

# **THE ALSPAC STUDY**

## **SD FILE**

### **DATA COLLECTED FROM THE YEAR 4 MATHS ASSESSMENT**

**Administered in schools**

**Prepared by**

**David Herrick  
Jean Golding  
&**

**The ALSPAC Study Team**

**Documentation giving frequencies, background and instructions for use.**

**Last updated for version 1b of the built file (partial update only).**

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# Introduction and Methodology

## Background

The ALSPAC cohort is split across 3 school years. The expected progress, according to date of birth, of each subdivision of the cohort through compulsory schooling is shown in table 1. Note that the oldest ALSPAC children entered reception in autumn 1995 and the youngest will be in year 11, when GCSEs are taken, in summer 2009. Table 1 also details the codes that will be used for the relevant school years on ALSPAC data files.

The year 4 maths test was, therefore, administered during the academic years 1999 / 2000, 2000 / 2001 and 2001 / 2002 and the aim was for children to complete the tests at the beginning of the academic year.

**Table 1: Coding of school years on ALSPAC data files and expected progress of the ALSPAC cohort according to their dates of birth**

School year	Code	Expected position of ALSPAC children born between:		
		April 1991 & August 1991	September 1991 & August 1992	September 1992 & January 1993
1995 / 1996	1	Reception	-	-
1996 / 1997	2	Year 1	Reception	-
1997 / 1998	3	Year 2	Year 1	Reception
1998 / 1999	4	Year 3	Year 2	Year 1
1999 / 2000	5	Year 4	Year 3	Year 2
2000 / 2001	6	Year 5	Year 4	Year 3
2001 / 2002	7	Year 6	Year 5	Year 4
2002 / 2003	8	Year 7	Year 6	Year 5
2003 / 2004	9	Year 8	Year 7	Year 6
2004 / 2005	10	Year 9	Year 8	Year 7
2005 / 2006	11	Year 10	Year 9	Year 8
2006 / 2007	12	Year 11	Year 10	Year 9
2007 / 2008	13	-	Year 11	Year 10
2008 / 2009	14	-	-	Year 11

## Contents

The maths test for year 4 children was devised by Terezinha Nunes and Peter Bryant. and was designed to assess basic understanding of additive reasoning and multiplicative reasoning. There is some evidence that there are different levels of understanding of these concepts; the questions are designed to show this. 8 year olds should have a good understanding of additive reasoning and should be beginning to understand multiplicative reasoning. The problems are based on realistic situations, so should be sensitive to basic understanding, thereby testing latent ability rather than the ability to learn.

## Administration

From each of the relevant schools in Avon (i.e. those in the areas covered by the Bristol, South Gloucestershire, North Somerset and Bath & Northeast Somerset local education authorities) a list of children in Year 4, containing names and dates of birth, was requested at the beginning of each of the relevant academic years. Note that all schools in the BANES LEA were included even though, geographically speaking, only a small part of that

LEA was actually in the ALSPAC enrolment area. The schools were then sent an appropriate number of test booklets and teacher administration booklets in the October/November of the relevant academic year. The child was asked to enter their names, date of birth, school and class on page 2 of their booklet (see page 12 of this documentation). Reminder letters were sent out to head teachers if, after an appropriate interval, the completed tests had not been returned.

The children on the class lists were assigned numeric identifiers, regardless of whether they were eligible for ALSPAC or not. These identifiers consisted of 8 digits: The first 4 digits identified the school (with the first digit indicating education authority), digits 5 and 6 identified the child within the school and the final 2 digits identified the year of data collection. On receipt of the completed booklets, the children were identified on the class lists and the appropriate numeric ID applied to the front of the booklet. The page containing the identifying information (name, date of birth etc) was then removed and destroyed.

For children living outside the study area, the test packs were sent to the mothers. In the 1999 / 2000 trawl "out-of-area" was defined as non-BS postcodes. However, some BS postcodes (e.g. Cheddar) were actually outside the area covered by direct school contact and so children at schools in these areas were not covered. The definition was refined to include such cases in 2000 / 2001. However, it then transpired that one or two schools located at the edge of the area were taking large numbers of children living outside the area and therefore were approached twice to do the tests. The definition was further refined in 2001 / 2002 to avoid this complication. Each test booklet was identified by a code comprising one or two letters identifying the country it was being sent to, followed by the mother's contact ID number and birth order code (ranking). The mother was asked to give the pack to the child to take into school. No reminders were sent to out-of-area cases.

## Response Rates

The following table shows the numbers of schools contacted in each year and various different levels of response rates:

Year	1999 / 2000	2000 / 2001	2001 / 2002
Schools invited to participate	309	344	344
No response (% of those invited)	65 (21%)	170 (49%)	99 (29%)
Refused to participate (% of those invited)	14 (5%)	32 (9%)	19 (6%)
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Schools sent tests (% of those invited)	230 (74%)	142 (41%)	226 (66%)
Returned tests (% of those sent tests)	210 (91%)	125 (88%)	198 (88%)
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Overall response rate (% of schools invited that returned tests)	68%	36%	58%

The following table gives response rate information for the out-of-area children. Note that this is a slight approximation as it is based on the number of packs sent out to mothers not the number of tests (so counts only once for twins, triplets etc.).

<b>Year</b>	<b>1999 / 2000</b>	<b>2000 / 2001</b>	<b>2001 / 2002</b>
Mothers sent pack(s)	179	883	237
Mothers from whose pack(s) questionnaires were returned (% of mothers sent packs)	109 (61%)	375 (42%)	143 (60%)

### **Permissions**

For out-of-area children, permission was always assumed since the parent had handed the questionnaires to the school.

For local children permission to link to general ALSPAC data was originally sought from the accompanying adult at the Focus@7 clinic. However, in May 2003 the ALSPAC Ethics & Law Committee decided that in line with the data protection act it was not necessary for ALSPAC to obtain written consent before using the data, but that data on children for whom permission was actually refused at the Focus@7 clinic or for whom permission was subsequently withdrawn should not be used. At the time of writing there are 15 children for whom we have such refusals.

### **Multiple Records**

Multiple records were returned for a small number of ALSPAC eligible children. These occurred for one of three reasons:

1. The child moved schools during Year 4. This means there are two records in the same sweep but from different schools.
2. The child repeated Year 4. This means there are two records from the same school but in different sweeps.
3. The child did Year 4 twice in different schools. This means there are two records from different schools in different sweeps.

One record was selected for each child as follows. For 2 & 3 above the record that came from the year in which the child should have sat the tests by age (see table 3 and variable SD006) was retained. For 1 above the record that was completed first was retained.

### **Linking**

There were no special complications linking the out-of-area children, since the questionnaire numbers for these children contained the standard ALSPAC contact ID.

For children in the local LEAs, the questionnaires were linked to the lists of children provided by the schools by the questionnaire number (school / child), using date of birth and gender as a check. Some instances of teachers transposing questionnaire numbers were identified and corrected. The lists were then linked to ALSPAC identifiers using names and dates of birth.

## **Sample**

There are a total of 28,145 records on this file. This number is made up of the 14,676 fetuses in the core ALSPAC sample (regardless of whether or not the test data is available for them) plus 1,760 records for children eligible for ALSPAC but not in the core sample for whom test data are available and 11,709 records for children not eligible for ALSPAC for whom test data are available.

Of the 14,676 fetuses in the core ALSPAC sample, 14,062 were live born. The maths test data are available for 5,066 (36%) of these live born children. For further information on the ALSPAC sample, please see section 5 of the "Guide to ALSPAC data" which can be found in the "Collaborator Pack" on the ALSPAC documentation CD.

## **General Coding/Transcription Rules**

- If remainders were written after a numeric answer, then "R" was written in a separate box next to the whole part of the numeric answer. The exact value of the remainder was not recorded.
- If fractions or decimals were written after a numeric answer, then "F" was written in a separate box next to the integer part of the numeric answer. The exact value of the fraction was not recorded. If only a fraction was written then "F" was written in a separate box and the answer boxes left blank.]
- Any non-standard answers that weren't a digit that would fit in a box were written alongside the box on the coding sheet so that they could be keyed as text. However, for such cases an asterisk only was actually keyed.

## **General Editing Rules**

- If a remainder was present then 10000 was added to the integer part of the answer and the resulting value labelled accordingly.
- If a fraction was present then 20000 was added to the integer part of the answer and the resulting value labelled accordingly.

## **File version history**

### Built version 1a – February 2007

The first published version of this data file.

### Built version 1b – December 2008

Data from children not eligible for ALSPAC have now been restricted and are no longer available for general use. Their records have therefore been removed. As a result of this action variable SD002 (eligibility indicator) is no longer required so has been dropped.

Due to the extension of direct access to ALSPAC data to non-ALSPAC staff and in order to comply with guidance issued in 1996 by the ALSPAC Law & Ethics Committee regarding the confidentiality of multiple pregnancies SD001 has been recoded to 2 "No" for the 5 children from triplet and quadruplet pregnancies for whom test data are available and all other variables set to -11. Note that 2 of these triplet/quadruplet children are not in the core sample.

Note that the frequency tables have not been updated to reflect these changes.

## Identifier Variables

### ALN & QLET

These are the standard ALSPAC child identifiers and are only available for records belonging to children who have been identified as being eligible for ALSPAC. For non-eligible children, ALN has been set to -2 and QLET to Z.

### Y4SCH

ALSPAC has devised a unique 9-digit identifier for schools called ALSPSCID, which is derived from the official DfES identifier set. Although schools will (generally) keep the same value of ALSPSCID across time, since children have the potential to move between schools, any indicator of which school a child is in is time dependent. Variable Y4SCH contains the appropriate values of ALSPSCID for each child when the Year 4 school questionnaires were administered. This information is only available for children attending schools within the local LEAs (value 1 in variable SD003a below). Note that two or more out-of-area children may actually attend the same school, but there is no way in which this can be ascertained from the data. Y4SCH is set to -2 for out-of-area children.

### Y4YEAR

This is the school year in which the data on each child were collected:

**y4year School year in which Year 4 data was collected**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5 1999 / 2000	7236	39.0	39.0	39.0
	6 2000 / 2001	4555	24.6	24.6	63.6
	7 2001 / 2002	6744	36.4	36.4	100.0
	Total	18535	100.0	100.0	

## Administrative Variables

### Data availability

Variable SD001 indicates whether or not the maths test data is available for each case. If this variable equals 2 ('No') then all other variables on this file (except for ALN, QLET & SD002) are set to -10.

