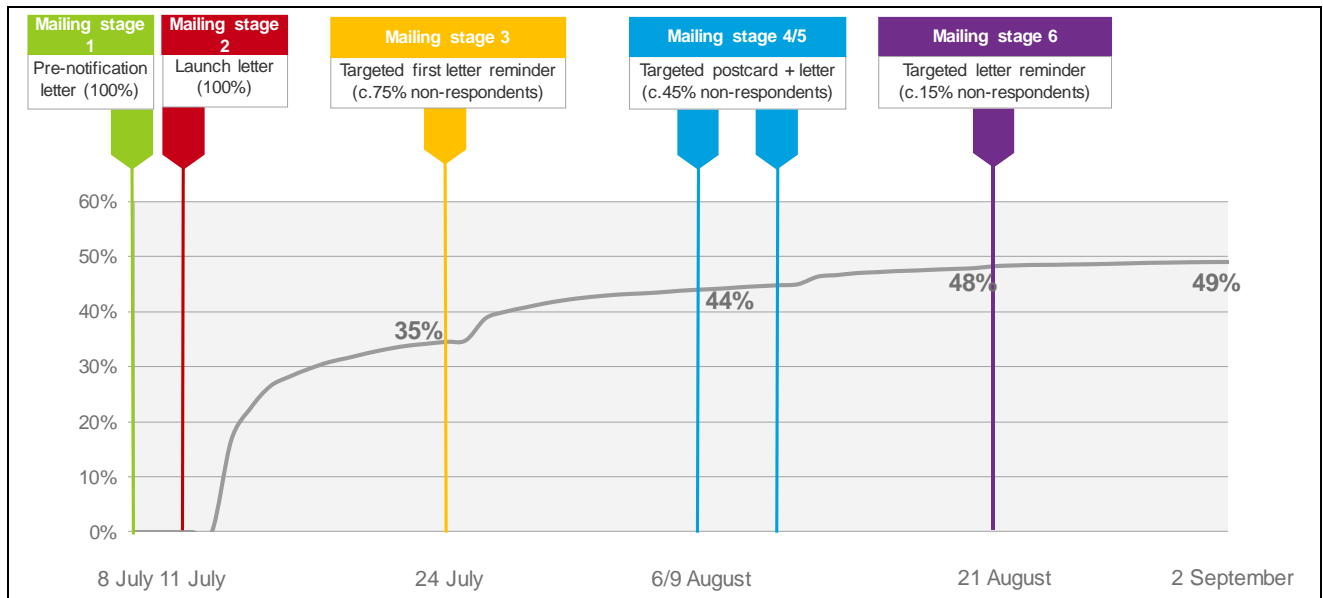
Table 5a: Mailing dates and volumes

Mailing	Date (2019)	Size of mailing*	Number of completions after mailing	Cumulative no. completions	Cumulative response rate	Remaining non-responders
Pre-notification letter	8 July	13,056	-	-	0%	-
Launch letter	11 July	13,056	4,516	4,516	35%	8,540
First day of fieldwork (letters land)	13 July					
First targeted reminder: letter	24 July	6,763	1,237	5,753	44%	7,303
Second targeted reminder: postcard	6 August	3,348				
Second targeted reminder: letter	9 August	3,348	555	6,308	48%	6,748
Third targeted reminder: letter	21 August	1,009	101	6,409	49%	
Fieldwork closes	2 Sep					

*As noted in the text, the size of the mailing does not correspond to the number of non-responders as the reminders were targeted at a subset of non-responders in the lowest responding deciles (section 6.2).

The cumulative response rate is further illustrated in Figure 5b.

Figure 5b: Cumulative response rate



5.4 Incentive management

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

Incentives were administered as follows:

- At the end of the survey, respondents were given a survey reference and token code.
- Following completion of the survey, respondents were automatically redirected to the Perks website, where they were asked to enter their unique code. They were then directed to a bespoke Pathways survey web page which allowed them to choose an incentive. Options included Amazon, Boots, ASOS, River Island e-vouchers and a Love2Shop card voucher (sent in the post).

The redemption rate for the different vouchers was as follows:

Table 5c: Vouchers redeemed

Amazon	60%
Love2Shop	18%
Boots	10%
ASOS	9%
River Island	3%
Total redeemed	100%

6. Response rates and targeted fieldwork strategy

6.1 Response rates

A total of 6,409 young people completed the survey – a response rate of 49%.^{12, 13}

The response rates varied between different groups, and non-response weights were calculated to account for this (Chapter 10).

The response rates for different survey subgroups (the variables included in the stratum reference) are shown in Table 6a.

The response rate was lower for year 7 than for 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).

The 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 6a: Response rates by survey subgroup

Subgroup		Response rate	Subgroup		Response rate
Overall		49%	Overall academic performance¹⁴	Bottom 25%	40%
School year (sample frame 2017/2018)	6	41%		Middle	50%
	7	50%		Top 25%	57%
	8	49%	Region	South	49%
	9	53%		Midlands	49%
	10	53%		North	48%
	11	49%			
	12	47%			
Gender	Male	47%			
	Female	51%			
IMD 2015 quintiles	Quintile 1 (most deprived)	45%			
	Quintile 2	47%			
	Quintile 3	50%			
	Quintile 4	52%			
	Quintile 5 (least deprived)	53%			

¹² 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).

¹³ The actual number of returns was 6,417, although 8 respondents were removed as a result of quality control checks (section 9.1).

¹⁴ For a definition of this measure, see section 2.3.

6.2 Targeted fieldwork strategy and response maximisation

As described above, 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.

Before each reminder was sent, 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-responders were then sorted by their estimated response probability and segmented into deciles (separately for year 6, year 7, year 8 and years 9–12¹⁵)¹⁶. A proportion of non-responders were then selected at random from each decile to be included in the reminder. Reminders were primarily targeted at individuals in the lower response rate deciles.

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.

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 to could then have been sent the second reminder.

Cases for the first reminder were selected based on responses received by 19 July 2019. Table 6b shows the proportion of each estimated response rate decile that were sent the first reminder.

Cases for the second reminder were selected based on responses received by 2 August 2019. Table 6c shows the proportion of each estimated response rate decile that were sent the second reminder.

After the first two reminders, response rates for most year groups were in line with (or above) the target for the project. It was therefore decided that additional reminders were not required for those in years 6 to 10.

The exception was year 12 – for whom the response rate was only 43% at this stage. As such, it was decided to target the third reminder to those in the bottom 7 deciles for this year (where the response rate was below 50%). This aimed to help boost year 12 numbers and further reduce variation in response rates for this year. In addition, some reminders were sent to year 11. While the overall response rate for year 11 was close to the target (47% compared with 50%), the response rate among the bottom decile of this year group was relatively poor compared with the lowest deciles of other year groups.

Table 6d shows the proportion of each estimated response rate decile in years 11 and 12 that were sent the final reminder. Cases for this reminder were selected based on responses received by 14 August 2019.

¹⁵ As we expected the response rates to vary for each of these categories.

¹⁶ School years refer to the 2017/2018 rather than the 2018/2019 academic year.

Table 6b: Selection of young people for the first survey reminders

	Response decile	Estimated response probability	Proportion of non-responders selected for reminder
Year 6	Least likely to take part (1)	15%	100%
	2	18%	100%
	3	21%	100%
	4	24%	80%
	5	24%	80%
	6	27%	60%
	7	29%	50%
	8	30%	40%
	9	32%	30%
	Most likely to take part (10)	36%	20%
Year 7	Least likely to take part (1)	20%	100%
	2	23%	100%
	3	27%	100%
	4	30%	80%
	5	31%	80%
	6	35%	60%
	7	36%	50%
	8	37%	40%
	9	40%	30%
	Most likely to take part (10)	45%	20%
Year 8	Least likely to take part (1)	19%	100%
	2	22%	100%
	3	26%	100%
	4	29%	80%
	5	30%	80%
	6	33%	60%
	7	35%	50%
	8	36%	40%
	9	39%	30%
	Most likely to take part (10)	43%	20%
Years 9–12	Least likely to take part (1)	18%	100%
	2	22%	100%
	3	25%	100%
	4	29%	100%
	5	31%	100%
	6	34%	75%
	7	36%	75%
	8	38%	75%
	9	41%	50%
	Most likely to take part (10)	46%	50%

Table 6c: Selection of young people for the first two survey reminders

	Response decile	Estimated response probability	Proportion of non-responders selected for reminder
Year 6	Least likely to take part (1)	24%	100%
	2	27%	100%
	3	31%	40%
	4	34%	0%
	5	36%	0%
	6	38%	0%
	7	39%	0%
	8	41%	0%
	9	44%	0%
	Most likely to take part (10)	48%	0%
Year 7	Least likely to take part (1)	32%	100%
	2	35%	100%
	3	40%	40%
	4	44%	0%
	5	46%	0%
	6	48%	0%
	7	50%	0%
	8	51%	0%
	9	54%	0%
	Most likely to take part (10)	59%	0%
Year 8	Least likely to take part (1)	30%	100%
	2	33%	100%
	3	38%	40%
	4	41%	0%
	5	43%	0%
	6	45%	0%
	7	47%	0%
	8	49%	0%
	9	52%	0%
	Most likely to take part (10)	56%	0%
Years 9–12	Least likely to take part (1)	27%	100%
	2	33%	100%
	3	37%	100%
	4	41%	100%
	5	44%	60%
	6	47%	30%
	7	49%	15%
	8	51%	0%
	9	54%	0%
	Most likely to take part (10)	59%	0%

Table 6d Selection of young people for the third reminders

	Response decile	Estimated response probability	Proportion of non-responders selected for reminder
Year 11	Least likely to take part (1)	34%	100%
	2	38%	0%
	3	42%	0%
	4	45%	0%
	5	47%	0%
	6	48%	0%
	7	50%	0%
	8	53%	0%
	9	56%	0%
	Most likely to take part (10)	59%	0%
Year 12	Least likely to take part (1)	28%	100%
	2	31%	100%
	3	36%	100%
	4	39%	100%
	5	41%	100%
	6	44%	100%
	7	48%	100%
	8	51%	0%
	9	55%	0%
	Most likely to take part (10)	59%	0%

7. Interview length, partial interviews and device choice

7.1 Interview length

The median interview length was 19 minutes and the mean interview length was around 20 minutes. 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 age, gender, year group or device type, and the modular content was evenly matched (Table 7a).

Table 7a: Average survey length by survey subgroups

	Mean length*	Median length
Total	20.5	19
Modularisation		
Sample A	20.7	19
Sample B	20.4	18
School year		
Year 7	20.3	19
Year 8	20.7	19
Year 9	19.0	17
Year 10	22.6	20
Year 11	22.2	20
Year 12	19.7	17
Year 13 or above	18.6	16
Device		
PC/laptop	21.8	20
Tablet	20.7	18
Smartphone	19.3	17
Gender		
Males	20.1	18
Females	21.0	19

*The mean has been calculated after removing outliers.

7.2 Partial interviews

There were 115 respondents who started the survey but did not complete it; this represents a break-off rate of 2.2%. These respondents have not been included in the final dataset.

7.3 Device choice

Young people could complete the survey on a range of devices. The profile of completions by device is shown in Table 7b.

Overall, almost half (46%) completed the survey on a smartphone. The smartphone completion rate among those in years 10 to 13 was 51%, which is double the smartphone completion rate in SET 2016 (25%).

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

Table 7b: Devices used by respondents

	(%)	School year (%)						
	All respondents	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13
PC/laptop	45.2	53.2	49.4	48.0	44.9	39.2	41.1	44.5
Tablet	8.4	12.1	13.5	8.7	7.7	7.7	6.1	4.8
Smartphone	46.4	34.7	37.0	43.3	47.3	53.2	52.8	50.6
<i>Base</i>	<i>6,409</i>	<i>775</i>	<i>814</i>	<i>725</i>	<i>1,044</i>	<i>1,093</i>	<i>1,016</i>	<i>942</i>

8. Consent for data linkage and re-contact

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 2 years to take part in a follow-up survey.

8.1 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 precedence. 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 shown in the box below. 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 Wellcome and the Government to ensure that educational services can be planned around the needs of individuals from all types of background.*

Overall, 90% gave consent. This was higher than the rate in SET 2016 (83%). This is partly due to the different age profile in 2019; in 2019, younger children were more likely to provide consent than older children (Table 8a).

Table 8a: 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	
%	92.9%	91.6%	92.1%	90.8%	90.1%	88.6%	85.8%	90.1%
N	983	925	930	902	920	878	871	6,409

In 2016 it was found that consent rates were higher for those who were interested in science and who took triple science. We found no variation in consent rates in SET 2019 by these measures. This might reflect the fact that the survey topics in SET 2019 were broader and less obviously skewed towards science, which may have increased survey engagement.

The level of consent for NPD linkage from parents was very high at 95%. Among children aged under 13, n=830 had consented to NPD linkage, though this reduced slightly to n=807 once the data had been checked against parental consent.

8.2 Agreement to re-contact

Respondents aged 13+ were asked their permission to re-contact them in 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 may want to contact you again in about two years' time 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 would retain your name and contact details only for the purposes of getting back in touch. Kantar 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 in about two years for this purpose? (Yes, No)

The consent rate was very high (92%) and was consistently high across all year groups (between 85% and 96%). For children aged under 13, virtually all parents (97%) consented to their child being re-contacted.

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 2 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 re-contact 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 might have put some parents off and caused them to withdraw consent for their child to participate in the survey.

As shown in Table 8b 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 were already available),

Table 8b: Agreement to re-contact and provision of additional contact information

	n	%
Base: All who consented to follow-up	(6,409)	
Consented to follow-up (aged 13+)	5,114	
Parent consented to follow-up (aged <13)	877	
Total consent to follow-up	5,991	93%
Base: All aged 16+ who agreed to be re-contacted	(2,555)	
Mobile number		
Provided a number	1,682	66%
Household telephone number		
Provided a number	673	26%
Email		
Provided an email address	2,213	87%
Provided at least one additional method of contact	2,332	91%

Based on the proportion 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 8c). It should be noted that this does not account for respondents who may have moved or changed their contact details in the interim period, or who may have provided incorrect re-contact information.