#### sd001 Data available

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	18535	65.9	65.9	65.9
	2 No	9610	34.1	34.1	100.0
	Total	28145	100.0	100.0	

### ALSPAC Eligibility Indicator

Variable SD002 indicates whether or not each record has been identified as belonging to a child who was eligible for ALSPAC. In order to match the data in the SD file to data in other child-based built files it is necessary to first drop the non-eligible cases by selecting only those cases for whom SD002 = 1.

#### sd002 Child identified as ALSPAC eligible case

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	16436	58.4	58.4	58.4
	2 No	11709	41.6	41.6	100.0
	Total	28145	100.0	100.0	

### Region of Education

This is the area where the child attends school. The local LEAs are Bristol, South Gloucestershire, North Somerset and Bath & Northeast Somerset. For the non-local children the countries / regions have been grouped in order to maintain confidentiality.

#### sd003 Education region

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Local LEAs	17903	96.6	96.6	96.6
	2 Rest of England, Wales & Northern Ireland	543	2.9	2.9	99.5
	3 Scotland & Republic of Ireland	29	.2	.2	99.7
	4 Continental Europe	15	.1	.1	99.8
	5 USA & Canada	20	.1	.1	99.9
	6 Australia & New Zealand	11	.1	.1	99.9
	7 Elsewhere in world	14	.1	.1	100.0
	Total	18535	100.0	100.0	

An indicator of whether the child was local or not was derived as SD003a by recoding 2 - 7 as 2 in SD003.

#### sd003a Education region (summary)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Local	17903	96.6	96.6	96.6
	2 Not local	632	3.4	3.4	100.0
	Total	18535	100.0	100.0	

## Type of School

This information is only available for children attending schools within the local LEAs (value 1 in variable SD003a above).

### sd004 Type of school

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Primary	16924	91.3	94.5	94.5
	3 Special	15	.1	.1	94.6
	4 Private	964	5.2	5.4	100.0
	Total	17903	96.6	100.0	
Missing	-2 Not local	632	3.4		
Total		18535	100.0		

## Education Authority

This information is only available for children attending local Primary and Infant schools (values 1 & 2 in variable SD004 above).

### sd005 Education authority

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Bristol	5294	28.6	31.3	31.3
	2 Bath & North East Somerset	1828	9.9	10.8	42.1
	3 South Gloucestershire	6167	33.3	36.4	78.5
	4 North Somerset	3635	19.6	21.5	100.0
	Total	16924	91.3	100.0	
Missing	-3 Private / Special	979	5.3		
	-2 Not local	632	3.4		
	Total	1611	8.7		
Total		18535	100.0		

## Child is in Correct School Year

An indicator of whether the child was in the correct year according to their date of birth (see table 1) at the time of the year 4 data collection was derived as SD006:

### sd006 Child is in correct school year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	17742	95.7	98.1	98.1
	2 No	339	1.8	1.9	100.0
	Total	18081	97.6	100.0	
Missing	-1 Missing/invalid date of birth	454	2.4		
Total		18535	100.0		



**School Grouping Identifier**

Variable SD008 identifies the school groupings of the children. It is a 11-digit code that is a combination of Y4SCH and Y4YEAR. The first 9 digits are the school code (Y4SCH) and the 10<sup>th</sup> and 11<sup>th</sup> digits identify the year in which the data were collected (Y4YEAR). So children that share values of SD008 were all taught at the same school in the same year. Again, it is missing where Y4SCH is missing. Note that on the SA files the equivalent variable (SA008) is a class grouping identifier. This cannot be exactly replicated here as we have no identifier of class groupings within schools.

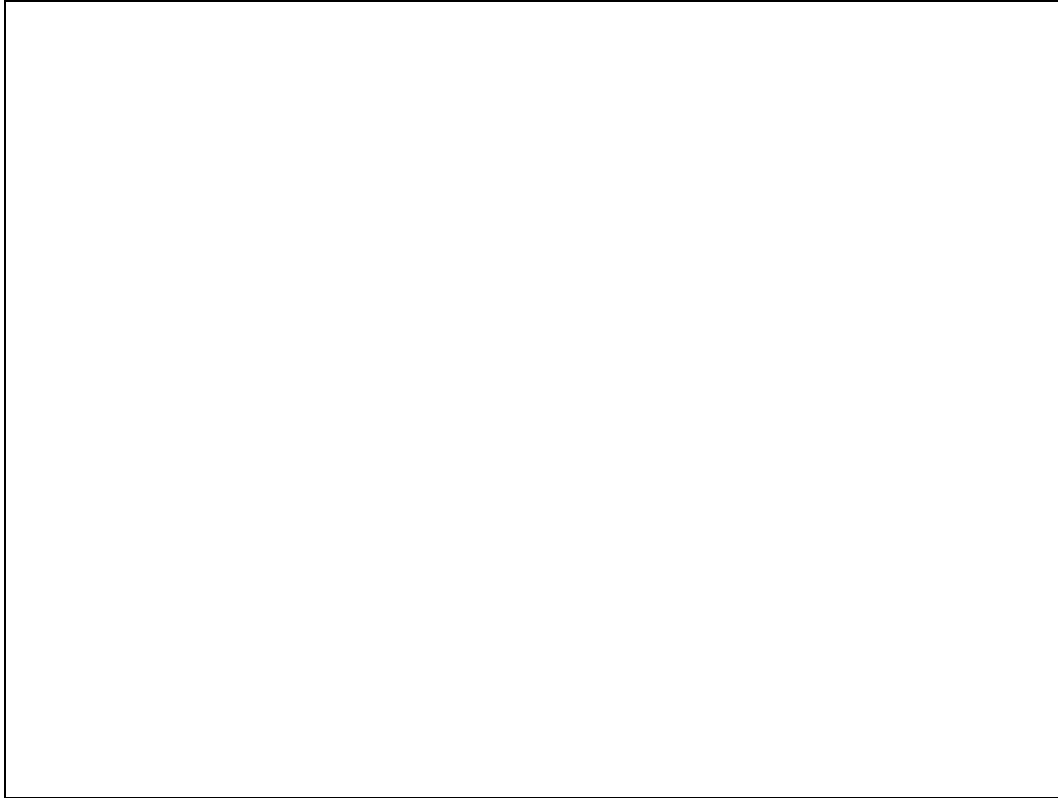


An assessment of the development of  
mathematical concepts

Teacher's administration booklet

October 1999





All the children have their own answer booklet where they can work out their answers, in rough, in the 'rough paper' before giving their answers in the boxes provided. Encourage the children to use this space for doing anything that may help them solve the problem - drawing, writing, doing sums etc.

Please read the instructions and allow the children enough time to attempt each question. If you feel you need to rephrase any instructions, feel free to do so as long as you ensure that you are not giving the children extra clues.

Please make sure that each child has a pencil and that there are no rulers on the tables before you start the assessment.

Date \_\_\_\_\_

School \_\_\_\_\_

Class \_\_\_\_\_

Birthday \_\_\_\_\_



(Second page of children's booklet)

## Date of Birth

The dates of birth were validated on receipt of the test booklets with reference to the class lists and corrected/completed if necessary. The month & year of the child's birth, as completed on the test booklet, are presented as variables SD191a & SD191b. For ALSPAC eligible children with test data (i.e. those for whom SD002 = 1 and SD001 = 1) these variables have been set to -2, as variables MZ024a & MZ024b should be used in preference.

### sd191a Month of birth (reported)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 January	1090	5.9	9.7	9.7
	2 February	1088	5.9	9.7	19.4
	3 March	1238	6.7	11.0	30.4
	4 April	926	5.0	8.2	38.6
	5 May	935	5.0	8.3	46.9
	6 June	893	4.8	7.9	54.8
	7 July	950	5.1	8.4	63.3
	8 August	930	5.0	8.3	71.5
	9 September	839	4.5	7.5	79.0
	10 October	788	4.3	7.0	86.0
	11 November	805	4.3	7.2	93.1
	12 December	773	4.2	6.9	100.0
	Total	11255	60.7	100.0	
Missing	-2 ALSPAC child	6826	36.8		
	-1 Missing	454	2.4		
	Total	7280	39.3		
Total		18535	100.0		

### sd191b Year of birth (reported)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1989	5	.0	.0	.0
	1990	2172	11.7	19.3	19.3
	1991	3381	18.2	30.0	49.4
	1992	1489	8.0	13.2	62.6
	1993	4193	22.6	37.3	99.9
	1994	14	.1	.1	100.0
	1995	1	.0	.0	100.0
	Total	11255	60.7	100.0	
Missing	-2 ALSPAC child	6826	36.8		
	-1 Missing	454	2.4		
	Total	7280	39.3		
Total		18535	100.0		

### Date of Test

The date of testing was checked for invalid day / month combinations. Incomplete dates were completed if possible by comparison with other children in the same school. If after this process either month or year of testing was missing then all components of the date were set to -1. If day only was missing then it was set to 15 and this action flagged in variable SD196c. Month & year of testing was retained on the built file, but day was dropped.

#### sd196a Date of test (month)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 January	1994	10.8	10.8	10.8
	2 February	1426	7.7	7.7	18.5
	3 March	2213	11.9	12.0	30.5
	4 April	419	2.3	2.3	32.8
	5 May	324	1.7	1.8	34.6
	6 June	57	.3	.3	34.9
	7 July	64	.3	.3	35.2
	10 October	1947	10.5	10.6	45.8
	11 November	7100	38.3	38.5	84.3
	12 December	2899	15.6	15.7	100.0
	Total	18443	99.5	100.0	
Missing	-1 Missing	92	.5		
Total		18535	100.0		

#### sd196b Date of test (year)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1999	3489	18.8	18.9	18.9
	2000	6318	34.1	34.3	53.2
	2001	7784	42.0	42.2	95.4
	2002	852	4.6	4.6	100.0
	Total	18443	99.5	100.0	
Missing	-1 Missing	92	.5		
Total		18535	100.0		