Table 8c: Potential pool of re-contacts for a follow-up survey

	Total respondents in SET 2019	% who consented to be re-contacted	Number who consented to re-contacted
Year 7	775	97%	755
Year 8	814	96%	781
Year 9	725	95%	690
Year 10	1,044	95%	991
Year 11	1,093	93%	1,014
Year 12	1,016	92%	932
Year 13	942	87%	816

9. Data processing

9.1 Data processing, coding and data cleaning

The survey was conducted using IBM Dimensions survey software, which limits the potential for missing values or data errors. Survey respondents were obliged to give an answer to each question in the survey 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.

An inspection was made of all interview lengths. Eight respondents were removed from the final dataset due to unfeasibly short interview lengths (5 minutes or less).

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.

9.2 Linking to NPD data

Where respondents gave permission, it was possible to link their survey answers to administrative data held by the NPD: 90% of respondents agreed that their data could 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 Kantar Public and merged with the survey dataset. These variables included:

- eligibility status for free school meals;
- IDACI quintiles;
- whether English is the young person's first language;
- special educational needs (SEN) status;
- academic results from key stage 2 and key stage 4¹⁷.

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

¹⁷ Key stage 4 data was only available for young people who had already completed these exams. This was primarily young people in years 12 and 13.

10. Weighting

10.1 Design weighting

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

Table 10a: Design weighting

2017/2018 academic year	2018/2019 academic year	N	Sampled	Sampling probability	Design weight
Y6	Y7	621,122	1,906	0.0031	325.88
Y7	Y8	595,648	1,668	0.0028	357.10
Y8	Y9	583,579	1,482	0.0025	393.78
Y9	Y10	571,274	2,000	0.0035	285.64
Y10	Y11	555,290	2,000	0.0036	277.65
Y11	Y12	531,144	2,000	0.0038	265.57
Y12	Y13	549,294	2,000	0.0036	274.65
Total	-	4,007,351	13,056*		

*It should be noted that 3 sampled cases did not have sufficiently complete addresses to be issued into field.

10.2 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:

$$p(\text{response}) = \text{Year Group} + \text{School performance} + \text{Gender} + \text{IDACI} + \text{Year Group} * \text{Gender} + \text{Year Group} * \text{School performance}$$

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

10.3 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 1.06¹⁸. It was therefore decided that there was no need to trim the weights.

The profile of the weighted sample was found to be a good match to the population profile (Tables 10b and 10c).

¹⁸ Design effect was calculated as $-(1 + \text{cov}(W)^2)$ – where $\text{cov}(W)$ is the coefficient of variation of the weights.

Table 10b: Weighted sample profile compared with population profile

		Population	Weighted sample	Unweighted sample*
School year (2017/2018)	6	15.5%	15.5%	12.2%
	7	14.9%	14.8%	13.1%
	8	14.6%	14.6%	11.3%
	9	14.3%	14.3%	16.7%
	10	13.9%	13.9%	16.6%
	11	13.3%	13.3%	15.4%
	12	13.7%	13.7%	14.8%
Gender	Male	51.1%	51.1%	48.9%
	Female	48.9%	48.9%	51.1%
Region	South	40.2%	40.0%	40.6%
	Midlands	31.2%	31.4%	31.3%
	North	28.6%	28.5%	28.1%
IDACI 2015	Quartile 1 (most deprived)	25.1%	25.1%	23.3%
	Quartile 2	24.9%	24.8%	24.2%
	Quartile 3	24.9%	24.9%	25.3%
	Quartile 4 (least deprived)	25.0%	25.1%	27.2%
Overall school performance	Bottom 25%	24.6%	24.6%	19.9%
	Middle	50.1%	50.2%	50.7%
	Top 25%	25.3%	25.2%	29.4%

*The unweighted profiles in this table are based on the NPD data contained in the stratum reference variables rather than the questionnaire variables. As a result, there may be a slight discrepancy between the two in relation to school year and gender (if students classify themselves differently when asked in the survey).

Table 10c: Ethnicity¹⁹ (not included in the stratum reference)

		Population	Weighted sample	Unweighted sample
Ethnicity	White	73.2%	73.7%	73.9%
	Black	6.0%	6.1%	5.9%
	Asian	11.7%	12.4%	12.5%
	Mixed	5.5%	5.1%	5.2%
	Other	1.9%	1.4%	1.4%
	Unclassified	1.7%	1.2%	1.1%

¹⁹ We have compared the profile of responses given to the survey question with the NPD tables for secondary state schools that were published in 2019: <https://www.gov.uk/government/statistics/schools-pupils-and-their-characteristics-january-2019>

11. Segmentation of young people: methodology

We carried out a segmentation analysis to investigate underlying patterns in the population of young people with respect to interest in science and computing. The motivation for this analysis was to further understand how the observed variation in science and computing interest is associated with factors such as young people's self-perceived ability in these subjects, their science quiz score and features which had encouraged them to or discouraged them from learning science and/or computing. Latent class analysis (LCA) was chosen as the method for the segmentation as it lends itself to statistical testing and validation techniques. It also enables comparisons of goodness of fit between different model specifications.

Before conducting the segmentation, associations between the variables were examined to ensure that no two variables were highly correlated. Variable choice for the segmentation was informed by the desire to understand more about the interactions between motivational factors, ability and self-perception for pupils with different backgrounds. A detailed breakdown of the variables used is given below in Table 11c.

The number of segments was chosen by balancing the trade-off between model fit (here, minimising the Bayesian Information Criterion (BIC)) and limiting the number of segments to reduce the complexity of the output. Each latent class model specification was iterated through between two and ten segments; we selected six as the number of segments as a greater number of segments led to only a very small reduction in the BIC. The final model specification (that is, the variables included in the model) was also chosen by minimising the BIC criterion.

Likelihood-ratio statistics are often used to assess the goodness of fit of LCA models. However, this validation method has considerable drawbacks when cross-tabs are sparsely populated, which is the case for many of the variables used in the analysis. Therefore, we examined the similarity of individuals within each segment and the dissimilarity of the segments with respect to the variables used in the segmentation using Fleiss' kappa. This statistic was used as it was the most appropriate indicator of intra-class correlation for ordinal and categorical data. For each segment, we found that the individuals were significantly more similar than they could have been due to chance alone – with values of the kappa statistic ranging between 0.34 and 0.41. Furthermore, it was shown that any associations between segments was random (yielding a kappa value very close to 0).

We fitted a multinomial regression model, predicting segment membership as a function of demographic characteristics (such as sex and ethnicity) and school-level characteristics (such as the proportion of pupils in a school who were eligible for free school meals). This model correctly predicted segment membership in 30% of cases. Sex, ethnicity, eligibility for free school meals and parental interest in science were strongly associated with certain segments.

Table 11a, below, provides a brief descriptive summary of the segments (more details can be found in the main report). Table 11b provides a breakdown of the estimated association between demographic and school-level characteristics and segment membership.

Table 11a: Summary of segments

High Achievers	<p>Segment 1 is characterised by high quiz scores and high levels of interest in both science and computer science. These young people were more likely to report being encouraged to learn science or computer science, and are the group most inclined to want a career in science.</p> <p>This segment represents 11% of the population. It is composed of almost twice as many boys as girls and has a higher percentage of Asian pupils than any other group.</p>
Average Learners	<p>Segment 2 represents the average pupil – with average achievement, self-reported ability and interest in both science and computer science. These students do not seem to be particularly encouraged or discouraged by any factors listed in the survey.</p> <p>This segment represents 26% of the population.</p>
Learners with Low Self-perceived Ability	<p>Segment 3 exhibits similar quiz scores to segment 2, but young people in this segment are less interested in both science and computer science and exhibit markedly lower self-perception in science. They are more likely to report being discouraged by there being a lot to learn in both subjects.</p> <p>This group is predominantly female and represents 15% of the population.</p>
Disengaged Learners	<p>Segment 4 is characterised by low quiz scores and a lack of interest in both subjects. Young people in this segment exhibit average to low self-perception scores. This segment represents 23% of the population and is comprised of a slightly higher than average percentage of white pupils and pupils from disadvantaged backgrounds.</p>
High Achievers resistant to computing	<p>Segment 5, like segment 1, is associated with high quiz scores. However, unlike segment 1, this group expresses very little interest in computer science. While group members find science interesting and relevant to real life, they exhibit a lower level of interest in computer science and cite a wider range of barriers than any other segment.</p> <p>This group makes up 13% of the population and consists of more girls than boys.</p>
Computer Science Enthusiasts	<p>Segment 6 is characterised by a pronounced enthusiasm for computer science. This group achieved average quiz scores but members of it rank themselves as better at and more interested in computer science than any other segment. They are particularly encouraged by the creativity and enjoyment of computer science. They remained mostly neutral towards science.</p> <p>This segment represents 13% of the population. It is composed of almost twice as many boys as girls, but otherwise remains average in terms of its demographic characteristics.</p>

Table 11b: Multinomial regression, association of demographic and school-level characteristics with segment membership (in comparison with reference category segment 2, average learners)

Variable	Segment 1: High Achievers		Segment 3: Learners with low self-perceived ability		Segment 4: Disengaged Learners		Segment 5: High Achievers resistant to computing		Segment 6: Computer Science Enthusiasts	
	Beta	SE	beta	SE	beta	SE	beta	SE	beta	SE
Gender: male vs female	0.10	0.15	-1.27***	0.14	-0.33**	0.12	-0.76***	0.14	0.29*	0.14
Ethnicity: black vs white	0.06	0.31	-0.56	0.32	-0.48	0.28	-0.72*	0.36	-0.61	0.34
Ethnicity: Asian vs white	0.94***	0.23	-0.61*	0.26	-0.79**	0.24	0.11	0.24	-0.02	0.25
Ethnicity: mixed vs white	0.14	0.39	-0.21	0.37	-0.05	0.32	0.47	0.32	-0.08	0.38
Ethnicity: other vs white	1.31*	0.55	0.18	0.59	-0.16	0.62	0.29	0.62	0.32	0.65
Region: South-East England and South London	-0.74**	0.25	0.41	0.24	0.40	0.22	-0.08	0.24	-0.21	0.23
Region: Lancashire and West Yorkshire	-0.58*	0.25	0.43	0.25	0.26	0.22	0.14	0.24	-0.45	0.25
Region: North-West London and South- Central England	-0.87***	0.25	0.51*	0.24	0.30	0.23	-0.08	0.24	-0.76**	0.27
Region: West Midlands	-0.51*	0.26	0.33	0.26	0.42	0.22	-0.27	0.27	-0.20	0.25
Region: East of England and North- East London	-0.92**	0.29	0.64*	0.26	0.27	0.24	0.08	0.26	-0.16	0.26
Region: South-West England	-1.09***	0.30	0.39	0.25	0.38	0.23	0.05	0.25	-0.91**	0.29
Region: North of England	-0.79*	0.38	0.48	0.33	0.64*	0.28	0.15	0.33	-0.42	0.35
Eligible for FSM vs ineligible	-0.68**	0.22	-0.53*	0.19	-0.09	0.15	-0.42*	0.20	-0.01	0.18
IDAC1 quintile 1 vs quintile 3	-0.32	0.25	-0.06	0.25	0.25	0.21	-0.31	0.26	0.04	0.25

IDACI quintile 2 vs quintile 3	-0.74**	0.24	0.14	0.22	0.13	0.20	-0.21	0.22	-0.07	0.22
IDACI quintile 4 vs quintile 3	-0.13	0.22	0.36	0.21	0.49*	0.20	0.11	0.21	0.08	0.22
IDACI quintile 5 vs quintile 3	-0.48*	0.22	0.35	0.21	0.16	0.20	0.02	0.20	0.03	0.22
Parental interest in science	0.65***	0.16	-0.48***	0.14	-1.12***	0.14	0.32*	0.15	-0.04	0.15
Family science connections	0.36*	0.16	-0.09	0.14	-0.20	0.13	0.29*	0.15	-0.02	0.15
Progress8 1 vs 3	0.31	0.23	0.45*	0.21	0.33	0.21	0.42	0.21	0.09	0.23
Progress8 2 vs 3	0.01	0.20	0.19	0.19	0.01	0.18	0.16	0.19	-0.18	0.20
Progress8 4 vs 3	-0.06	0.22	-0.09	0.20	0.23	0.18	-0.08	0.21	-0.24	0.21
Progress8 5 vs 3	-0.09	0.31	-0.80*	0.32	0.46*	0.21	-0.17	0.30	-0.24	0.28
Percentage of school eligible for FSM	-0.04***	0.01	0.00	0.01	0.00	0.01	-0.03***	0.01	-0.03**	0.01

Note: Statistical significance: *** = significant at <1% level, ** = significant at the 1% level, * = significant at the 5% level.

Table 11c: Breakdown of the variables used in the segmentation analysis

Variable	Survey question
QuizBand	Quiz results band (Low, Medium, High)
Good	Thinking about some subjects at school, how good would you say you are or were at the following subjects? ... English ... Science
GoodComp	How good would you say you are or were at Computer Science/Computing?
CSInt	How interesting do you find Computing/Computer Science lessons at school?
SciInt	How interesting do you find the science lessons at school?
SciUse	Understanding science is important for... ... Me in my future career ... Me in my everyday life ... Society in general
SciMedia	How often, if at all, have you done each of the following in the past year outside of school? A Read about science in a book, newspaper or magazine B Saw or read something about science online (e.g. Instagram, YouTube, news websites) C Watched a programme 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	
TeachImp	Thinking just about science lessons, what are the three most important things about science teachers that help you learn?	
	<ol style="list-style-type: none"> 1 Being enthusiastic/passionate about the subject 2 Making the subject feel more relevant outside school 3 Being knowledgeable 4 Making learning fun 5 Able to control class behaviour 6 Being calm/patient 7 Being organised/prepared 8 Taking an interest in my learning 9 Explaining things well 10 Helping me/Being supportive 	
SciCar_1	How much do you agree or disagree with the following statement? ... Careers that use science are suitable for someone like me.	
SciEnc CompEnc	<p>What has encouraged you to learn science?</p> <p>It's easier than other subjects I get good marks I find science interesting/enjoyable It's relevant to real life Having a good teacher Encouraged by family / friends Fits with my future study / career plans I like doing practical work / experiments I enjoy the maths involved It's important to do well in science</p>	<p>What has encouraged you to learn Computing/Computer Science?</p> <p>It's easier than other subjects I get good marks I find the subject interesting/enjoyable It's relevant to real life Having a good teacher Encouraged by family / friends Fits with my future study / career plans I enjoy the maths involved I find it creative It's important to do well in Computing</p>
SciDis CompDis	<p>And what has put you off learning science?</p> <p>It can be difficult I don't get good marks I don't find some science subjects interesting/enjoyable There is a lot to learn/remember The teacher/One of my teachers Doesn't fit with my future study / career plans I find the maths difficult Not enough practical work or experiments</p>	<p>And what has put you off learning Computer Science?</p> <p>It can be difficult I don't get good marks I don't always find it interesting/enjoyable There is a lot to learn/remember The teacher/One of my teachers Doesn't fit with my future study / career plans I find the maths difficult I find it repetitive</p>

12. Multivariate analysis methodology

Multivariate analysis was conducted to explore interest in computer science, alongside interest in science as a comparison (section 6.5 in the main report). Three models were carried out:

- interest in computer science
- interest in computer science: encouragement/discouragement variables removed
- interest in science: encouragement/discouragement variables removed

Multivariate analysis was also conducted to investigate how different characteristics of young people and their schools are associated with whether or not respondents thought their primary school science had helped prepare them for year 7 science (section 3.1 in the main report).

The methodology and full details of the models are provided below.

12.1 Methodology

Computer science

Binary logistic regression was employed to investigate the factors that influence a pupil's reported interest in computer science. Pupils were given a score of 1 if they responded 'Fairly interesting' or 'Very interesting' to the question 'How interesting do you find Computing/Computer Science lessons at school?' and 0 otherwise. This analysis was conducted using data from pupils that reported having been taught computer science lessons at school.

Several specifications of the model were fitted. As a first step, we included only individual-level characteristics and demographic predictors in the model, as existing research indicated that these variables would be strongly associated with the outcome of interest. We then proceeded to add additional predictors to the model incrementally, starting with quiz scores, school-level characteristics and geography before including familial science characteristics and finally encouragement and discouragement factors. In the final specification, we included composite measures of self-perception and ability comprised of various combinations of the encouragement and discouragement factors. In addition, we also experimented with several interaction variables. In the final specification, only the interaction of gender and a positive attitude towards maths was found to be statistically significant.

We used cross-validation as a tool for model selection, as opposed to a simple train and test set approach, as this provides a better indication of the generalisability of the results. The final model was chosen by comparing Brier scores of alternate specifications, after having conducted cross-validation on each specification to obtain the model estimates.

We controlled for the presence of selection bias originating from non-random NPD data linkage by re-weighting the data. Initially, we proposed using a Heckman correction to model this selection bias, but this approach proved inefficient when used in conjunction with the complex survey design and cross-validation.

Gender, ethnicity, year group, attitude towards teachers and enjoyment of maths were consistently found to be the factors most strongly associated with computer science interest. A summary of the model output is displayed in Tables 12a–12c below.

Primary school transition

For the primary school transition model, the approach was much the same. Pupils were given a score of 1 if they responded 'Very well' or 'Fairly well' to the question 'Thinking back, how well do you feel that the science you learned in primary school helped you in year 7 science?' and 0 otherwise. In this model, gender and ethnicity were also found to be strongly associated with the outcome of interest. Moreover, key stage 2 indicators were also included and it appears that pupils who met the expected standard at key stage 2 felt less prepared for secondary school science than their under-achieving counterparts. Overall, this model was far less responsive to the inclusion or exclusion of various variables and interactions, with the Brier score changing very little between specifications. A summary of the model output can be found in Table 12d.

12.2 Predictor variables used in the models

Table 12a: Computer science interest model: all predictors

Category	Variable	Coefficient	Confidence interval		Odds ratio	Standard error
			Lower	Upper		
Gender	Male vs Female	1.580***	0.713	2.446	4.853	0.442
Ethnic minority vs white	Asian	0.721***	0.373	1.069	2.056	0.178
	Any other	-0.105	-0.459	0.248	0.900	0.180
School year vs year 7	Year 8	-0.981***	-1.388	-0.573	0.375	0.208
	Year 9	-1.213***	-1.624	-0.803	0.297	0.209
	Year 10	-1.412***	-1.820	-1.004	0.244	0.208
	Year 11	-1.713***	-2.125	-1.300	0.180	0.211
	Year 12	-1.577***	-2.001	-1.153	0.207	0.216
	Year 13	-1.433***	-1.858	-1.008	0.239	0.217
NPD Deprivation Indicators	Eligible for FSM vs ineligible	0.088	-0.176	0.352	1.092	0.135
	IDACI quintile 2 vs 1	-0.236	-0.568	0.096	0.790	0.169
	IDACI quintile 3 vs 1	-0.183	-0.528	0.162	0.833	0.176
	IDACI quintile 4 vs 1	-0.234	-0.582	0.114	0.791	0.177
	IDACI quintile 5 vs 1	-0.309	-0.685	0.066	0.734	0.191
Region vs East Midlands and the Humber	East of England and North-East London	-0.119	-0.545	0.306	0.888	0.217
	Lancashire and West Yorkshire	0.004	-0.383	0.390	1.004	0.197
	North-West London and South-Central England	-0.136	-0.543	0.272	0.873	0.208
	North of England	-0.037	-0.547	0.473	0.964	0.260
	South-East England and South London	0.116	-0.264	0.495	1.122	0.194
	South-West England	-0.207	-0.633	0.219	0.813	0.217
	West Midlands	0.129	-0.271	0.529	1.137	0.204

School-level characteristics	Progress8 2 vs 1	0.009	-0.359	0.377	1.009	0.188
	Progress8 3 vs 1	0.026	-0.309	0.361	1.027	0.171
	Progress8 4 vs 1	0.234	-0.160	0.628	1.264	0.201
	Progress8 5 vs 1	-0.122	-0.602	0.358	0.885	0.245
	Percentage FSM	0.010	-0.004	0.024	1.010	0.007
Quiz scores vs high (9–10)	Low (0–5 correct)	-0.308*	-0.623	0.007	0.735	0.161
	Medium (6–8 correct)	-0.211	-0.466	0.045	0.810	0.130
Family science connections	Parental interest in science	0.233**	0.007	0.459	1.262	0.115
	Know someone in a science-related job	-0.061	-0.279	0.157	0.941	0.111
	At least one parent went to university	-0.067	-0.299	0.164	0.935	0.118
	Non-parental figure in household works in science	0.529*	-0.030	1.088	1.698	0.285
	Parent in household works in science	-0.138	-0.424	0.148	0.871	0.146
Self-assessed confidence	Easier than other subjects	0.714**	0.120	1.308	2.042	0.303
	More difficult than other subjects	-0.147	-0.486	0.192	0.863	0.173
Self-assessed ability	Get good marks	0.672**	0.123	1.221	1.958	0.280
	Don't get good marks	-0.752**	-1.331	-0.173	0.471	0.296
Teacher	Encouraged by the teacher	1.297***	0.931	1.662	3.657	0.187
	Discouraged by the teacher	-1.117***	-1.425	-0.809	0.327	0.157
Encouragement from family	Encouraged vs Not encouraged	0.574**	0.114	1.034	1.776	0.235
Attitude to maths	Enjoy maths	1.795***	0.923	2.668	6.021	0.445
	Find the maths difficult	0.005	-0.496	0.507	1.005	0.256
Self-assessed importance of doing well in science	Important to do well	0.813***	0.413	1.212	2.254	0.204
Gender interaction terms vs female and neutral towards confidence /ability/maths	Male*Confidence: Easier than other subjects	-0.275	-1.241	0.691	0.759	0.493
	Male*Confidence: More difficult than other subjects	-0.338	-0.849	0.173	0.713	0.261
	Male*Ability: Get good marks	0.803*	-0.028	1.633	2.231	0.424
	Male*Ability: Don't get good marks	-0.399	-1.242	0.443	0.671	0.430
	Male*Enjoy maths	-1.474**	-2.705	-0.242	0.229	0.628
	Male*Find the maths difficult	-0.352	-1.204	0.500	0.703	0.435

Note: Statistical significance: *** = significant at the 1% level, ** = significant at the 5% level, * = significant at the 10% level

Table 12b: Predictors of computer science interest (without the encouragement/discouragement variables)

Category	Variable	Coefficient	Confidence interval		Odds ratio	Standard error
			Lower	Upper		
Ethnic minority vs white	Asian	0.779***	0.451	1.108	2.180	0.168
	Any other	-0.036	-0.354	0.282	0.965	0.162
School year vs year 7	Year 8	-1.022***	-1.388	-0.656	0.360	0.187
	Year 9	-1.312***	-1.679	-0.945	0.269	0.187
	Year 10	-1.654***	-2.019	-1.289	0.191	0.186
	Year 11	-1.864***	-2.225	-1.504	0.155	0.184
	Year 12	-1.733***	-2.110	-1.356	0.177	0.192
	Year 13	-1.539***	-1.916	-1.162	0.214	0.192
NPD Deprivation Indicators	Eligible for FSM vs Ineligible	0.080	-0.163	0.323	1.084	0.124
	IDACI quintile 2 vs 1	-0.225	-0.531	0.081	0.799	0.156
	IDACI quintile 3 vs 1	-0.191	-0.511	0.129	0.826	0.163
	IDACI quintile 4 vs 1	-0.136	-0.460	0.187	0.873	0.165
	IDACI quintile 5 vs 1	-0.264	-0.604	0.076	0.768	0.174
Region vs East Midlands and the Humber	East of England and North-East London	-0.114	-0.496	0.267	0.892	0.195
	Lancashire and West Yorkshire	-0.118	-0.468	0.233	0.889	0.179
	North-West London and South-Central England	-0.303	-0.666	0.061	0.739	0.185
	North of England	-0.124	-0.583	0.335	0.883	0.234
	South-East England and South London	0.044	-0.295	0.384	1.045	0.173
	South-West England	-0.269	-0.652	0.115	0.764	0.196
	West Midlands	0.093	-0.273	0.458	1.097	0.186
School-level characteristics	Progress8 2 vs 1	-0.001	-0.319	0.316	0.999	0.162
	Progress8 3 vs 1	-0.048	-0.343	0.247	0.954	0.150
	Progress8 4 vs 1	0.130	-0.224	0.484	1.139	0.181
	Progress8 5 vs 1	-0.071	-0.496	0.355	0.932	0.217
	Percentage FSM	0.009	-0.004	0.022	1.009	0.007
Quiz scores vs high (9–10)	Low (0–5 correct)	-0.234	-0.517	0.049	0.792	0.144
	Medium (6–8 correct)	-0.147	-0.373	0.078	0.863	0.115
Family science connections	Parental interest in science	0.335***	0.131	0.538	1.397	0.104
	Know someone with a science-related job	0.013	-0.184	0.211	1.013	0.101
	Parents went to university	-0.062	-0.267	0.144	0.940	0.105
	Non-parental figure in household works in science	0.534**	0.043	1.024	1.705	0.250
	Parent in household works in science	-0.120	-0.377	0.136	0.887	0.131

Note: Statistical significance: *** = significant at the 1% level, ** = significant at the 5% level, * = significant at the 10% level.

Table 12c: Predictors of science interest (without the encouragement/ discouragement variables)

Category	Variable	Coefficient	Confidence interval		Odds ratio	Standard error
			Lower	Upper		
Gender	Male vs Female	0.145**	0.016	0.273	1.155	0.066
Ethnic minority vs white	Asian	0.281**	0.051	0.512	1.325	0.118
	Any other	0.236**	0.019	0.452	1.266	0.110
School year vs year 7	Year 8	-0.474***	-0.759	-0.189	0.623	0.145
	Year 9	-0.929***	-1.207	-0.652	0.395	0.142
	Year 10	-0.862***	-1.124	-0.599	0.422	0.134
	Year 11	-0.909***	-1.171	-0.648	0.403	0.133
	Year 12	-0.735***	-1.006	-0.463	0.480	0.139
	Year 13	-0.625***	-0.906	-0.345	0.535	0.143
NPD Deprivation Indicators	Eligible for FSM vs ineligible	0.085	-0.078	0.248	1.089	0.083
	IDACI quintile 2 vs 1	-0.019	-0.221	0.184	0.981	0.103
	IDACI quintile 3 vs 1	0.014	-0.205	0.233	1.014	0.112
	IDACI quintile 4 vs 1	-0.068	-0.293	0.156	0.934	0.114
	IDACI quintile 5 vs 1	-0.093	-0.321	0.136	0.912	0.116
Region vs East Midlands and the Humber	East of England and North-East London	0.189	-0.080	0.458	1.208	0.137
	Lancashire and West Yorkshire	0.060	-0.184	0.304	1.062	0.125
	North-West London and South-Central England	0.141	-0.115	0.396	1.151	0.130
	North of England	0.056	-0.250	0.362	1.058	0.156
	South-East England and South London	0.078	-0.165	0.320	1.081	0.124
	South-West England	-0.102	-0.370	0.167	0.903	0.137
	West Midlands	-0.191	-0.440	0.059	0.826	0.127
School-level characteristics	Progress8 2 vs 1	0.015	-0.221	0.251	1.015	0.121
	Progress8 3 vs 1	0.018	-0.194	0.231	1.019	0.108
	Progress8 4 vs 1	-0.057	-0.305	0.191	0.945	0.127
	Progress8 5 vs 1	-0.286*	-0.585	0.013	0.751	0.153
	Percentage FSM	0.004	-0.005	0.013	1.004	0.004
Quiz scores vs high (9–10)	Low (0–5 correct)	-1.147***	-1.352	-0.942	0.318	0.105
	Medium (6–8 correct)	-0.456***	-0.639	-0.274	0.634	0.093
Family science connections	Parental interest in science	0.643***	0.498	0.788	1.902	0.074
	Know someone with a science-related job	0.187***	0.051	0.323	1.206	0.069
	Parents went to university	0.076	-0.071	0.222	1.079	0.075
	Non-parental figure in household works in science	0.178	-0.191	0.547	1.195	0.188
	Parent in household works in science	0.154	-0.049	0.357	1.167	0.104

Note: Statistical significance: *** = significant at the 1% level, ** = significant at the 5% level, * = significant at the 10% level.