#### sd196c Day of testing imputed as 15th

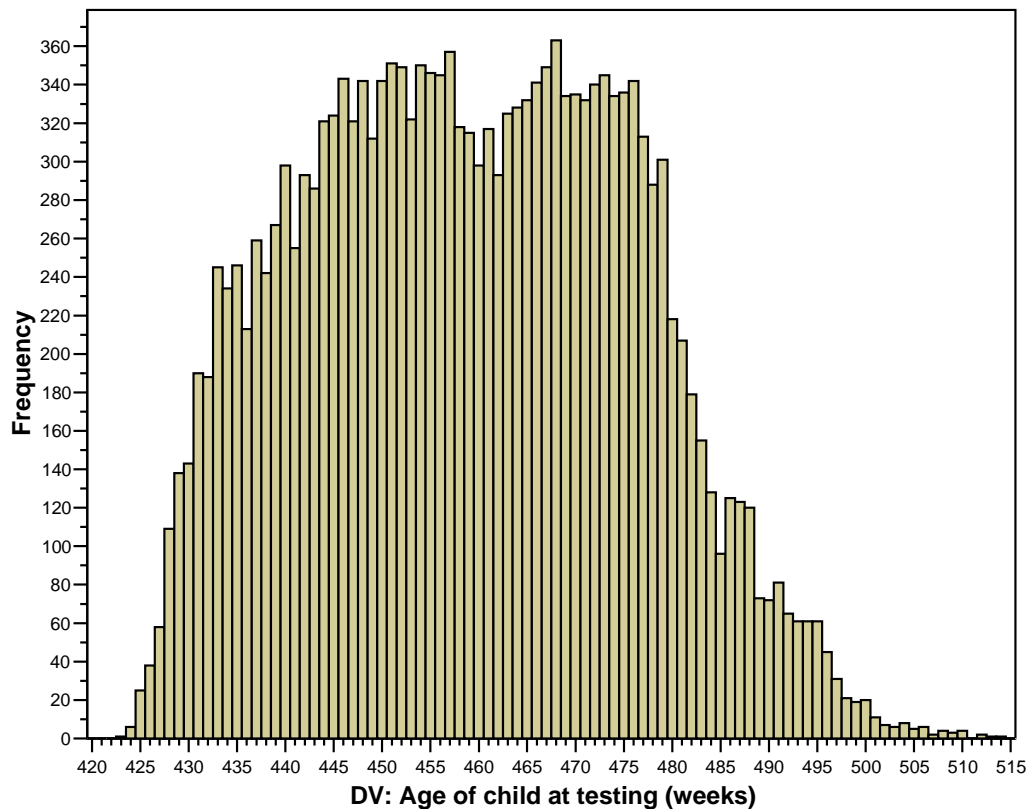
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	27	.1	.1	.1
	2 No	18508	99.9	99.9	100.0
	Total	18535	100.0	100.0	

## Derived Variables

### Age at Testing

The child's age at testing was calculated in both weeks and months from the date of testing and the child's date of birth. For ALSPAC children the date of birth was taken from central records. For non-ALSPAC children the child-reported date of birth was used. If the day of birth was missing but the month and year were not then the day was assumed to be 15. Variable SD197c indicates the cases for which this assumption was made.

### sd197b (Cases in expected school year, i.e. SD006 = 1)



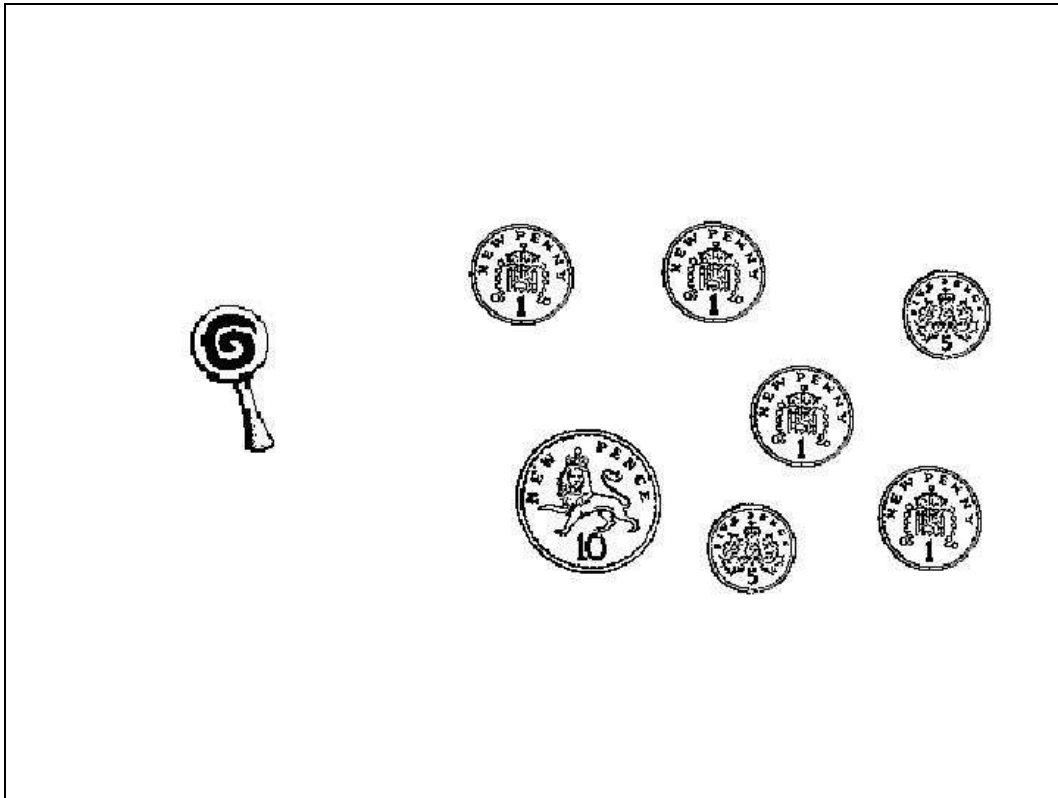
### sd197c Day of birth imputed as 15th

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	103	.6	.6	.6
	2 No	17895	96.5	99.4	100.0
	Total	17998	97.1	100.0	
Missing	-3 Missing/invalid dob & dot	9	.0		
	-2 Missing/invalid date of test	83	.4		
	-1 Missing/invalid date of birth	445	2.4		
	Total	537	2.9		
Total		18535	100.0		

**sd197a DV: Age of child at testing (months)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	70	1	.0	.0	.0
	78	1	.0	.0	.0
	82	1	.0	.0	.0
	83	1	.0	.0	.0
	85	1	.0	.0	.0
	86	1	.0	.0	.0
	87	4	.0	.0	.1
	88	4	.0	.0	.1
	89	5	.0	.0	.1
	90	7	.0	.0	.1
	91	2	.0	.0	.2
	92	1	.0	.0	.2
	93	1	.0	.0	.2
	94	7	.0	.0	.2
	95	11	.1	.1	.3
	96	18	.1	.1	.4
	97	58	.3	.3	.7
	98	441	2.4	2.5	3.1
	99	912	4.9	5.1	8.2
	100	1080	5.8	6.0	14.2
	101	1204	6.5	6.7	20.9
	102	1418	7.7	7.9	28.8
	103	1483	8.0	8.2	37.0
	104	1435	7.7	8.0	45.0
	105	1422	7.7	7.9	52.9
	106	1369	7.4	7.6	60.5
	107	1504	8.1	8.4	68.9
	108	1457	7.9	8.1	76.9
	109	1441	7.8	8.0	85.0
	110	1048	5.7	5.8	90.8
	111	578	3.1	3.2	94.0
	112	424	2.3	2.4	96.3
	113	303	1.6	1.7	98.0
	114	152	.8	.8	98.9
	115	71	.4	.4	99.3
	116	41	.2	.2	99.5
	117	31	.2	.2	99.7
	118	16	.1	.1	99.8
	119	14	.1	.1	99.8
	120	10	.1	.1	99.9
	121	6	.0	.0	99.9
	122	7	.0	.0	100.0
	124	1	.0	.0	100.0
	125	1	.0	.0	100.0
	126	1	.0	.0	100.0
	127	2	.0	.0	100.0
	129	2	.0	.0	100.0
	Total	17998	97.1	100.0	
Missing	-3 Missing/invalid dob & dot	9	.0		
	-2 Missing/invalid date of test	83	.4		
	-1 Missing/invalid date of birth	445	2.4		
	Total	537	2.9		
Total		18535	100.0		





The lolly costs 8p.

Tick the coins you need to pay the exact money.

[Coding: If a correct combination of coins was indicated then the “yes” box was ticked for item 4 on the coding sheet. If an incorrect combination of coins was indicated then the “no” box was ticked. If no coins were indicated, i.e. the question was not attempted, then neither box was ticked.]

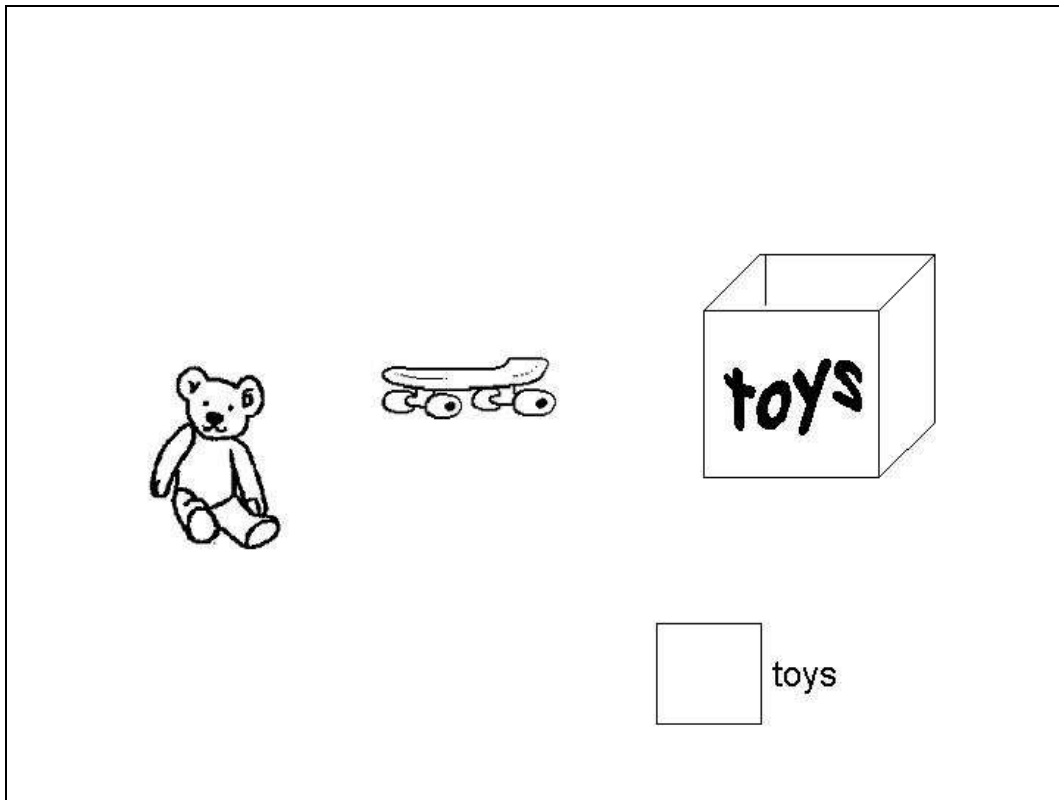
[Editing: The variable for the response recorded on the coding sheet was called SD010. An indicator of whether the question was attempted was derived as SD012 by recoding (-1 = 2)(1, 2 = 1) in SD010. Values of -1 in SD010 were then recoded to 2.]

**sd010 Qu.1 (# coins) correct**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 Yes	17153	92.5	92.5	92.5
2 No	1382	7.5	7.5	100.0
Total	18535	100.0	100.0	

**sd012 Qu.1 (# coins) attempted**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 Yes	18457	99.6	99.6	99.6
2 No	78	.4	.4	100.0
Total	18535	100.0	100.0	



The boy has 12 toys altogether.

You can see 2 of his toys, the rest are in the box.

How many toys are in the box?

Write your answer in the box.

[Coding: The number written was copied into the boxes in item 5 on the coding sheet.]

[Editing: The response recorded on the coding sheet is presented as SD021. An indicator of whether the child got the answer correct was derived as SD020 by recoding (10 = 1)(else = 2) in SD021. An indicator of whether the child attempted the question was derived as SD022 by recoding (-1 = 2)(else = 1) in SD021.]

**sd020 Qu.2 (# toys) correct**

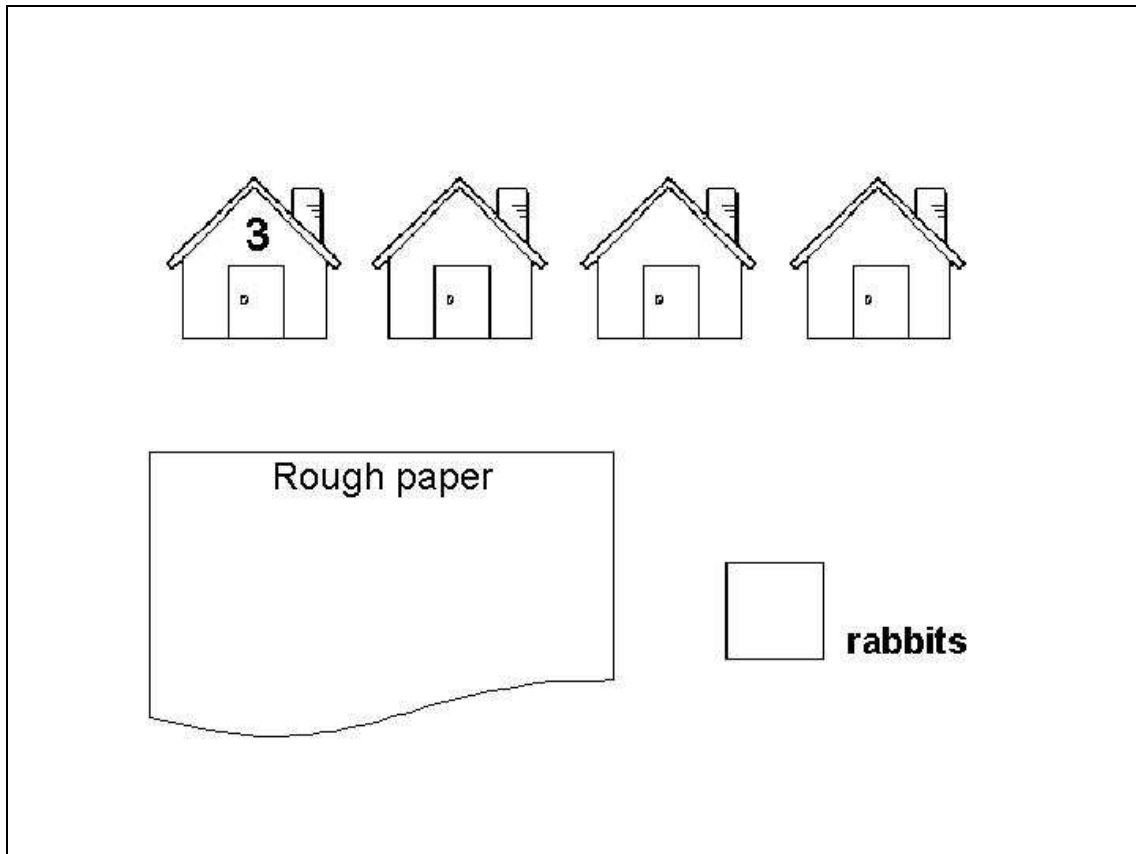
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 Yes	17367	93.7	93.7	93.7
2 No	1168	6.3	6.3	100.0
Total	18535	100.0	100.0	

**sd021 Qu.2 (# toys): Response**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	11	.1	.1	.1
1	12	.1	.1	.1
2	34	.2	.2	.3
3	7	.0	.0	.3
4	23	.1	.1	.5
5	16	.1	.1	.6
6	38	.2	.2	.8
7	12	.1	.1	.8
8	58	.3	.3	1.1
9	205	1.1	1.1	2.3
10	17367	93.7	94.0	96.3
11	54	.3	.3	96.6
12	198	1.1	1.1	97.6
13	18	.1	.1	97.7
14	329	1.8	1.8	99.5
15	10	.1	.1	99.6
16	11	.1	.1	99.6
17	4	.0	.0	99.7
18	11	.1	.1	99.7
19	5	.0	.0	99.7
20	12	.1	.1	99.8
21	4	.0	.0	99.8
22	6	.0	.0	99.9
23	2	.0	.0	99.9
24	6	.0	.0	99.9
25	4	.0	.0	99.9
28	3	.0	.0	99.9
41	5	.0	.0	100.0
91	1	.0	.0	100.0
100	1	.0	.0	100.0
112	2	.0	.0	100.0
144	1	.0	.0	100.0
30000 Other response	1	.0	.0	100.0
Total	18471	99.7	100.0	
Missing -1 Not attempted	64	.3		
Total	18535	100.0		

**sd022 Qu.2 (# toys) attempted**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	18471	99.7	99.7	99.7
	2 No	64	.3	.3	100.0
	Total	18535	100.0	100.0	



3 rabbits live in each house.

How many rabbits altogether live in the 4 houses?

Write your answer in the box.

[Coding: The number written was copied into the boxes in item 6 on the coding sheet.]

[Editing: The response recorded on the coding sheet is presented as SD031. An indicator of whether the child got the answer correct was derived as SD030 by recoding (12 = 1)(else = 2) in SD021. An indicator of whether the child attempted the question was derived as SD022 by recoding (-1 = 2)(else = 1) in SD021.]

**sd030 Qu.3 (# rabbits) correct**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	17236	93.0	93.0	93.0
	2 No	1299	7.0	7.0	100.0
	Total	18535	100.0	100.0	

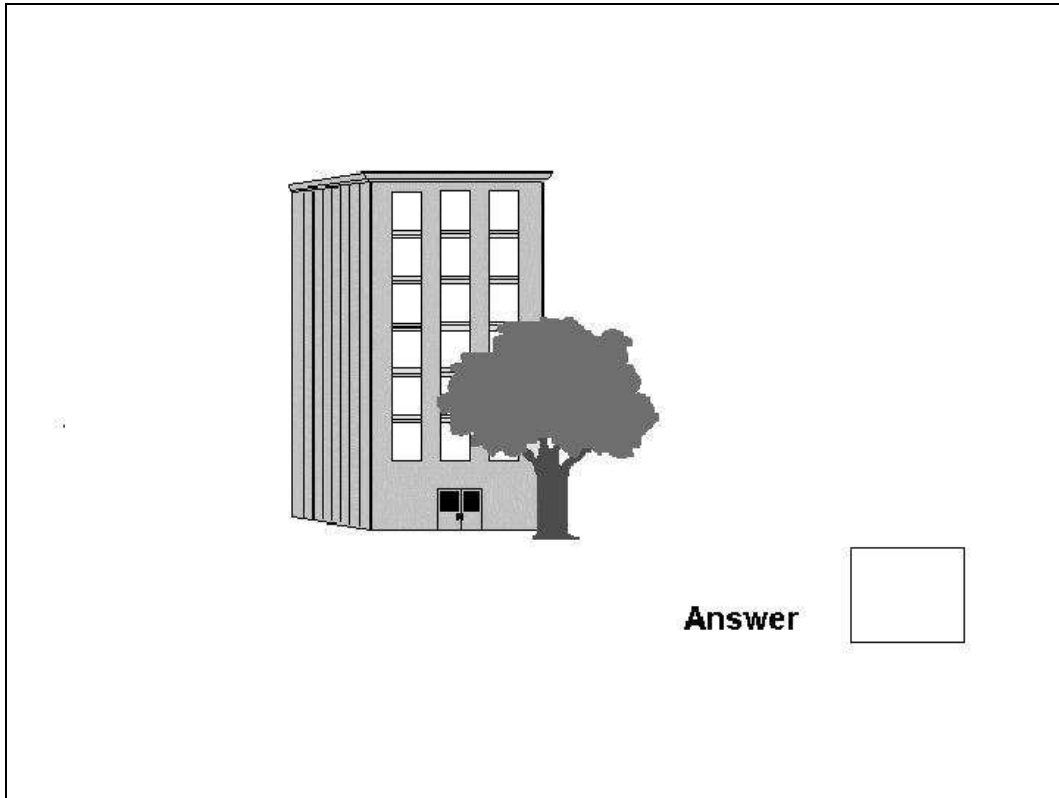
**sd031 Qu.3 (# rabbits): Response**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	5	.0	.0	.0
1	56	.3	.3	.3
2	24	.1	.1	.5
3	125	.7	.7	1.1
4	143	.8	.8	1.9
5	16	.1	.1	2.0
6	64	.3	.3	2.4
7	31	.2	.2	2.5
8	36	.2	.2	2.7
9	85	.5	.5	3.2
10	49	.3	.3	3.4
11	71	.4	.4	3.8
12	17236	93.0	93.6	97.4
13	72	.4	.4	97.8
14	31	.2	.2	98.0
15	185	1.0	1.0	99.0
16	48	.3	.3	99.2
17	10	.1	.1	99.3
18	47	.3	.3	99.5
19	8	.0	.0	99.6
20	8	.0	.0	99.6
21	17	.1	.1	99.7
23	2	.0	.0	99.7
24	24	.1	.1	99.9
25	1	.0	.0	99.9
26	4	.0	.0	99.9
30	7	.0	.0	99.9
31	1	.0	.0	99.9
34	1	.0	.0	99.9
35	1	.0	.0	99.9
36	1	.0	.0	99.9
49	1	.0	.0	100.0
50	1	.0	.0	100.0
60	2	.0	.0	100.0
66	1	.0	.0	100.0
71	1	.0	.0	100.0
444	1	.0	.0	100.0
610	1	.0	.0	100.0
10003 3 + Remainder	1	.0	.0	100.0
20002 2 + Fraction	1	.0	.0	100.0
Total	18419	99.4	100.0	
Missing -1 Not attempted	116	.6		
Total	18535	100.0		

**sd032 Qu.3 (# rabbits) attempted**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 Yes	18419	99.4	99.4	99.4
2 No	116	.6	.6	100.0
Total	18535	100.0	100.0	





You cannot see all the windows on the building because some are behind the tree.