Table 12d: Predictors of feeling that primary school prepared you well for secondary school science

Category	Variable	Coefficient	Confidence interval		Odds ratio	Standard error
			Lower	Upper		
Gender	Male vs female	0.285**	0.006	0.563	1.329	0.142
Ethnic minority vs white	Asian	1.123***	0.599	1.647	3.074	0.267
	Black	0.321	-0.319	0.961	1.379	0.326
	Any other	0.152	-0.451	0.754	1.164	0.307
School year	Year 8 vs year 7	-0.295***	-0.572	-0.018	0.745	0.141
NPD Deprivation Indicators & other pupil-level indicators	KS2 met expected standard vs standard not met	-0.589***	-1.169	-0.009	0.555	0.296
	Eligible for FSM vs ineligible	-0.443	-1.343	0.458	0.642	0.459
	IDACI quintile 2 vs 1	-0.196	-0.653	0.261	0.822	0.233
	IDACI quintile 3 vs 1	0.022	-0.455	0.498	1.022	0.243
	IDACI quintile 4 vs 1	-0.109	-0.615	0.396	0.897	0.258
	IDACI quintile 5 vs 1	0.104	-0.409	0.616	1.109	0.262
Region vs East Midlands and the Humber	East of England and North-East London	0.304	-0.277	0.884	1.355	0.296
	Lancashire and West Yorkshire	0.206	-0.318	0.731	1.229	0.267
	North-West London and South-Central England	0.234	-0.316	0.783	1.263	0.280
	North of England	-0.117	-0.768	0.533	0.889	0.332
	South-East England and South London	0.024	-0.502	0.550	1.024	0.269
	South-West England	0.028	-0.542	0.598	1.028	0.291
	West Midlands	0.370	-0.179	0.918	1.447	0.280
School-level characteristics	Progress8 2 vs 1	-0.324	-0.811	0.163	0.723	0.249
	Progress8 3 vs 1	0.028	-0.408	0.465	1.029	0.223
	Progress8 4 vs 1	0.139	-0.393	0.671	1.150	0.271
	Progress8 5 vs 1	-0.103	-0.768	0.563	0.902	0.339
	Percentage FSM	0.007	-0.013	0.027	1.007	0.010
Quiz scores vs high (9–10)	Low (0–5 correct)	0.179	-0.250	0.607	1.196	0.219
	Medium (6–8 correct)	-0.052	-0.400	0.296	0.949	0.178
Family characteristics	Parental interest in science	0.084	-0.223	0.392	1.088	0.157
	Family science connections	-0.097	-0.404	0.209	0.907	0.156
	Parents went to university	-0.010	-0.319	0.298	0.990	0.158
	Non-parental figure in household works in science	0.200	-0.550	0.950	1.222	0.383
	Parent in household works in science	-0.006	-0.373	0.361	0.994	0.187
Interaction of KS2 indicator & FSM vs not meeting standard in KS2 & ineligible for FSM	KS2 met standard*Eligible for FSM	0.960***	-0.004	1.923	2.611	0.491

Note: Statistical significance: *** = significant at the 1% level, ** = significant at the 5% level, * = significant at the 10% level.

Appendix A: Fieldwork documents

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

Mailing	Letter	Letter content
Pre-notification Letter	1A	Pre-notification letter to parents of a child aged 11-12
	1B	Pre-notification letter to parents of a child aged 13-15
	1C	Pre-notification letter to respondents aged 11-12
	1D	Pre-notification letter to respondents aged 13+
Launch Letter	2A	Launch letter to parents of a child aged 11-12
	2B	Launch letter to parents of a child aged 13-15
	2C	Launch letter to respondents aged 11-12
	2D	Launch letter to respondents aged 13+
Reminder 1 Letter	3A	First reminder letter to parents of a child aged 11-12*
	3B	First reminder letter to parents of a child aged 13-15
	3C	First reminder letter to respondents aged 11-12*
	3D	First reminder letter to respondents aged 13+
Reminder 2 Postcard	4PA	The parent version of the second reminder postcard
	4PB	The respondent version of the second reminder postcard
Reminder 2 Letter	4A	Second reminder letter to parents of a child aged 11-12*
	4B	Second reminder letter to parents of a child aged 13-15
	4C	Second reminder letter to respondents aged 11-12*
	4D	Second reminder letter to respondents aged 13+
Reminder 3	4D	A bespoke version of Reminder 2 letter 4D was sent out as a third reminder. This was the first letter to contain the closing date of the survey.

* An adapted version of these letters was used where the parent had completed the short consent form but their child had not yet taken part.

B.1. Pre-notification Letter 1A text

Dear Parent or Guardian of [CHILD AGED 11-12],

Your child has been selected to take part in the **Pathways** survey, an important research study which will involve around 6,000 young people in England. I am writing to you today to give you some information about the study.

In a few days' time your child will be asked to complete a short survey online. The survey explores their opinions on a range of interesting topics about their education, career plans and other topics such as new technologies.

The survey will last around 15-20 minutes. As a thank you for their time, we will provide all young people with a **£10 voucher** which can be used in a range of high street and online stores.

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

What will happen next?

You do not need to do anything now. In the few days we will send a further letter inviting your child to take part. This will provide information on how to access the survey online.

Further information

The Pathways survey is being conducted by Kantar, an independent research company, on behalf of Wellcome, an independent global charity, with support from the Department for Education. The results will be used by Government and other educational organisations to improve education and careers advice for young people in England.

On the other side of the letter are some common questions and details of our Privacy Policy. This information can also be found at www.pathways2019.co.uk/. However, if you have any additional questions, please contact the survey helpline on Freephone 0800 051 0888 or email us at pathways@kantar.com.

Many thanks,

[signature]

Rebecca Gooch

Survey Manager

Pathways Survey Team

B.2. Pre-notification Letter 1B text

Dear Parent or Guardian of [CHILD AGED 13-15],

Your child has been selected to take part in the **Pathways** survey, an important research study which will involve around 6,000 young people in England. I am writing to you today to give you some information about the study.

In a few days' time your child will be asked to complete a short survey online. The survey explores their opinions on a range of interesting topics about their education, career plans and other topics such as new technologies.

The survey will last around 15-20 minutes. As a thank you for their time, we will provide all young people with a **£10 voucher** which can be used in a range of high street and online stores.

What will happen next?

You do not need to do anything now. In the next few days we will send a further letter inviting your child to take part. This will provide information on how to access the survey online.

Further information

The Pathways survey is being conducted by Kantar, an independent research company, on behalf of Wellcome, an independent global charity, with support from the Department for Education. The results will be used by Government and other educational organisations to improve education and careers advice for young people in England.

On the other side of the letter are some common questions and details of our Privacy Policy. This information can also be found at www.pathways2019.co.uk/. However, if you have any additional questions, please contact the survey helpline on Freephone 0800 051 0888 or email us at pathways@kantar.com.

Many thanks,
[signature]
Rebecca Gooch
Survey Manager
Pathways Survey Team

B.3. Pre-notification Letter 1C text

Dear [CHILD AGED 11-12],

We need your help!

We are writing to you today to invite you to take part in **Pathways**, an important survey of 6,000 young people in school years 7-13. The survey covers your experiences of life at school, college or employment in the past year; your plans for next year and beyond; and your views about other important issues such as new technologies.

This major survey will reach over 6,000 young people across England and will be used by the Government and other organisations to help improve education and careers advice for young people in England. The Pathways survey is being conducted by Kantar, an independent research company, on behalf of Wellcome, an independent global charity, with support from the Department for Education.

As a thank you, you will be rewarded with a **£10 voucher** immediately after completing the survey. You can choose from a range of high street or online shops such as Amazon, Boots and Love2shop, which can be used at various stores.

What do I need to do next?

You do not need to do anything now. We will write to you again in the next few days with details on how to complete the survey. Your parent or guardian will also be asked to complete a short online consent form so we can check they are happy for you to take part.

Answers to some common questions are listed on the back, as well as relevant contact details if you have any further questions.

Many thanks,
[signature]
Rebecca Gooch
Survey Manager
Pathways Survey Team

B.4. Pre-notification Letter 1D text

Dear [CHILD AGED 13+],

We need your help!

We are writing to you today to invite you to take part in **Pathways**, an important survey of 6,000 young people in school years 7-13. The survey covers your experiences of life at school, college or employment in the past year; your plans for next year and beyond; and your views about other important issues such as new technologies.

This major survey will reach over 6,000 young people across England and will be used by the Government and other organisations to help improve education and careers advice for young people in England. The Pathways survey is being conducted by Kantar, an independent research company, on behalf of Wellcome, an independent global charity, with support from the Department for Education.

As a thank you, you will be rewarded with a **£10 voucher** immediately after completing the survey. You can choose from a range of high street or online shops such as Amazon, Boots and Love2shop, which can be used at various stores.

What do I need to do next?

You do not need to do anything now. We will write to you again in the next few days with details on how to complete the short survey.

Answers to some common questions are listed on the back, as well as relevant contact details if you have any further questions.

Many thanks,
[signature]
Rebecca Gooch
Survey Manager
Pathways Survey Team

B.5. Launch Letter 2A text

Dear Parent or Guardian of [CHILD AGED 11-12],

We wrote to you a few days ago, informing you that your child has been selected to take part in the **Pathways** study. The survey explores their opinions on a range of interesting topics about their education, career plans and other topics such as new technologies.

The survey is now open and your child can complete the questionnaire online. They will receive a **£10 voucher** which can be used in a range of high street and online stores to thank them for their time.

What do I need to do next?

Before your child can take part, you will be asked to complete a short online form so we can check that you are happy for them to take part.

Please follow the instructions below. This should take no more than a couple of minutes.

1. Visit www.pathways2019.co.uk
2. Enter your unique username: **XXXX** and password: **XXXXX**
4. Complete the simple form to let us know if you are happy for your child to take part.
5. Then pass the second letter which is enclosed in this envelope to your child. This explains how they can take part.

Further information

The Pathways survey is being conducted by Kantar, an independent research company, on behalf of Wellcome, an independent global charity, with support from the Department for Education.

On the other side of the letter are some common questions and details of our Privacy Policy. This information can also be found at www.pathways2019.co.uk. However, if you have any additional questions, please do contact the survey helpline on Freephone 0800 051 0888 or email us at pathways@kantar.com.

Many thanks,

[signature]

Rebecca Gooch

Survey Manager

Pathways Survey Team

B.6. Launch Letter 2B text

Dear Parent or Guardian of [CHILD AGED 13 TO 15],

We wrote to you a few days ago, informing you that your child has been selected to take part in the **Pathways** study. The survey explores their opinions on a range of interesting topics about their education, career plans and other topics such as new technologies.

The survey is now open and your child can complete the questionnaire online. They will receive a **£10 voucher** which can be used in a range of high street and online stores to thank them for their time.

What do I need to do next?

All you have to do is hand the 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

The Pathways survey is being conducted by Kantar, an independent research company, on behalf of Wellcome, an independent global charity, with support from the Department for Education.

On the other side of the letter are some common questions and details of our Privacy Policy. This information can also be found at www.pathways2019.co.uk. However, if you have any additional questions, please do contact the survey helpline on Freephone 0800 051 0888 or email us at pathways@kantarc.com.

Many thanks,
[signature]
Rebecca Gooch
Survey Manager
Pathways Survey Team

B.7. Launch Letter 2C text

Dear [CHILD AGED 11-12],

We need your help!

We wrote to you a few days ago, telling you about **Pathways**, an important survey for young people in England. The survey covers your experiences of life at school, college or employment; your plans for next year and beyond; and your views about a range of other important issues such as new technologies.

The survey will only take around 15-20 minutes to complete and as a thank you, you will be rewarded with a **£10 voucher** immediately after completing. You can choose from a range of high street or online shops such as Amazon, Boots and Love2shop, which can be used at various stores.

On a separate letter, we have asked your parent or guardian to complete a short online consent form to say that 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:

Web link: www.pathways2019.co.uk

Username: **XXXX**

Password: **XXXXX**

Simply go to the website, use the log in details and then at the end you can claim your voucher.

Answers to some Frequently Asked Questions can be found on the reverse of this letter.

Thank you again for your help.

[signature]

Rebecca Gooch

Survey Manager

Pathways Survey Team

B.8. Launch Letter 2D text

Dear [CHILD AGED 13+],

We need your help!

We wrote to you a few days ago, telling you about **Pathways**, an important survey for young people in England. The survey covers your experiences of life at school, college or employment; your plans for next year and beyond; and your views about a range of other important issues such as new technologies.

The survey will only take around 15-20 minutes to complete and as a thank you, you will be rewarded with a **£10 voucher** immediately after completing. You can choose from a range of high street or online shops such as Amazon, Boots and Love2shop, which can be used at various stores.

The details you need to log into the survey are below:

Web link: www.pathways2019.co.uk

Username: **XXXX**

Password: **XXXXX**

Simply go to the website, use the log in details and then at the end you can claim your voucher.

Answers to some Frequently Asked Questions can be found on the reverse of this letter.

Thank you again for your help.