How many windows are there altogether?

Put your answer in the box.

[Coding: The number written was copied into the boxes in item 7 on the coding sheet.]

[Editing: The response recorded on the coding sheet is presented as SD041. An indicator of whether the child got the answer correct was derived as SD040 by recoding (18 = 1)(else = 2) in SD041. An indicator of whether the child attempted the question was derived as SD042 by recoding (-1 = 2)(else = 1) in SD041.]

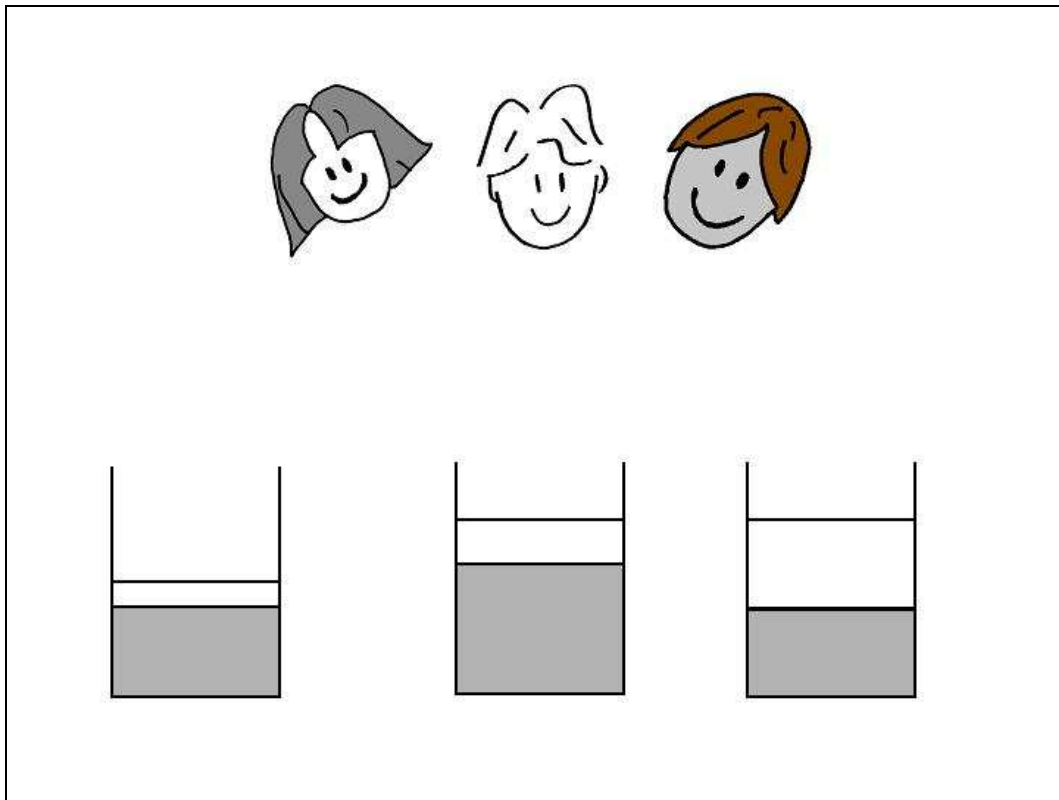
**sd040 Qu.4 (# windows) correct**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	16636	89.8	89.8	89.8
	2 No	1899	10.2	10.2	100.0
	Total	18535	100.0	100.0	

Frequency table for SD041 not included as it is too long.

**sd042 Qu.4 (# windows) attempted**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	18484	99.7	99.7	99.7
	2 No	51	.3	.3	100.0
	Total	18535	100.0	100.0	



Three children are making orange squash  
(if the children don't understand this, try saying that the  
children are making a brand name drink like Ribena or  
Kia-ora).

In the picture the orange squash is grey and the water is  
white. The children then stir their drinks.

The drink in two glasses will taste the same.

Which two glasses? Tick them.

[Coding: The ticks were copied into the boxes (numbered i to iii from left to right) in item 8 on the coding sheet.]

[Editing: The responses recorded on the coding sheet are presented as SD053 to SD055. A single variable summarising the response was derived as SD051. An indicator of whether the child got the answer correct was derived as SD050 by recoding (3 = 1)(else = 2) in SD051. An indicator of whether the child attempted the question was derived as SD052 by recoding (-1 = 2)(else = 1) in SD051.]

**sd050 Qu.5 (orange squash 1) correct**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 Yes	6101	32.9	32.9	32.9
2 No	12434	67.1	67.1	100.0
Total	18535	100.0	100.0	

**sd051 Qu.5 (orange squash 1): Response**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 Glass 1	18	.1	.1	.1
2 Glass 2	17	.1	.1	.2
3 Glasses 1 & 2	6101	32.9	33.2	33.4
4 Glass 3	44	.2	.2	33.6
5 Glasses 1 & 3	6560	35.4	35.7	69.3
6 Glasses 2 & 3	5610	30.3	30.5	99.8
7 Glasses 1, 2 & 3	38	.2	.2	100.0
Total	18388	99.2	100.0	
Missing -1 Not attempted	147	.8		
Total	18535	100.0		

**sd052 Qu.5 (orange squash 1) attempted**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 Yes	18388	99.2	99.2	99.2
2 No	147	.8	.8	100.0
Total	18535	100.0	100.0	

**sd053 Qu.5 (orange squash 1): Glass 1 ticked**

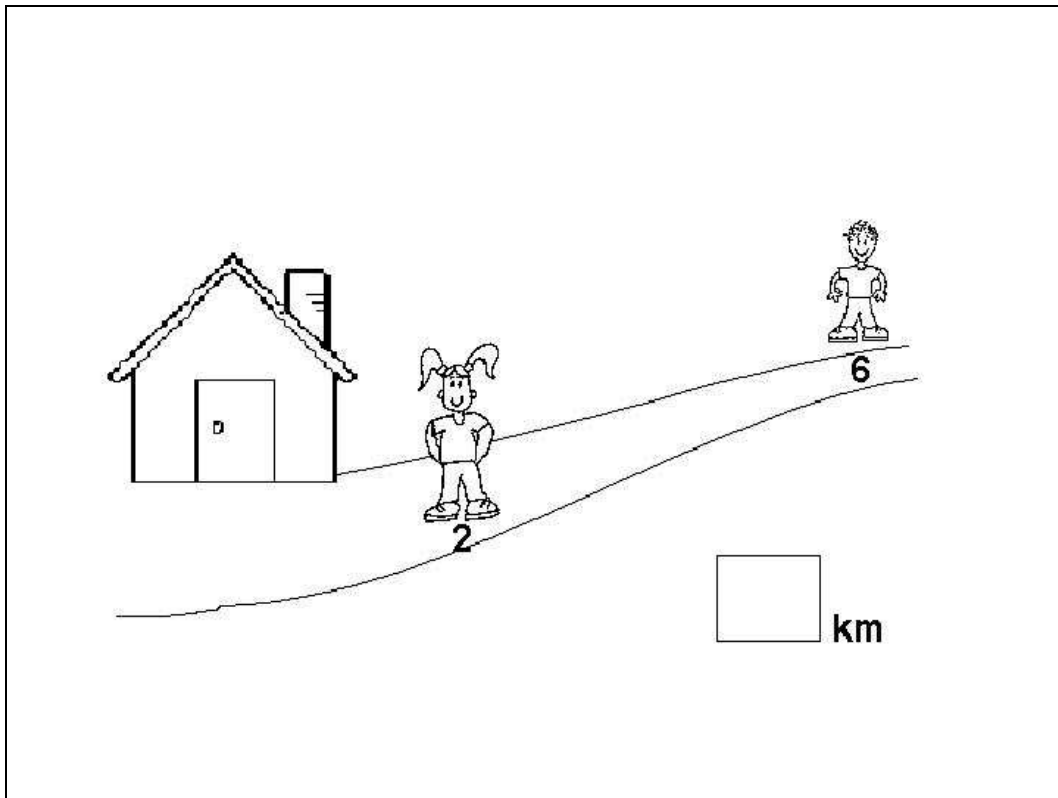
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	12717	68.6	68.6	68.6
	2 No	5818	31.4	31.4	100.0
	Total	18535	100.0	100.0	

**sd054 Qu.5 (orange squash 1): Glass 2 ticked**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	11766	63.5	63.5	63.5
	2 No	6769	36.5	36.5	100.0
	Total	18535	100.0	100.0	

**sd055 Qu.5 (orange squash 1): Glass 3 ticked**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	12252	66.1	66.1	66.1
	2 No	6283	33.9	33.9	100.0
	Total	18535	100.0	100.0	



Two friends were walking on the beach.

They started walking from the house and walked in the same direction.

The girl stopped and the boy went on.

The girl walked 2km from the house and the boy walked 6km from the house.

How far apart are the two friends?

Write your answer in the box.

[Coding: The number written was copied into the boxes in item 9 on the coding sheet.]

[Editing: The response recorded on the coding sheet is presented as SD061. An indicator of whether the child got the answer correct was derived as SD060 by recoding (4 = 1)(else = 2) in SD061. An indicator of whether the child attempted the question was derived as SD062 by recoding (-1 = 2)(else = 1) in SD061.]