[signature]

Rebecca Gooch

Survey Manager

Pathways Survey Team

B.9. Reminder 1 Letter 3A text

Dear Parent or Guardian of [CHILD AGED 11-12],

We recently invited your child to take part in the **Pathways** survey. Already thousands of young people across England have completed the survey and we hope your child will be able to do the same.

The survey lasts around 15-20 minutes and as a thank you each participant will get a **£10 voucher** that can be used in shops such as Amazon, Boots and Love2shop which can be used at various stores.

What do I need to do next?

Please follow the instructions below. This should take no more than a couple of minutes.

1. Visit www.pathways2019.co.uk
2. Enter your unique username: **XXXX** and password: **XXXXX**
3. Complete the simple form to let us know if you are happy for your child to take part.
4. Then pass the second letter which is enclosed in this envelope to your child. This explains how they can take part.

Further information

The Pathways survey is being conducted by Kantar, an independent research company, on behalf of Wellcome, an independent global charity, with support from the Department for Education.

Answers to some Frequently Asked Questions can be found on the reverse of this letter. If you have any other questions or concerns, you can contact the survey helpline on Freephone 0800 051 0888 or pathways@kantar.com

Thanks for your help!

Many thanks,

[signature]

Rebecca Gooch

Survey Manager

Pathways Survey Team

B.10. Reminder 1 Letter 3A (bespoke) text

Dear Parent or Guardian of [CHILD AGED 11-12],

We recently invited your child to take part in the **Pathways** survey. Already thousands of young people across England have completed the survey and we hope your child will be able to do the same.

Thank you for completing the consent form to let us know you are happy for your child to take part. We wanted to inform you that we haven't yet received any response from your child. Please let us know if they are having trouble accessing the survey.

The survey lasts around 15-20 minutes and as a thank you each participant will get a **£10 voucher** that can be used in shops such as Amazon, Boots and Love2shop which can be used at various stores.

What do I need to do next?

Because you have already completed the consent form, please simply pass the second letter which is enclosed in this envelope to your child. This explains how they can take part.

Further information

The Pathways survey is being conducted by Kantar, an independent research company, on behalf of Wellcome, an independent global charity, with support from the Department for Education.

Answers to some Frequently Asked Questions can be found on the reverse of this letter. If you have any other questions or concerns, you can contact the survey helpline on Freephone 0800 051 0888 or pathways@kantarc.com

Thanks for your help!

Many thanks,
[signature]
Rebecca Gooch
Survey Manager
Pathways Survey Team

B.11. Reminder 1 Letter 3B text

Dear Parent or Guardian of [CHILD AGED 13-15],

We recently invited your child to take part in the **Pathways** survey. Already thousands of young people across England have completed the survey and we hope your child will be able to do the same.

The survey lasts around 15-20 minutes and as a thank you each participant will get a **£10 voucher** that can be used in shops such as Amazon, Boots and Love2shop, which can be used at various stores.

What do I need to do next?

If you are happy for your child to take part, please give them the second letter enclosed in this envelope so they can complete the survey online.

Further information

The Pathways survey is being conducted by Kantar, an independent research company, on behalf of Wellcome, an independent global charity, with support from the Department for Education.

Answers to some Frequently Asked Questions can be found on the reverse of this letter. If you have any other questions or concerns, you can contact the survey helpline on Freephone 0800 051 0888 or pathways@kantarc.com

Thanks for your help!

Many thanks,
[signature]
Rebecca Gooch
Survey Manager
Pathways Survey Team

B.12. Reminder 1 Letter 3C text

Dear [CHILD AGED 11 TO 12],

We recently invited you to take part in the **Pathways survey**. Already thousands of young people across England have completed the survey and we hope you will be able to do so too.

The survey only takes around 15-20 minutes and as a thank you for your time, we will give you a **£10 voucher** which can be used in shops such as Amazon, Boots and Love2shop, which can be used at various stores.

On a separate letter, we have asked your parent or guardian to complete a short online form to say that they are happy for you to take part. If this has been done, simply go to the website, use the login details and at the end you can claim your voucher.

Web link: www.pathways2019.co.uk/

Username: **XXXX**

Password: **XXXXX**

No one else can take your place so we really hope you can take part.

Answers to some Frequently Asked Questions can be found on the reverse of this letter. If you have any other questions or concerns, you can contact the survey helpline on Freephone 0800 051 0888 or email us at pathways@kantar.com.

Thanks for your help!

[signature]

Rebecca Gooch

Survey Manager

Pathways Survey Team

B.13. Reminder 1 Letter 3C (bespoke) text

Dear [CHILD AGED 11 TO 12],

We recently invited you to take part in the **Pathways survey**. Already thousands of young people across England have completed the survey and we hope you will be able to do so too.

The survey only takes around 15-20 minutes and as a thank you for your time, we will give you a **£10 voucher** which can be used in shops such as Amazon, Boots and Love2shop, which can be used at various stores.

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.

Web link: www.pathways2019.co.uk/

Username: **XXXX**

Password: **XXXXX**

No one else can take your place so we really hope you can take part.

Answers to some Frequently Asked Questions can be found on the reverse of this letter. If you have any other questions or concerns, you can contact the survey helpline on Freephone 0800 051 0888 or email us at pathways@kantar.com.

Thanks for your help!

[signature]

Rebecca Gooch

Survey Manager

Pathways Survey Team

B.14. Reminder 1 Letter 3D text

Dear [CHILD AGED 13+],

We recently invited you to take part in the **Pathways survey**. Already thousands of young people across England have completed the survey and we hope you will be able to do so too.

The survey only takes around 15-20 minutes and as a thank you for your time, we will give you a **£10 voucher** which can be used in shops such as Amazon, Boots and Love2shop, which can be used at various stores.

Simply go to the website, use the login details and then at the end you can claim your voucher.

Web link: www.pathways2019.co.uk/

Username: **XXXX**

Password: **XXXXX**

No one else can take your place so we really hope you can take part.

Answers to some Frequently Asked Questions can be found on the reverse of this letter. If you have any other questions or concerns, you can contact the survey helpline on Freephone 0800 051 0888 or email us at pathways@kantar.com.

Thanks for your help!

[signature]

Rebecca Gooch

Survey Manager

Pathways Survey Team

B.15. Reminder 2 Letter 4A text

Dear Parent or Guardian of [CHILD AGED 11-12],

We just wanted to remind you that there is still time for your child to take part in the **Pathways** survey.

The survey lasts around 15-20 minutes and as a thank you each participant will get a **£10 voucher** that can be used in shops such as Amazon, Boots and Love2shop which can be used at various stores.

If you are happy for your child to take part, please follow the instructions below. This should take no more than a couple of minutes.

1. Visit www.pathways2019.co.uk
2. Enter your unique username: **XXXX** and password: **XXXXX**
3. Complete the simple form to let us know if you are happy for your child to take part.
4. Then pass the second letter which is enclosed in this envelope to your child. This explains how they can take part.

Further information

The Pathways survey is being conducted by Kantar, an independent research company, on behalf of Wellcome, an independent global charity, with support from the Department for Education.

Answers to some Frequently Asked Questions can be found on the reverse of this letter. If you have any other questions or concerns, you can contact the survey helpline on Freephone 0800 051 0888 or pathways@kantar.com

Thanks for your help!

Many thanks,

[signature]

Rebecca Gooch

Survey Manager

Pathways Survey Team

B.16. Reminder 2 Letter 4A (bespoke) text

Dear Parent or Guardian of [CHILD AGED 11-12],

We just wanted to remind you that there is still time for your child to take part in the **Pathways** survey.

Thank you for completing the consent form to let us know you are happy for your child to take part. We wanted to inform you that we haven't yet received any response from your child. Please let us know if they are having trouble accessing the survey.

The survey lasts around 15-20 minutes and as a thank you each participant will get a **£10 voucher** that can be used in shops such as Amazon, Boots and Love2shop which can be used at various stores.

Because you have already completed the consent form, please simply pass the second letter which is enclosed in this envelope to your child. This explains how they can take part.

The Pathways survey is being conducted by Kantar, an independent research company, on behalf of Wellcome, an independent global charity, with support from the Department for Education.

Answers to some Frequently Asked Questions can be found on the reverse of this letter. If you have any other questions or concerns, you can contact the survey helpline on Freephone 0800 051 0888 or pathways@kantar.com

Thanks for your help!

Many thanks,
[signature]
Rebecca Gooch
Survey Manager
Pathways Survey Team

B.17. Reminder 2 Letter 4B text

Dear Parent or Guardian of [CHILD AGED 13-15],

We just wanted to remind you that there is still time for your child to take part in the **Pathways** survey.

The survey lasts around 15-20 minutes and as a thank you each participant will get a **£10 voucher** that can be used in shops such as Amazon, Boots and Love2shop, which can be used at various stores.

If you are happy for your child to take part, please give them the second letter enclosed in this envelope so they can complete the survey online.

The Pathways survey is being conducted by Kantar, an independent research company, on behalf of Wellcome, an independent global charity, with support from the Department for Education.

Answers to some Frequently Asked Questions can be found on the reverse of this letter. If you have any other questions or concerns, you can contact the survey helpline on Freephone 0800 051 0888 or pathways@kantar.com

Thanks for your help!

Many thanks,
[signature]
Rebecca Gooch
Survey Manager
Pathways Survey Team

B.18. Reminder 2 Letter 4C text

Dear [CHILD AGED 11 TO 12],

We just wanted to remind you that there is still time to take part in the **Pathways survey**.

The survey only takes around 15-20 minutes and as a thank you for your time, we will give you a **£10 voucher** which can be used in shops such as Amazon, Boots and Love2shop, which can be used at various stores.

On a separate letter, we have asked your parent or guardian to complete a short online form to say that they are happy for you to take part. If this has been done, simply go to the website, use the login details and at the end you can claim your voucher.

Web link: www.pathways2019.co.uk/

Username: **XXXX**

Password: **XXXXX**

No one else can take your place so we really hope you can take part.

Answers to some Frequently Asked Questions can be found on the reverse of this letter. If you have any other questions or concerns, you can contact the survey helpline on Freephone 0800 051 0888 or email us at pathways@kantar.com.

Thanks for your help!

[signature]

Rebecca Gooch

Survey Manager

Pathways Survey Team

B.19. Reminder 2 Letter 4C (bespoke) text

Dear [CHILD AGED 11 TO 12],

We just wanted to remind you that there is still time to take part in the **Pathways survey**.

The survey only takes around 15-20 minutes and as a thank you for your time, we will give you a **£10 voucher** which can be used in shops such as Amazon, Boots and Love2shop, which can be used at various stores.

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.

Web link: www.pathways2019.co.uk/

Username: **XXXX**

Password: **XXXXX**

No one else can take your place so we really hope you can take part.

Answers to some Frequently Asked Questions can be found on the reverse of this letter. If you have any other questions or concerns, you can contact the survey helpline on Freephone 0800 051 0888 or email us at pathways@kantar.com.

Thanks for your help!

[signature]

Rebecca Gooch
Survey Manager
Pathways Survey Team

B.20. Reminder 2 Letter 4D text

Dear [CHILD AGED 13+],

We just wanted to remind you that there is still time to take part in the **Pathways survey**.

The survey only takes around 15-20 minutes and as a thank you for your time, we will give you a **£10 voucher** which can be used in shops such as Amazon, Boots and Love2shop, which can be used at various stores.

Simply go to the website, use the login details and then at the end you can claim your voucher.

Web link: www.pathways2019.co.uk/

Username: **XXXX**

Password: **XXXXX**

No one else can take your place so we really hope you can take part.

Answers to some Frequently Asked Questions can be found on the reverse of this letter. If you have any other questions or concerns, you can contact the survey helpline on Freephone 0800 051 0888 or email us at pathways@kantar.com.

Thanks for your help!

[signature]

Rebecca Gooch

Survey Manager

Pathways Survey Team

B.21. Reminder 2 Postcard 4PA text

Dear Parent or Guardian of [child's name],

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

As a reminder, the survey only takes around 15-20 minutes and as a thank you for their time, your child will receive a **£10 e-voucher** which can be used in shops such as Amazon, Boots and Love2shop, which can be used at various stores.

In the next few days, we will be sending you a letter with your child's unique login details. **If you are happy for your child to take part, please look out for the letter and pass it on to them.**

This survey is entirely voluntary. If you have any questions or concerns, please contact the survey helpline on Freephone 0800 051 0888 or email us at pathways@kantar.com.

Thanks for your help!

[signature]

Rebecca Gooch
Survey Manager

B22. Reminder 2 Postcard 4P B text

Dear [respondent],

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 15-20 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, Boots and Love2shop, which can be used at various stores.

You can access the survey at www.pathways2019.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 051 0888 or email us at pathways@kantar.com.

Thanks for your help!

[signature]

Rebecca Gooch
Survey Manager

B23. Reminder 3 Letter 4D text

Dear [CHILD AGED 13+],

We just wanted to remind you that there is still time to take part in the **Pathways survey**.

The survey only takes around 15-20 minutes and as a thank you for your time, we will give you a **£10 voucher** which can be used in shops such as Amazon, Boots and Love2shop, which can be used at various stores.

Simply go to the website, use the login details and then at the end you can claim your voucher.

Web link: www.pathways2019.co.uk/

Username: **XXXX**

Password: **XXXXX**

No one else can take your place so we really hope you can take part.

To collect your £10 voucher, please complete by **Sunday 1st September**.

Answers to some Frequently Asked Questions can be found on the reverse of this letter. If you have any other questions or concerns, you can contact the survey helpline on Freephone 0800 051 0888 or email us at pathways@kantar.com.

Thanks for your help!

[signature]

Rebecca Gooch

Survey Manager

Pathways Survey Team

Appendix B: Questionnaire

SET SURVEY

Version v7 11 April

MASTER

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Note: 'Don't know' (code 98) and 'Prefer not to say' (code 99) options should be made available as standard

Modularisation is shown by the question filters SAMPLE A and SAMPLE B, and these questions are also highlighted in yellow and blue

FILTER KEY:

BLUE = All school years

PURPLE= Years 10-13 (or a subset of this group)

GREEN=Years 7-9 (or a subset of this group)

1. PARENTAL CONSENT SURVEY

Feed through the following from the NPD sample:

<Age band of child at start of survey (TBC): Under 13, 13-15, 16+

<School Year>

<Child's name>

<Child's address>

SCRIPTJNG NOTE: Please include a back button throughout.