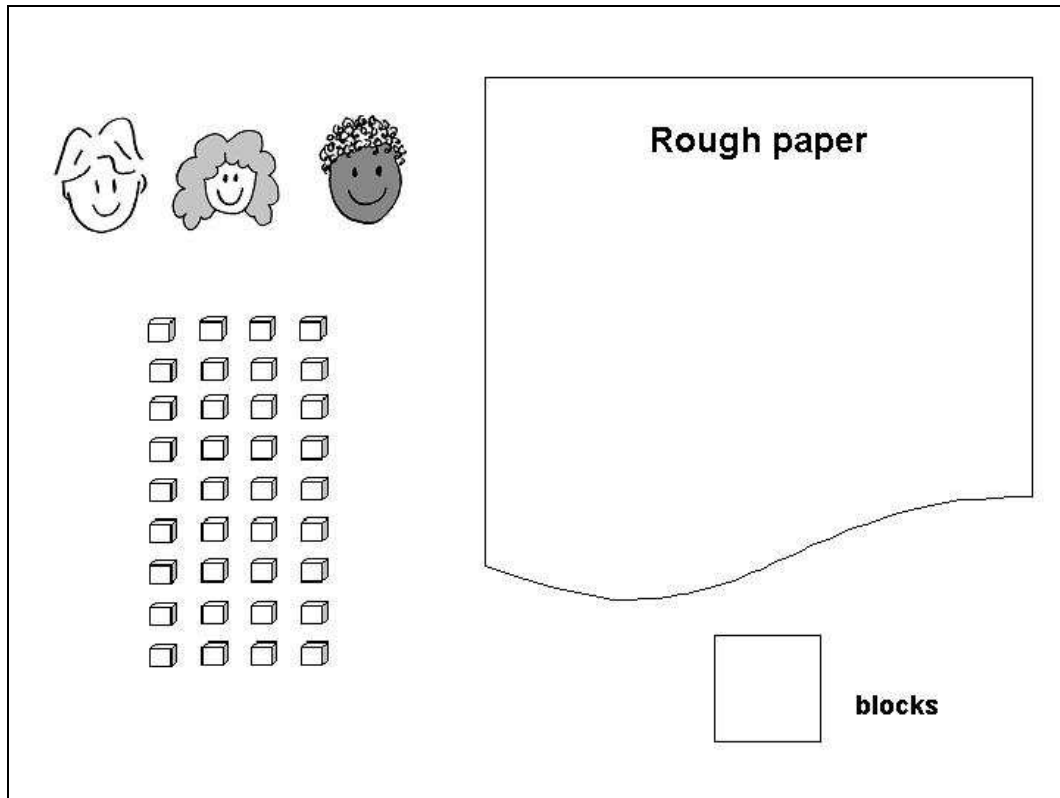
**sd060 Qu.6 (distance apart 1) correct**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 Yes	13506	72.9	72.9	72.9
2 No	5029	27.1	27.1	100.0
Total	18535	100.0	100.0	

Frequency table for SD061 not included as it is too long.

**sd062 Qu.6 (distance apart 1) attempted**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 Yes	18350	99.0	99.0	99.0
2 No	185	1.0	1.0	100.0
Total	18535	100.0	100.0	



Three children are sharing 36 blocks with each other.

How many blocks will each child get?

Write your answer in the box.



[Coding: The number written was copied into the boxes in item 10 on the coding sheet.]

[Editing: The response recorded on the coding sheet is presented as SD071. An indicator of whether the child got the answer correct was derived as SD070 by recoding (12 = 1)(else = 2) in SD071. An indicator of whether the child attempted the question was derived as SD072 by recoding (-1 = 2)(else = 1) in SD071.]

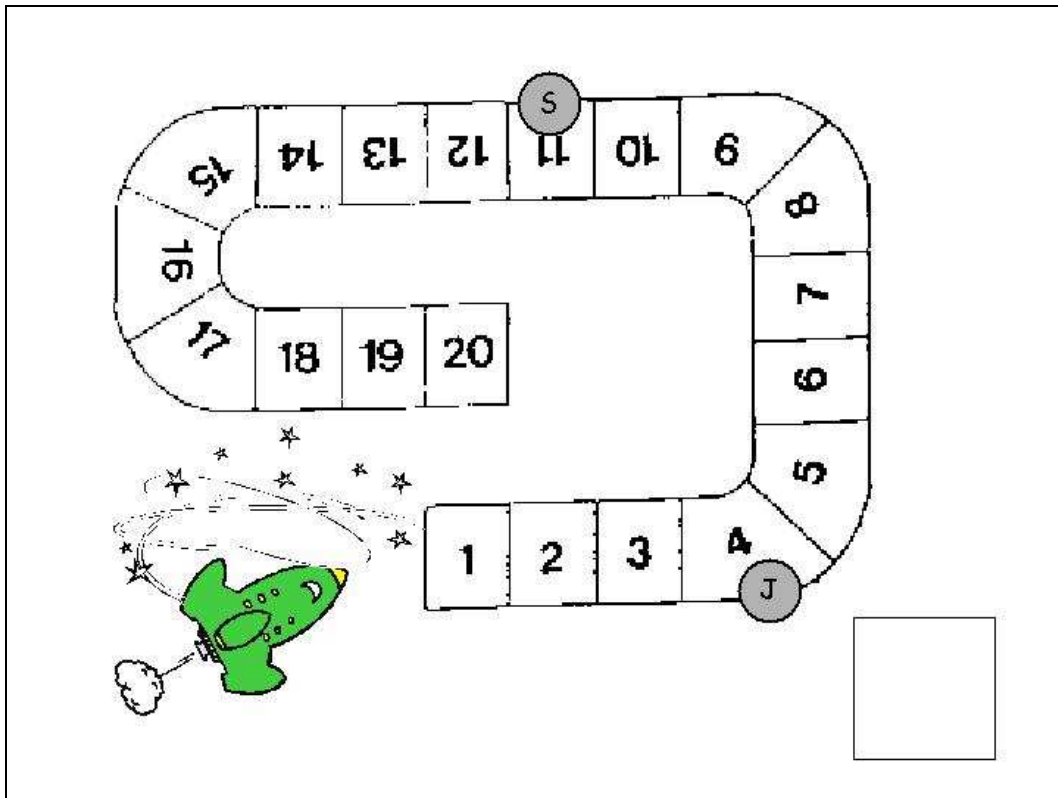
**sd070 Qu.7 (# blocks) correct**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	11471	61.9	61.9	61.9
	2 No	7064	38.1	38.1	100.0
	Total	18535	100.0	100.0	

Frequency table for SD071 not included as it is too long.

**sd072 Qu.7 (# blocks) attempted**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	17717	95.6	95.6	95.6
	2 No	818	4.4	4.4	100.0
	Total	18535	100.0	100.0	



Jamal and Serena are playing a game.

Jamal is at number 4.

Serena is at number 11.

Serena is winning.

How many squares ahead is Serena?

Put your answer in the box.

[Coding: The number written was copied into the boxes in item 11 on the coding sheet.]

[Editing: The response recorded on the coding sheet is presented as SD081. An indicator of whether the child got the answer correct was derived as SD080 by recoding (7 = 1)(else = 2) in SD081. An indicator of whether the child attempted the question was derived as SD082 by recoding (-1 = 2)(else = 1) in SD081.]

**sd080 Qu.8 (# squares ahead) correct**

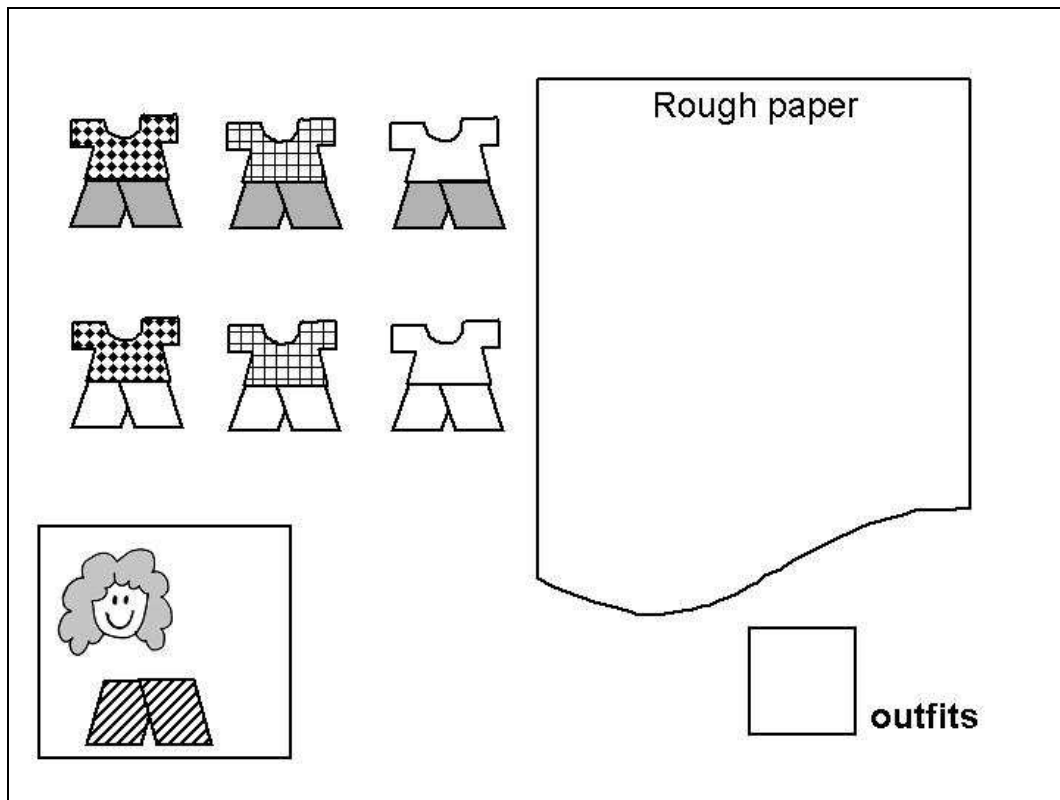
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 Yes	9101	49.1	49.1	49.1
2 No	9434	50.9	50.9	100.0
Total	18535	100.0	100.0	

**sd081 Qu.8 (# squares ahead): Response**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	7	.0	.0	.0
2	14	.1	.1	.1
3	5	.0	.0	.1
4	9	.0	.0	.2
5	35	.2	.2	.4
6	8188	44.2	44.3	44.7
7	9101	49.1	49.3	94.0
8	488	2.6	2.6	96.7
9	416	2.2	2.3	98.9
10	67	.4	.4	99.3
11	72	.4	.4	99.7
12	10	.1	.1	99.7
13	2	.0	.0	99.7
15	5	.0	.0	99.8
16	6	.0	.0	99.8
17	2	.0	.0	99.8
18	1	.0	.0	99.8
19	2	.0	.0	99.8
20	10	.1	.1	99.9
22	2	.0	.0	99.9
45	1	.0	.0	99.9
65	1	.0	.0	99.9
68	1	.0	.0	99.9
70	1	.0	.0	99.9
75	2	.0	.0	99.9
88	1	.0	.0	99.9
411	1	.0	.0	99.9
30000 Other response	15	.1	.1	100.0
Total	18465	99.6	100.0	
Missing -1 Not attempted	70	.4		
Total	18535	100.0		

**sd082 Qu.8 (# squares ahead) attempted**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	18465	99.6	99.6	99.6
	2 No	70	.4	.4	100.0
	Total	18535	100.0	100.0	



A girl has two pairs of shorts and three t-shirts.  
She can make six outfits. Look at the drawing and see the different outfits she can make.

The girl goes out and buys one more pair of shorts.

How many outfits altogether can the girl make now with three pairs of shorts and three t-shirts?

Write your answer in the box.

[Coding: The number written was copied into the boxes in item 12 on the coding sheet.]

[Editing: The response recorded on the coding sheet is presented as SD091. An indicator of whether the child got the answer correct was derived as SD090 by recoding (9 = 1)(else = 2) in SD091. An indicator of whether the child attempted the question was derived as SD092 by recoding (-1 = 2)(else = 1) in SD091.]

Note that the frequency table for variable SD091 is split into 2 parts because of its size.

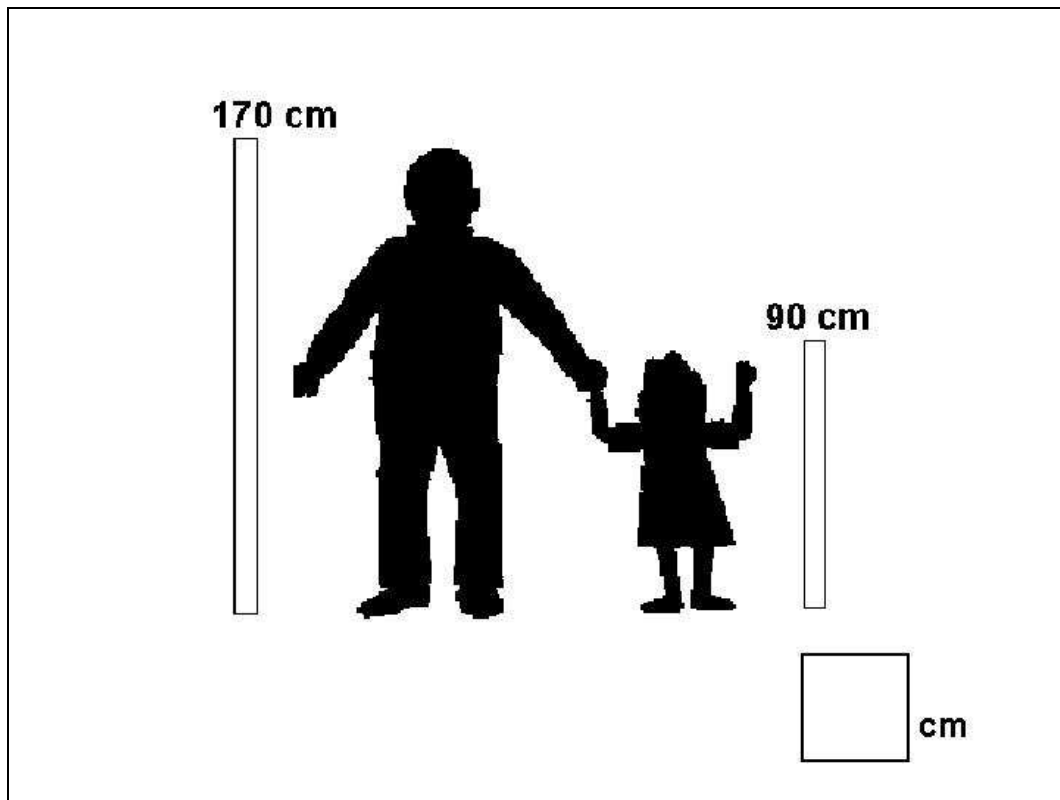
**sd090 Qu.9 (# outfits) correct**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 Yes	4333	23.4	23.4	23.4
2 No	14202	76.6	76.6	100.0
Total	18535	100.0	100.0	

Frequency table for SD091 not included as it is too long.

**sd092 Qu.9 (# outfits) attempted**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 Yes	18067	97.5	97.5	97.5
2 No	468	2.5	2.5	100.0
Total	18535	100.0	100.0	



Daddy and Claire are measuring themselves on their height charts.

They have two height charts that are the same height as them.

Daddy's height chart is 170cm long.

Claire's height chart is 90cm long.

Daddy is taller. How much taller is he?

Write your answer in the box.

[Coding: The number written was copied into the boxes in item 13 on the coding sheet.]

[Editing: The response recorded on the coding sheet is presented as SD101. An indicator of whether the child got the answer correct was derived as SD100 by recoding (80 = 1)(else = 2) in SD101. An indicator of whether the child attempted the question was derived as SD102 by recoding (-1 = 2)(else = 1) in SD101.]

**sd100 Qu.10 (height difference) correct**

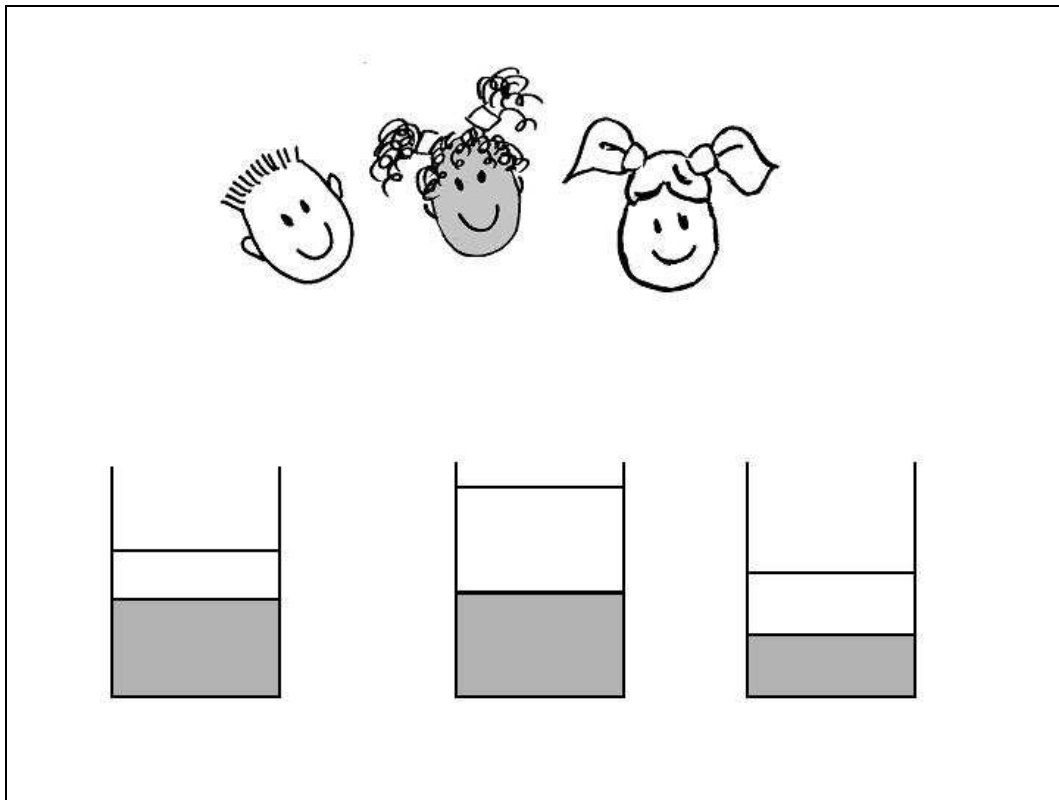
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 Yes	12903	69.6	69.6	69.6
2 No	5632	30.4	30.4	100.0
Total	18535	100.0	100.0	

Frequency table for SD101 not included as it is too long.

**sd102 Qu.10 (height difference) attempted**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 Yes	18011	97.2	97.2	97.2
2 No	524	2.8	2.8	100.0
Total	18535	100.0	100.0	





Three children are making orange squash  
(if the children don't understand this, try saying that the  
children are making a brand name drink like Ribena or  
Kia-ora).

In the picture the orange squash is grey and the water is  
white. The children then stir their drinks.

The drink in two glasses will taste the same.

Which two glasses? Tick them.

[Coding: The ticks were copied into the boxes (numbered i to iii from left to right) in item 14 on the coding sheet.]

[Editing: The responses recorded on the coding sheet are presented as SD113 to SD115. A single variable summarising the response was derived as SD111. An indicator of whether the child got the answer correct was derived as SD110 by recoding (6 = 1)(else = 2) in SD111. An indicator of whether the child attempted the question was derived as SD112 by recoding (-1 = 2)(else = 1) in SD111.]

**sd110 Qu.5 (orange squash 1) correct**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 Yes	2910	15.7	15.7	15.7
2 No	15625	84.3	84.3	100.0
Total	18535	100.0	100.0	

**sd111 Qu.5 (orange squash 1): Response**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 Glass 1	16	.1	.1	.1
2 Glass 2	17	.1	.1	.2
3 Glasses 1 & 2	5514	29.7	30.3	30.4
4 Glass 3	15	.1	.1	30.5
5 Glasses 1 & 3	9729	52.5	53.4	83.9
6 Glasses 2 & 3	2910	15.7	16.0	99.9
7 Glasses 1, 2 & 3	21	.1	.1	100.0
Total	18222	98.3	100.0	
Missing -1 Not attempted	313	1.7		
Total	18535	100.0		

**sd112 Qu.5 (orange squash 1) attempted**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 Yes	18222	98.3	98.3	98.3
2 No	313	1.7	1.7	100.0
Total	18535	100.0	100.0	