ParIntro [ASK PARENT OF <13]

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

This survey is being conducted by Kantar on behalf of 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 (>) button to continue.

ParIntroX [ASK PARENT OF <13]

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 Kantar's privacy policy it can be found here {INSERT [LINK TO PP](#)}.

Please click the (>) button to continue.

ParPar [ASK PARENT OF <13]

Are you the parent or legal guardian of [CHILD NAME]?

1. Yes
2. No

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

SCREEN OUT 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 (>) button to end this survey.

ParConsent [ASK IF ParPar = 1]

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 and do not activate child serial number

SCREEN OUT 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 (>) button to end this survey.

ParName [ASK IF ParConsent = 1]

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

ENTER FIRST NAME

ENTER LAST NAME

Do not wish to provide my name

SCRIPTING NOTE: If refusal, screen out and do not activate child serial number

SCREEN OUT 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 (>) button to end this survey.

ParIntro2 [ASK IF ParConsent=1 and ParName <> refused]

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.

ParLink [ASK IF ParConsent=1 and ParName <> refused]

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 child's survey answers? [ADD A HELP '?'
BUTTON HERE WHICH INCLUDES THE FOLLOWING 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 Wellcome and the Government to ensure that educational services can be targeted to the needs of individuals from all types of background

- 1 Yes
- 2 No

ParMail [ASK IF ParConsent=1 and ParName <> refused]

We will also ask your child if they would like to take part in a follow-up survey in about two years' time to find out how their attitudes and plans might have changed since this survey. They will receive another voucher at that time.

Would you be happy for us to re-contact your child again in about two years' time for this purpose? If they are re-contacted there will be no obligation for them to take part in any further research.

1. Yes, I give consent for them to take part in another survey in 2 years' time.
2. No, I do not want them to take part in another survey in 2 years' time.

ParNow [ASK IF ParConsent=1 and ParName <> refused]

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. You may now close this browser.

If Parconsent = Yes and ParName <> refused ACTIVATE CHILD SERIAL

2. RESPONDENT DETAILS AND HOUSEHOLD INFORMATION

**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**

ASK ALL

Intro

Welcome to the **Pathways** survey.

This survey is being conducted on behalf of Wellcome and Department for Education. Your answers will be kept private.

One or two questions will also ask you for sensitive information such as your ethnicity. 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 (>) button to confirm you are content to take part and to start the survey.

ASK ALL

RespDet (single code)

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

<RESPONDENT NAME>

<RESPONDENT ADDRESS>

- 1 Yes
 - 2 No
-

ASK IF RESPONDENT DETAILS ARE NOT CORRECT // IF RespDet = 2

RespDetC (open ended)

Please correct any details which are incorrect. When you are finished please click the (>) button to continue

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

<RESPONDENT NAME>

<ADDRESS>

ASK ALL

SYCheck (single code)

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

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

[IF SAMPLE YEAR 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: Text fill additional text if in years 12-13

SCRIPTING NOTE: Do not include DK/Prefer not to say at this question

ASK IF SYCHECK=2 (INCORRECT)

XYear (single code)

Which school/college year have you been in this past academic year (September 2018 to July 2019)?

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

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

SCRIPTING NOTE: Respondents who answer code 1 should be screened out of the survey

SCREEN OUT TEXT:

Sorry but we are only surveying young people in Years 7 and above. Please click the (>) button to end this survey.

SCRIPTING NOTE: Text fill additional text if in years 12-13

- 1 **Year 6, or below**
- 2 **Year 7**
- 3 **Year 8**
- 4 **Year 9**
- 5 **Year 10**
- 6 **Year 11**
- 7 **Year 12**
- 8 **Year 13, or above**

SCRIPTING NOTE: Do not include Don't know or Prefer not to say at this question.

ASK ALL

CREATE DUMMY VARIABLE

SurveySY= take School Year from sample unless SYCheck=2 in which case take answer at XYear.

From this point SurveySY should be the school year filter.

ASK ALL YEARS

IntroNext

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

Please click the (>) button to continue.

ASK ALL YEARS

BroSis (single-code)

Do you have any brothers or sisters? Include half, step or foster brothers/sisters.

1. Yes
 2. No
-

IF BROSIS=1

BroSisOld (*single-code*)

Do you have any **older** brothers or sisters?

1. Yes
 2. No
-

2. OUT OF SCHOOL ACTIVITIES

ASK ALL YEAR 7 TO 13

SciVisit (*multi-code*)

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

Choose all that apply. Think about trips with family and friends, school trips or trips abroad.

- 1 A science museum, science attraction or planetarium
 - 2 Another type of museum or art gallery
 - 3 A theatre or play
 - 4 A zoo or aquarium
 - 5 A science festival, fair or event
 - 6 A science talk / lecture out of school
 - 7 Other science event/activity (please tell us what)
 - 97 None of the above (*single code*)
-

ASK ALL YEAR 7 TO 13

SciMedia1-SciMedia8 (*grid*)

How often, if at all, have you done each of the following in the past year outside of school?

- A Read about science in a book, newspaper or magazine
- B Saw or read something about science online (e.g. Instagram, YouTube, news websites)
- C Watched a programme 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

- 1. At least once a month in the past year
 - 2. A few times in the past year
 - 3. Once or twice in the past year
 - 4. Not at all in the past year
-

3. SCHOOL/COLLEGE SUBJECTS

ASK ALL YEAR 10 TO 13

YPEconAc (*single code*)

Which of these best describes what you have been doing this past academic year (September 2018 to July 2019)?

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 / Apprenticeship**
 - 96 **Something else (please tell us what)** *Text box*
-

ASK ALL YEAR 7-9

PrimEnj (*single code*)

Compared with science at primary school, do you enjoy science at secondary school ...

- 1 More
 - 2 Less
 - 3 About the same
-

ASK ALL YEAR 7-8

PrimDiff (*single code*)

Thinking back, how well do you feel that the science you learned in primary school helped you in Year 7 science?

- 1 Very well
 - 2 Fairly well
 - 3 Not very well
 - 4 Not at all well
-

ASK ALL IN Y10-13

Schoolintro (*text*)

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.

Please click the (>) button to continue.

ASK ALL YEAR 7 TO 13

Good1-7 (*grid*)

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

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

...Maths?

...English?

...Science?

...History?

[IF YEAR 10 TO 13 AND SAMPLE B] ...Biology?

[IF YEAR 10 TO 13 AND SAMPLE B] ...Chemistry?

[IF YEAR 10 TO 13 AND SAMPLE B] ...Physics?

SCRIPTING NOTE: Text fill additional text if in Years 10 to 13

- 1 Very good
- 2 Fairly good
- 3 OK
- 4 Not very good
- 5 Not good at all

ASK ALL

GoodComp

And how good would you say you are [IF YEARS 10-13: or were] at Computer Science/Computing?
[IF YEARS 10-13] If you no longer study this, think back to when you were studying it.

- 1 Very good
- 2 Fairly good
- 3 OK
- 4 Not very good
- 5 Not good at all
- 6 I have never studied this at school

SCRIPTING NOTE: Text fill additional text if in Years 10 to 13

ASK ALL YEAR 10 TO 13

ASK IF SAMPLE B

SchSubEnj (drag and drop)

At school, which of these subjects have you enjoyed the most, even if you no longer study them?

Please rank **all** options with 1 being the subject you have enjoyed the most and 10 the subject you have 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 Languages**
- 8 **Computer Science/Computing** *See note below*
- 9 **Geography**
- 10 **Art/Design**

SCRIPTING NOTE: Randomise list. Don't know and Prefer not to say should be exclusive codes.

SCRIPTING NOTE: If GoodComp=6 do not include Computer Science/Computing in the list

ASK ALL YEAR 7-9

ASK IF SAMPLE B

SchSubEnj2 (*drag and drop*)

At school, which of these subjects do you enjoy the most?

Rank your answers with 1 being the subject you enjoy the most and 8 the subject you enjoy the least.

- 1 English
- 2 Maths
- 3 Science
- 4 History
- 5 Foreign Languages
- 6 Computer Science/Computing *See note below*
- 7 Geography
- 8 Art/Design

SCRIPTING NOTE: Randomise list. Don't know and Prefer not to say should be exclusive codes.

SCRIPTING NOTE: If GoodComp=6 do not include Computer Science/Computing in the list

ASK ALL YEAR 7 TO 13

SciInt (*single code*)

How interesting do you find the science lessons at school?

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

By Science, we mean Biology, Chemistry and Physics

SCRIPTING NOTE: Text fill additional text if in Years 12 to 13

- 1 Very interesting
 - 2 Fairly interesting
 - 3 Not very interesting
 - 4 Not at all interesting
-

ASK ALL YEAR 10 TO 13

ASK ALL SAMPLE B

OtherInt (*grid*)

How interesting do you find the following lessons at school?

[IF YEARS 12-13] If you no longer study these subjects, think back to when you were studying them.

...Biology

...Chemistry

...Physics

...English?

SCRIPTING NOTE: Text fill additional text if in Years 12 to 13. Randomise.

- 1 Very interesting
 - 2 Fairly interesting
 - 3 Not very interesting
 - 4 Not at all interesting
-

ASK ALL YEAR 7 TO 13

ASK SAMPLE A

CSInt (*single code*)

How interesting do you find Computing/Computer Science lessons at school?

If you no longer study this, think back to when you were studying it.

- 1 Very interesting
 - 2 Fairly interesting
 - 3 Not very interesting
 - 4 Not at all interesting
-

ASK ALL YEAR 7 TO 13

SciEnc (*multi code*)

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

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

Choose all that apply.

SCRIPTING NOTE: Randomise answer list, although code 97 should always appear first.

- | | | |
|----|--|------------------------|
| 97 | Nothing has encouraged me | (<i>single code</i>) |
| 1 | It's easier than other subjects | |
| 2 | I get good marks | |
| 3 | I find science interesting/enjoyable | |
| 4 | It's relevant to real life | |
| 5 | Having a good teacher | |
| 6 | Encouraged by family / friends | |
| 7 | Fits with my future study / career plans | |
| 8 | I like doing practical work / experiments | |
| 9 | I enjoy the maths involved | |
| 10 | It's important to do well in science | |
| 96 | Something else (please tell us what) | <i>Text box</i> |
-

ASK ALL YEAR 7 TO 13

SciDis (*multi code*)

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

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

Choose all that apply.

SCRIPTING NOTE: Randomise answer list, although code 97 should always appear first.

- | | | |
|----|-------------------------------|------------------------|
| 97 | Nothing has put me off | (<i>single code</i>) |
| 1 | It can be difficult | |

- 2 I don't get good marks
 - 3 I don't find some science subjects interesting/enjoyable
 - 4 There is a lot to learn/remember
 - 5 The teacher/One of my teachers
 - 6 Doesn't fit with my future study / career plans
 - 9 I find the maths difficult
 - 10 Not enough practical work or experiments
 - 96 Something else (please tell us what) Text box
-

ASK ALL YEAR 7 TO 13 WHO STUDY COMP SCIENCE (Goodcomp <> 6)

SAMPLE A

CompEnc (multi code)

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

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

Choose all that apply.

SCRIPTING NOTE: Randomise answer list, although code 97 should always appear first.

- 97 Nothing has encouraged me (single code)
 - 1 It's easier than other subjects
 - 2 I get good marks
 - 3 I find the subject interesting/enjoyable
 - 4 It's relevant to real life
 - 5 Having a good teacher
 - 6 Encouraged by family / friends
 - 7 Fits with my future study / career plans
 - 8 I enjoy the maths involved
 - 9 I find it creative
 - 10 It's important to do well in Computing
 - 96 Something else (please tell us what) Text box
-

ASK ALL YEAR 7 TO 13 WHO STUDY COMP SCIENCE (Goodcomp <> 6)

SAMPLE A

CompDis (multi code)

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

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

Choose all that apply.

SCRIPTING NOTE: Randomise answer list, although code 97 should always appear first.

- 97 Nothing has put me off (single code)
 - 1 It can be difficult
 - 2 I don't get good marks

- 3 I don't always find it interesting/enjoyable**
 - 4 There is a lot to learn/remember**
 - 5 The teacher/One of my teachers**
 - 6 Doesn't fit with my future study / career plans**
 - 7 I find the maths difficult**
 - 8 I find it repetitive**
 - 96 Something else (please tell us what)** *Text box*
-

4. CURRENT AND FUTURE STUDY

ASK YEAR 10,11,12

GCSESciA (single code)

Which science course [did you take / are you taking] in Year 10 and 11?

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

SCRIPTING NOTE: Text-fill is 'are you taking' if in Year 10, otherwise 'did you take' if in Years 11,12.

SCRIPTING NOTE: Text fill additional text if in Year 10

- 1 **Double Science/Combined Science (two GCSE grades awarded)**
 - 2 **Triple Science (three GCSE grades awarded)**
 - 3 **One or two separate sciences (e.g. just Biology, or just Chemistry and Physics)**
 - 96 **Another science course (e.g. BTEC) (please tell us what)** *Text box*
-

ASK IF YEAR 13

GCSESciB (single code)

Which science course did you take in Year 10 and 11?

- 1 **Single Science GCSE (one GCSE grade awarded)**
 - 2 **Double Science (two GCSE grades awarded)**
 - 3 **Triple Science (three GCSE grades awarded)**
 - 96 **Another science course (e.g. BTEC) (please tell us what)** *Text box*
-

IF YEARS 10-13 AND TOOK/WILL TAKE ANY SCIENCE GCSE CODES 1 TO 3 AT GCSESciA or GCSESciB

GCSECheck (single code)

Just to check, when you [took/take] your GCSE science exams, how many GCSEs [is/was] this worth?

SCRIPTING NOTE: Text fill 'took' and 'was' if in Year 11-13, 'take' and 'is' if in Year 10

- 1 **One**
 - 2 **Two**
 - 3 **Three**
 - 4 **Other (please tell us what)** *Text box*
-

IF YEARS 10-13 AND NOT STUDY TRIPLE SCIENCE // IF GCSESciA <> 2 or GCSESciB <> 3

TripSciSch (single code)

When you were choosing your GCSE options, did your school offer Triple Science to any students? By this we mean the opportunity to achieve **three separate** exam grades, one for each of the sciences.

- 1 Yes, this was offered to all students**
 - 2 Yes, this was offered to some students**
 - 3 No, triple science is not offered to any students at my school**
-

ASK IF TRIPLE SCIENCE NOT OFFERED BY SCHOOL // IF TripSciSch = 3

TripSciNo (single code)

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**
-

ASK IF NOT STUDY TRIPLE SCIENCE BUT IT WAS OFFERED BY SCHOOL // IF TripSciSch = 1 or 2

TripSci (single code)

At the time, did you want to study [Double Science / 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

SCRIPTING NOTE: Text-fill is 'Double Science' if GCSESciA = 1 or GCSESciB=2, else 'this science course'.

- 1 I wanted to study** [Double Science / this science course]
 - 2 I would have preferred Triple Science**
-

ASK IF NOT STUDY TRIPLE SCIENCE BUT IT WAS OFFERED BY SCHOOL // IF TripSciSch = 1 or 2

TripSciWhy (multi-code)

Why didn't you [want to {IF TripSci = 1}] study Triple Science?

Choose all that apply.

SCRIPTING NOTE: Randomise answer list

- 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
11 Not needed for my A-level choices
96 Another reason (please tell us why) *Text box*
-

ASK YEAR 10-13

CompGCSE (*single code*)

[Are you studying/Did you study] Computer Science/Computing at GCSE? Please don't include ICT.

SCRIPTING NOTE: Text fill 'Are you studying' if in Year 10/11, 'Did you study' if in Year 12/13

- 1 Yes
2 No
-

ASK IF YEARS 10 or 11

FutL3Qu (*single code*)

Now for some questions about your future study plans.

After Year 11, are you planning to study for further qualifications in **any subject** at school or college, for example A levels or qualifications such as NVQs?

- 1 Yes
2 No
3 Maybe
-

IF YEAR 10/11 AND NOT DEFINITELY PLANNING TO STUDY BEYOND Y11 (FutL3Qu=2/3or DON'T KNOW)

FutL3Other(*multi code*)

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

Choose all that apply.

- 1 Do paid work
2 Do an apprenticeship
3 Something else (please tell us what) *Text box*
4 Haven't decided yet. *Single code*
-

ASK IF YEAR 11 and FutL3Qu = 1 or 3 // In Year 11 and considering studying for further qualifications

P16Sub (*single code*)

Have you chosen your subjects for Year 12 yet?

- 1 Yes
2 No
-

ASK IF (YEAR 10 AND FUTL3QU=1 OR 3) OR (YEAR 11 AND P16Sub <> 1)

FutL3Sub (*grid*)

How likely are you to study A levels, NVQ level 3 or a similar qualification in...

- ... Maths?
- ... Biology?
- ... Chemistry?
- ... Physics?
- ... Computer Science?
- ... Psychology?
- ... Another science subject (e.g. Electronics, Geology, Environmental Science)?

- 1 Definitely**
- 2 Likely**
- 3 Unlikely**
- 4 Definitely not**
- 5 Don't know yet**

ASK IF YEAR 11 AND CHOSEN SUBJECTS FOR YEAR 12 // IF P16Sub = 1

Y12SubL3 (*multi-code*)

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/Technology**
- 20 Drama/Performing Arts**
- 7 Economics**
- 21 Engineering**
- 8 English Literature/Language**
- 22 Health/Social Care/Nursing**
- 9 History**
- 10 Geography**
- 11 Languages (e.g. French, German)**
- 23 Law**
- 12 Maths / Further Maths (including Statistics)**
- 24 Media/Film/TV Studies**
- 25 Music/Music technology**
- 13 Philosophy**
- 14 Physical Education (PE)**
- 15 Physics**
- 26 Politics/Political Studies**
- 16 Psychology**
- 17 Religious Studies**
- 18 Sociology**
- 19 Something else (please tell us what)** *Text box*
- 97 None of these** *(single code)*

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

L3Qual (*multi-code*)

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

Choose all that apply.

- 1 AS levels / A levels
 - 2 International Baccalaureate (IB)
 - 3 NVQ level 3
 - 4 BTEC National Certificate / ONC / OND
 - 5 City and Guilds Advanced Craft or Part III / RSA Advanced Diploma
 - 96 Another qualification (please tell us what) *Text box*
 - 97 None of these *(single code)*
-

ASK IF YEAR 12 OR 13 AND STUDYING AS LEVELS, A LEVELS, IB OR VOCATIONAL LEVEL 3 // IF L3Qual = 1, 2, 3, 4 or 5

CurSubL3 *(multi-code)*

Which 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/Technology
 - 20 Drama/Performing Arts
 - 7 Economics
 - 21 Engineering
 - 8 English Literature/Language
 - 22 Health/Social Care/Nursing
 - 9 History
 - 10 Geography
 - 11 Languages (e.g. French, German)
 - 23 Law
 - 12 Maths / Further Maths (including Statistics)
 - 24 Media/Film/TV Studies
 - 25 Music/Music technology
 - 13 Philosophy
 - 14 Physical Education (PE)
 - 15 Physics
 - 26 Politics/Political Studies
 - 16 Psychology
 - 17 Religious Studies
 - 18 Sociology
 - 19 Something else (please tell us what) *Text box*
 - 97 None of these *(single code)*
-

ASK ALL YEAR 10-13

FutHEQu *(single code)*

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

- 1 Yes
 - 2 No
 - 3 Maybe/Undecided
-

ASK ALL CONSIDERING HE AT FUTHEQU (FUTHEQu=1 or 3)

FutHEWhat (*Multi code*)

Which of the following are you thinking about? Choose all that apply.

- 1 University degree
 - 2 Apprenticeship
 - 3 Another higher education qualification (e.g. HNC, HND, Higher Education Diploma)
 - 4 None of these *Exclusive code*
-

ASK IF CONSIDERING STUDYING FOR HE EDUCATION DEGREE // IF FutHeQu = 1 or 3

FutHESu (*open question*)

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

SCRIPTING NOTE: OPEN TEXT QUESTION

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

ASK YEARS 8-9

Y89Choose (*single code*)

Have you chosen your GCSE options yet?

- 1 Yes
 - 2 Yes but it will depend on my marks
 - 3 No
-

ASK ALL YEAR8-9 WHO HAVE CHOSEN OPTIONS (Y89Choose=1/2)

SubjTalk (*single code*)

Who have you talked to most about what subjects to take at GCSE? Please choose one only.

- 1 Parents
 - 2 Brother/sister
 - 3 Other family member
 - 4 Teacher
 - 5 Friends
 - 6 Someone else (please say who) *(text box)*
 - 7 No-one
-

ASK ALL YEAR 7-9

SciGCSElik (*single code*)

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
-

ASK ALL YEAR 7-9

UniWant (*single code*)

How much do you want to go to university after you finish school?

- 1 Definitely
 - 2 Probably
 - 3 Probably not
 - 4 Definitely not
-

5. LEARNING MINDSET

ASK ALL YEAR 7 TO 13 AND B

ASK HALF OF SAMPLE B

L2Style _A (sliding scale)

Some people say that how well someone does in exams is mostly down to their **natural ability**, while others say it is mostly down to **how hard they work**.

Thinking about young people in general, tell us what you think for each of the following subjects.

SCRIPTING NOTE: Three sliding scales labelled 'Natural ability' on left, 'How hard they work' on right, and 'Both equally important' in the middle

- 1 English
 - 2 Maths
 - 3 Chemistry
 - 4 Biology
 - 5 Physics
-

ASK ALL YEAR 7 TO 13 AND B

ASK OTHER HALF OF SAMPLE B

L2Style _B (sliding scale)

Some people say that how well someone does in exams is mostly down to their **how hard they work**, while others say it is mostly down to **natural ability**

Thinking about young people in general, tell us what you think for each of the following subjects.

SCRIPTING NOTE: Three sliding scales labelled 'How hard they work' on left, 'Natural ability' on right, and 'Both equally important' in the middle

- 1 English
 - 2 Maths
 - 3 Chemistry
 - 4 Biology
 - 5 Physics
-

ASK ALL YEAR 7 TO 13 AND SAMPLE A

ASK HALF OF SAMPLE A

LStyle_A (sliding scale)

Some people say that how well someone does in exams is mostly down to their **natural ability**, while others say it is mostly down to **how hard they work**.

Thinking about young people in general, tell us what you think for each of the following subjects.

SCRIPTING NOTE: Three sliding scales labelled 'Natural ability' on left, 'How hard they work' on right, and 'Both equally important' in the middle

- 1 English
 - 2 Maths
 - 3 Science
-

ASK ALL YEAR 7 TO 13 AND SAMPLE A

ASK OTHER HALF OF SAMPLE A

LStyle _B (*sliding scale*)

Some people say that how well someone does in exams is mostly down to their **how hard they work**, while others say it is mostly down to **natural ability**.

Thinking about young people in general, tell us what you think for each of the following subjects.

SCRIPTING NOTE: Three sliding scales labelled 'How hard they work' 'on left, 'Natural ability' on right, and 'Both equally important' in the middle

- 1 English**
 - 2 Maths**
 - 3 Science**
-

ASK ALL YEARS 7 TO 11

ASK ALL SAMPLE B

ExamAnx (*grid*)

Thinking now about when you sit a test or an exam at school. How often have you felt nervous or worried when you are doing each of the following?

A Maths test/exam?

An English test/exam?

A Science test/exam?

- 1 Most times**
- 2 Sometimes**
- 3 Occasionally**
- 4 Never**

SCRIPTING NOTE: Randomise statements

6. SCIENCE AT SCHOOL

ASK ALL YEARS 7 TO 11

SciLes (*single code*)

Over the last school year, 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**
-

ASK ALL YEARS 7 TO 11

TeachSame (*single code*)

Thinking about this past school year (September 2018 to July 2019), have there been any changes in who has taught you science?

- 1 Yes – my teacher(s) have changed in the last school year
 - 2 No changes
-

ASK IF TEACHSAME = YES

TeachWhy (*multi code*)

What are the main reasons there have been changes in who has taught you science this past school year?

Choose all that apply.

SCRIPTING NOTE: Randomize. Keep 8 at the bottom.

1. Teacher(s) left the school
 2. We have had trainee/student teacher(s)
 3. We have had temporary/cover/supply teacher(s)
 4. Teacher(s) took time off (e.g. to have a baby, illness)
 5. I changed to a different class/set
 6. We started learning a different science subject so the teacher changed
 7. Teacher(s) changed to a different job within the school
 8. Other reason (please say what)
-

ASK ALL YEARS 7 TO 11 AND SAMPLE A

PracQuan (*grid*)

Still thinking about this last school year, about how often did you generally do the following in science lessons?

- ... **Watch a teacher demonstration of a practical**
 - ... **Watch a video of a practical**
 - ... **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**
-

ASK ALL YEARS 7 TO 11

SAMPLE A

PracRes (*single code*)

Which of these best applies to you?

SCRIPTING NOTE: 'More' and 'Less' in bold

- 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**
-

ASK ALL YEARS 7 TO 13

SAMPLE A

TeachImp

Thinking just about science lessons, what are the **three** most important things about science teachers that help you learn?

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

You can select up to three answers.

SCRIPTING NOTE: Allow 1, 2 or 3 responses (not including DK, prefer not to say).

SCRIPTING NOTE: Randomize but keep 11 at the bottom. Apply text fill for Year 12-13.

- 1 Being enthusiastic/passionate about the subject
 - 2 Making the subject feel more relevant outside school
 - 3 Being knowledgeable
 - 4 Making learning fun
 - 5 Able to control class behaviour
 - 6 Being calm/patient
 - 7 Being organised/prepared
 - 8 Taking an interest in my learning
 - 9 Explaining things well
 - 10 Helping me/Being supportive
 - 11 Something else (please tell us what) *Text box*
-

ASK ALL YEARS 7 TO 13

STEMPrac (multi-code)

In the past year, have you taken part in any of the following activities related to Science, Computer science, Engineering or Maths?

Choose all that apply.

- 1 [YEAR 12/13 ONLY] Science EPQ (Extended Project Qualification)
- 2 Science CREST Award
- 3 Science / Engineering / Computing / Maths club
- 4 A science or maths challenge / competition
- 5 A talk at school from a STEM Ambassador
- 6 A talk at school from someone in a science/computing/engineering job
- 7 School visit to an employer involved in science, computing or engineering
- 97 None of these *(single code)*

SCRIPTING NOTE: Only include code 1 if in Year 12/13

7. SCIENCE AS A CAREER

ASK ALL YEAR 10 TO 13

CarAdv (*multi-code*)

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

Choose all that apply.

- 1 Friends
 - 2 Parents
 - 3 Brother/sister
 - 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
 - 96 Someone or something else (please tell us what) *Text box*
 - 97 None *(single code)*
-

ASK ALL YEARS 7 TO 13

CarSure (*single code*)

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
-

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

CarWht (*open text*)

What careers are you interested in?

ASK ALL YEARS 7 TO 13

CarInt (*single code*)

How interested are you in a future career that involves any of the following: Science, Computer Science, Engineering or Maths?

- 1 Very interested
 - 2 Fairly interested
 - 3 Not very interested
 - 4 Not at all interested
-

ASK IF YEAR 10 TO 13 AND INTERESTED IN SCIENCE CAREER // IF CarInt = 1 or 2

CarWhy (*multi-choice*)

Why are you interested in a career involving Science, Computer science, Engineering or Maths?

Choose all that apply.

SCRIPTING NOTE: Randomise order of response options

- 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 My parents advised me**
 - 6 My brother/sister advised me**
 - 7 I want to help others**
 - 8 These careers are well paid**
 - 9 I know someone working/studying in a related area**
 - 10 There will be a lot of jobs/these skills are needed**
 - 96 Another reason (please tell us what)** *Text box*
-

ASK IF YEAR 10 TO 13 AND NOT INTERESTED IN SCIENCE CAREER // IF CarInt = 3 or 4

CarWhyNo (*multi-choice*)

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

Choose all that apply.

SCRIPTING NOTE: Randomise order of response options

- 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**
 - 96 Another reason (please tell us what)** *Text box*
-

ASK ALL YEARS 7 TO 13

SciCar (*grid*)

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

Careers that use science...

- ... Are suitable for someone like me.
- ... Require high grades.

- 1 Strongly agree**
- 2 Agree**
- 3 Neither agree nor disagree**
- 4 Disagree**
- 5 Strongly disagree**

SCRIPTING NOTE: Randomise statements

ASK ALL YEARS 10 TO 13

WorkExp (multi-code)

Have you ever done any work experience?

Choose any that apply.

- 1 Yes, involving Science, Computer Science, Engineering or Maths**
 - 2 Yes, in another area**
 - 3 No** (single code)
-

ASK IF DONE WORK EXPERIENCE IN SCIENCE // IF WorkExp = 1

WorkExpArr (multi-code)

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**
 - 96 Some other way (please tell us how)** (Text box)
-

ASK ALL YEAR 10 TO 13

WorkExpWant (single code)

Have you ever **wanted** to do work experience in Science, Computer science, Engineering or Maths, but not been able to do so?

- 1 Yes
 - 2 No
-

ASK IF UNABLE TO DO WORK EXPERIENCE IN SCIENCE // IF WorkExpWant = 1

WorkExpWhy (multi-code)

Why were you unable to do this work experience?

Choose all that apply.

SCRIPTING NOTE: Randomise order of response options, but keep 7 and 9 together.

- 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 Applied through my school / college but was unsuccessful
 - 6 Applied directly to an employer, but was unsuccessful
 - 7 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
 - 8 Didn't apply because places were limited
 - 96 Another reason (please tell us what) Text box
-

8. SCIENCE CAPITAL

ASK ALL YEAR 7 TO 13

SocNSci (*single code*)

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
-

ASK ALL

IntYPPar (*single code*)

Do you think your parents are interested in science? Please choose one only.

- 1 Yes, mother interested
 - 2 Yes, father interested
 - 3 Yes, both parents interested
 - 4 No, neither parent interested
 - 5 This question is not applicable to me
-

ASK ALL YEAR 7 TO 13

ASK IF SAMPLE A

SciUse (*grid*)

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
-

ASK ALL YEARS 10 TO 13

ASK IF SAMPLE B

BioIntSp (*multi-code*)

Are you interested in any of these areas of research?

Choose all that apply.

SCRIPTING NOTE: RANDOMIZE

- 1 How the brain works
- 2 How the body works
- 3 How genes work
- 4 Nutrition
- 5 Mental health issues
- 6 Development of new drugs, vaccines and treatments
- 7 How climate change can affect health
- 8 Antibiotics
- 9 How medical research is conducted

- 96 I'm interested in another area of medical research (please tell us what)** *Text box*
- 97 None of these** *(single code)*
-

9. DEMOGRAPHICS

ASK ALL YEARS 7 TO 13

DemIntro

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.

Please click the (>) button to continue.

ASK ALL YEARS 7 TO 13

Sex (single code)

Which of the following best describes you?

- 1 **Male**
 - 2 **Female**
 - 3 **Identify in another way**
-

ASK ALL YEARS 7 TO 13

Ethnic (single code)

What is your ethnic group?

Choose one option that best describes your ethnic group or background.

- 1 **White:** English / Welsh / Scottish / Northern Irish / British / Irish / Gypsy or Irish Traveller / Any other White background
 - 2 **Mixed / multiple ethnic groups:** White and Black Caribbean / White and Black African / White and Asian / Any other mixed/multiple ethnic background
 - 3 **Asian / Asian British:** Indian / Pakistani / Bangladeshi / Chinese / Any other Asian background
 - 4 **Black / African / Caribbean / Black British:** African / Caribbean / Any other Black / African / Caribbean background
 - 5 **Any other ethnic group** (including Arab and any other ethnic group) Text box
-

ASK ALL YEARS 7 TO 13

Unipar (single code)

Did at least one of your parents go to university?

1. Yes
 2. No
 3. This question is not applicable to me
 4. Don't know
-

ASK ALL WITH SIBLINGS (BROSISOLD=1)

Unisib (multi code)

Do you have any brothers or sisters who have been to or who have applied to go to university?

Choose all that apply.

- 1 I have a brother/sister who is at university
 - 2 I have a brother/sister who has been to university but has now left
 - 3 I have a brother/sister who has applied to go to university
 - 97 None of the above *(Single code)*
-

ASK ALL YEAR 7 TO 13

SciPar (multi-code)

Does anyone in your family work as a scientist or in a job using science or medicine?

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

Choose all that apply.

- 1 Mother
 - 2 Father
 - 3 Sibling(s)
 - 4 Other family member (living with you)
 - 96 Other family member (not living with you)
 - 97 No, no-one *(Single code)*
-

ASK ALL YEAR 7 TO 13

NPDConsent *(single code)*

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 A HELP '?' BUTTON HERE WHICH INCLUDES THE FOLLOWING 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 Wellcome and the Government 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 YEAR 10-13 AND NPDConsent = 2)

PstQual *(multi-code)*

Have you passed any of these qualifications?

Please choose all that apply. Do not include qualifications if you are still waiting for the results.

- 1 GCSEs / IGCSEs
 - 2 AS levels
 - 3 A levels (final year) / A2s
 - 4 International Baccalaureate (IB)
 - 5 NVQ level 1 / GNVQ Foundation / BTEC First Certificate / RSA stage I-III / City and Guilds Part 1 / Junior Certificate
 - 6 NVQ level 2 / GNVQ Intermediate / BTEC First Diploma / RSA Diploma / City and Guilds Craft or Part II
 - 7 NVQ level 3 / GNVQ Advanced / BTEC National Certificate / ONC / OND / City and Guilds Advanced Craft or Part III / RSA Advanced Diploma
 - 97 None of these (single code)
-

ASK IF PASSED A LEVELS/A2 AND REFUSED NPD CONSENT // IF PstQual = 3

PstLev3A (multi code)

Have you passed A levels or A2s in any of these subjects?

- 1 Biology
 - 2 Chemistry
 - 3 Physics
 - 4 Another science subject (e.g. Electronics, Geology, Environmental Science)
 - 5 Maths / Further Maths (including Statistics)
 - 6 Computer Science
 - 7 Psychology
 - 96 Another science subject (please tell us what) Text box
 - 97 None of these (single code)
-

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

PstLev3As (multi-code)

Have you passed AS levels in any of these subjects?

- 1 Biology
 - 2 Chemistry
 - 3 Physics
 - 4 Another science subject (e.g. Electronics, Geology, Environmental Science)
 - 5 Maths / Further Maths (including Statistics)
 - 6 Computer Science
 - 7 Psychology
 - 96 Another science subject (please tell us what) Text box
 - 97 None of these (single code)
-

ASK IF PASSED LEVEL 3 VOCATIONAL QUALIFICATION AND REFUSED NPD CONSENT // IF PstQual = 7

PstLev3Voc (multi-code)

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

HELP: Level 3 vocational qualifications include:

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

- 1 Biology**
 - 2 Chemistry**
 - 3 Physics**
 - 4 Another science subject (e.g. Electronics, Geology, Environmental Science)**
 - 5 Maths / Further Maths (including Statistics)**
 - 6 Computer Science**
 - 7 Psychology**
 - 96 Another science subject (please tell us what)** *Text box*
 - 97 None of these** *(single code)*
-

ASK IF PASSED GCSEs AND REFUSED NPD LINK // IF PstQual = 1

PstGCSE (multi-code)

Have you passed GCSEs at grades 9 to 4 or at grades A*-C in any of these subjects?

- 1 Maths**
 - 2 Biology**
 - 3 Chemistry**
 - 4 Physics**
 - 5 Applied Science / Environmental Science / Sports Science / Science in Society**
 - 6 Computer Science / Computing**
 - 7 ICT**
 - 8 Electronics / Engineering**
 - 9 Design and Technology**
 - 10 Geology**
 - 11 Psychology**
 - 96 Another science subject (please tell us what)**
 - 97 None of these**
-

10. MACHINE LEARNING

YEAR 10 TO 13

ASK IF SAMPLE B

MLIntro

You're nearly at the end where you can choose your e-voucher.

Next are a few questions about technology.

YEAR 10 TO 13

ASK IF SAMPLE B

MLAware (*multi-code*)

Machine Learning is when machines or computers are able to adapt, learn and make recommendations or decisions on their own without a human giving them ongoing instructions.

Have you seen or heard anything about...

SCRIPTING NOTE: Respondents asked four out of eight statements (chosen at random). And randomise.

- ... Computers that can recognise speech and answer questions
- ... Driverless vehicles which can adapt to road and traffic conditions
- ... Facial recognition computers which can learn identities through CCTV to catch criminals
- ... Computer programmes which show you websites or advertisements based on your web browsing habits
- ... Computers which analyse medical records to help diagnose patients
- ... Robots which can make their own decisions and can be used by the armed forces
- ... Robots that can adapt to the home environment for example helping to care for older people
- ... Computers which can make investments in the stock market by adapting to the financial market

- 1 Seen / heard a lot about this**
 - 2 Seen / heard a little about this**
 - 3 Not seen / heard anything about this**
-

YEAR 10 TO 13

ASK IF SAMPLE B

MLAtt (*grid*)

Would you trust a machine or computer to...

- ... Recommend a movie you would enjoy watching?
- ... Control a car in which you were travelling?
- ... Provide care for an elderly relative in their home?

- 1 Yes**

2 No

11. SCIENTIFIC LITERACY

ASK ALL YEAR 7 TO 13

QuizIntro

And finally, a quick quiz about science. For each of the following statements, please say whether you think it is true or false.

You can find out the answers at the end of the survey.

Please click the (>) button to continue.

ASK ALL YEAR 10 TO 13

ASK ALL

QuizA (*grid*)

- ... Electrons are smaller than atoms.
- ... All radioactivity is man-made.
- ... All plants and animals have DNA.
- ... More than half of human genes are identical to those of mice.
- ... The cloning of living things produces genetically identical copies.
- ... Lasers work by focusing sound waves.
- ... By eating a genetically modified fruit, a person's genes could also become modified.
- ... The oxygen we breathe comes from plants.
- ... It is the mother's genes that determine the sex of the child.
- ... One kilogram of lead has the same mass on Earth as it does on the moon.

- 1 Definitely true**
 - 2 Probably true**
 - 3 Probably false**
 - 4 Definitely false**
 - 98 Don't know**
-

ASK ALL YEAR 7 to 9

QuizB (*grid*)

- | | | |
|----|---|---|
| 13 | The particles in a gas have no bonds | T |
| 2 | A soluble substance can dissolve | T |
| 3 | Universal indicator paper goes red in alkaline solutions | F |
| 5 | An animal cell has a cell wall | F |
| 6 | A shark is a mammal | F |
| 8 | Photosynthesis happens in the leaves of a plant | T |
| 9 | Force is measured in kilograms | F |
| 10 | In a circuit diagram, the symbol for a lamp is a plain circle | F |
| 11 | Sounds are produced by vibrations | T |
| 12 | Fossil fuels are renewable | F |

- 1 Definitely true**
 - 2 Probably true**
 - 3 Probably false**
 - 4 Definitely false**
 - 98 Don't know**
-

12. RE-CONTACT DETAILS

ASK ALL AGED 13+

Contact (single code)

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

Kantar may want to contact you again in about two years' time 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 would retain your name and contact details only for the purposes of getting back in touch. Kantar 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 in about two years for this purpose?

1. Yes
2. No

ASK IF AGREED FOR DETAILS TO BE PASSED ON TO WELLCOME TRUST AND 16+ // IF Contact = 1 AND AGE=16+

RespTel (open ended)

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?

SCRIPTING NOTE: There should also be answer options for:

- Don't want to answer
- Don't have mobile number

ASK IF AGREED FOR DETAILS TO BE PASSED ON TO WELLCOME TRUST AND 16+ // IF Contact = 1 AND AGE=16+

HHTel (open ended)

What is your household telephone number?

SCRIPTING NOTE: There should also be answer options for:

- Don't want to answer
 - Don't have household telephone number
-

ASK IF AGREED FOR DETAILS TO BE PASSED ON TO WELLCOME TRUST AND 16+ // IF Contact = 1 AND AGE=16+

RespEmail (*open ended*)

What is your email address?

SCRIPTING NOTE: There should also be answer options for:

- *Don't want to answer*
- *Don't have an email address*

ASK IF AGE 13-15

ParName2 (*open ended*)

We sent your parent(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

Do not wish to provide this

ASK ALL year 7 to 13

Findings (*single code*)

Would you like us to send you the results of this survey when they are published next year?

- 1 Yes**
- 2 No thanks**

ADD A SCREEN WHICH SHOWS THE CORRECT QUIZ ANSWERS COMPARED WITH THE ANSWER THEY GAVE AND A SCORE.

Here are the answers to the quiz.

When you have finished reviewing this screen please click (>) to continue to the last couple of questions.

ASK ALL year 7 to 13

EOI

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

Please click on this link to claim your e-voucher: pathways.perksplus.com

You will need your **Perks login details** – see below. Please make a note of these before you proceed to the next screen. Note that these are **different** to the login details you used to enter the survey.

Reference number [ID]

Token: [password]

Wellcome exists to improve health by helping great ideas to thrive.

We support researchers, we take on big health challenges, we campaign for better science, and we help everyone get involved with science and health research.

We are a politically and financially independent foundation.

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