**sd113 Qu.5 (orange squash 1): Glass 1 ticked**

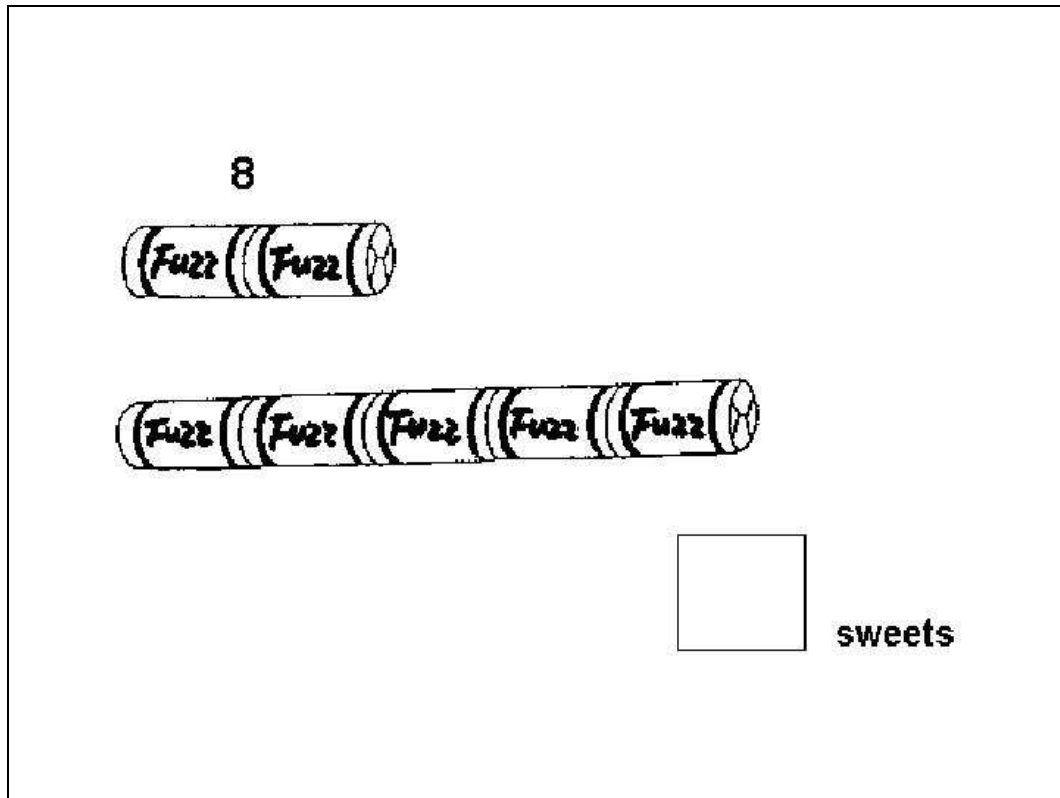
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 Yes	15280	82.4	82.4	82.4
2 No	3255	17.6	17.6	100.0
Total	18535	100.0	100.0	

**sd114 Qu.5 (orange squash 1): Glass 2 ticked**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 Yes	8462	45.7	45.7	45.7
2 No	10073	54.3	54.3	100.0
Total	18535	100.0	100.0	

**sd115 Qu.5 (orange squash 1): Glass 3 ticked**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 Yes	12675	68.4	68.4	68.4
2 No	5860	31.6	31.6	100.0
Total	18535	100.0	100.0	



The roll on top has 8 sweets.

How many sweets do you think there are in the big roll below?

Write you answer in the empty box.

[Coding: The number written was copied into the boxes in item 15 on the coding sheet.]

[Editing: The response recorded on the coding sheet is presented as SD121. An indicator of whether the child got the answer correct was derived as SD120 by recoding (20 = 1)(else = 2) in SD121. An indicator of whether the child attempted the question was derived as SD122 by recoding (-1 = 2)(else = 1) in SD121.]

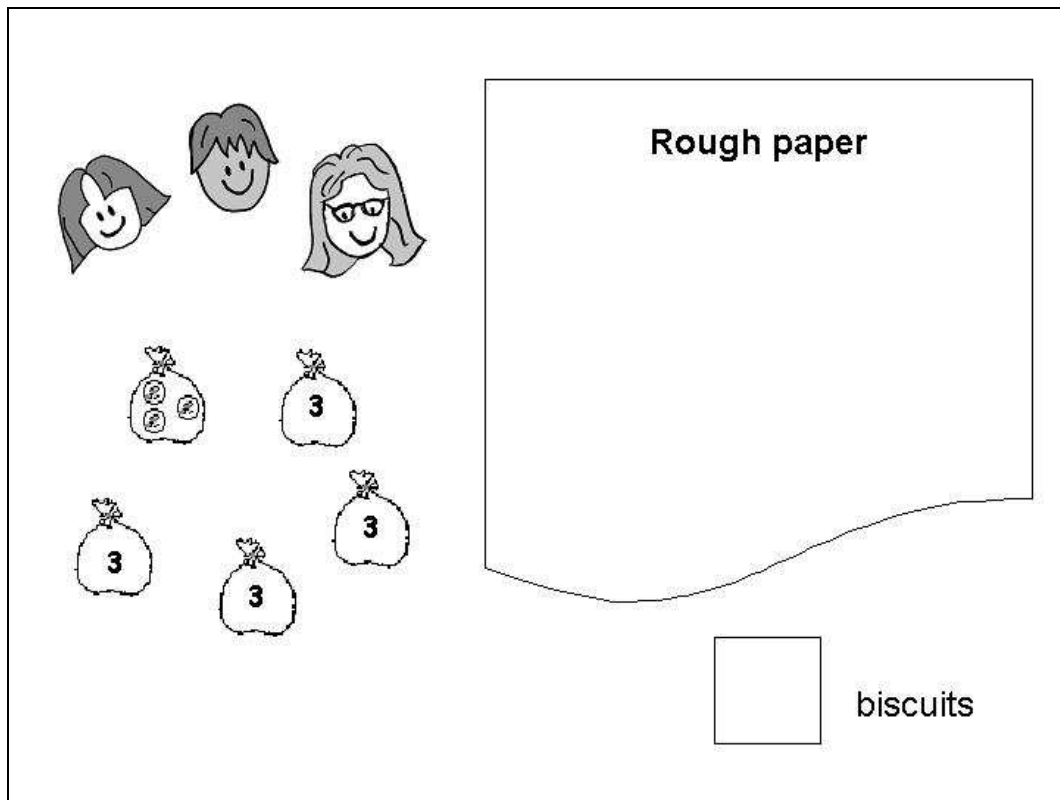
**sd120 Qu.12 (# fuzz sweets) correct**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	11701	63.1	63.1	63.1
	2 No	6834	36.9	36.9	100.0
	Total	18535	100.0	100.0	

Frequency table for SD121 not included as it is too long.

**sd122 Qu.12 (# fuzz sweets) attempted**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	18338	98.9	98.9	98.9
	2 No	197	1.1	1.1	100.0
	Total	18535	100.0	100.0	



Three children are sharing all the biscuits inside all the bags.

Each bag has three biscuits in it.

How many biscuits will each child get?

Write your answer in the box.

[Coding: The number written was copied into the boxes in item 16 on the coding sheet.]

[Editing: The response recorded on the coding sheet is presented as SD131. An indicator of whether the child got the answer correct was derived as SD130 by recoding (5 = 1)(else = 2) in SD131. An indicator of whether the child attempted the question was derived as SD132 by recoding (-1 = 2)(else = 1) in SD131.]

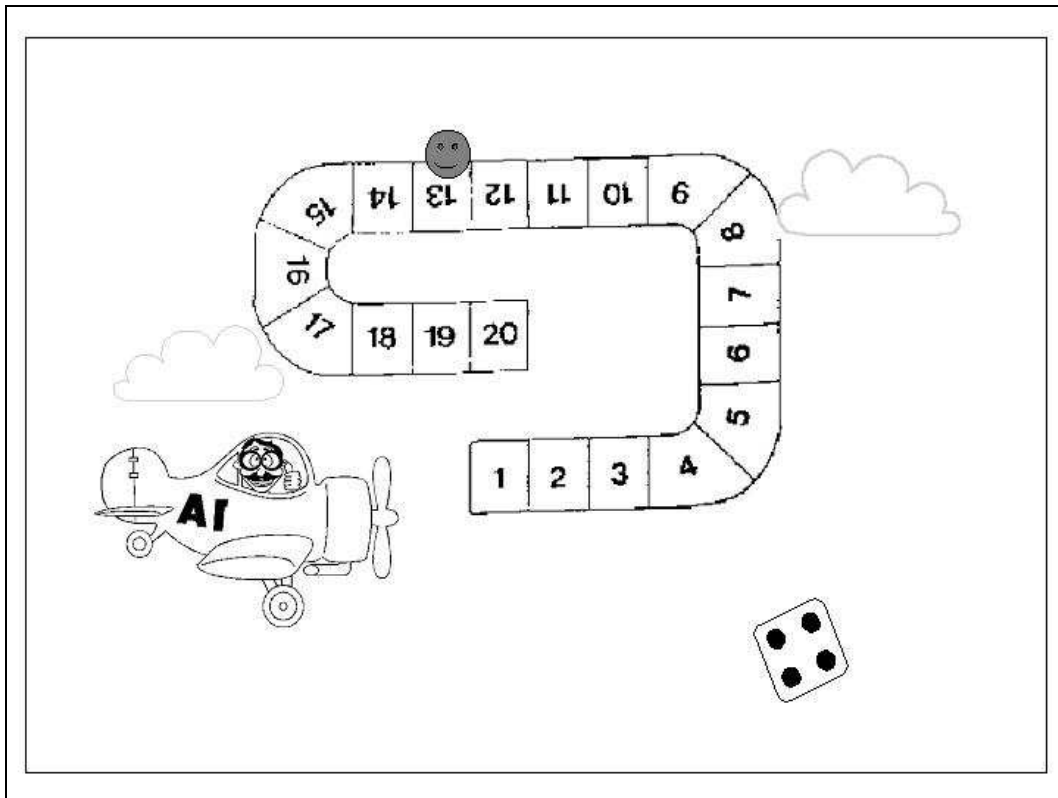
**sd130 Qu.13 (# biscuits) correct**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	11250	60.7	60.7	60.7
	2 No	7285	39.3	39.3	100.0
	Total	18535	100.0	100.0	

Frequency table for SD131 not included as it is too long.

**sd132 Qu.13 (# biscuits) attempted**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	17902	96.6	96.6	96.6
	2 No	633	3.4	3.4	100.0
	Total	18535	100.0	100.0	



The girl is playing a game.

When her turn comes, she gets a 4 and moves along 4 squares.

She is now on the number 13.

Where was she before?

Draw her counter on the square she was on before.



[Coding: The number written was copied into the boxes in item 17 on the coding sheet.]

[Editing: The response recorded on the coding sheet is presented as SD141. An indicator of whether the child got the answer correct was derived as SD140 by recoding (9 = 1)(else = 2) in SD141. An indicator of whether the child attempted the question was derived as SD142 by recoding (-1 = 2)(else = 1) in SD141.]

**sd140 Qu.14 (previous square) correct**

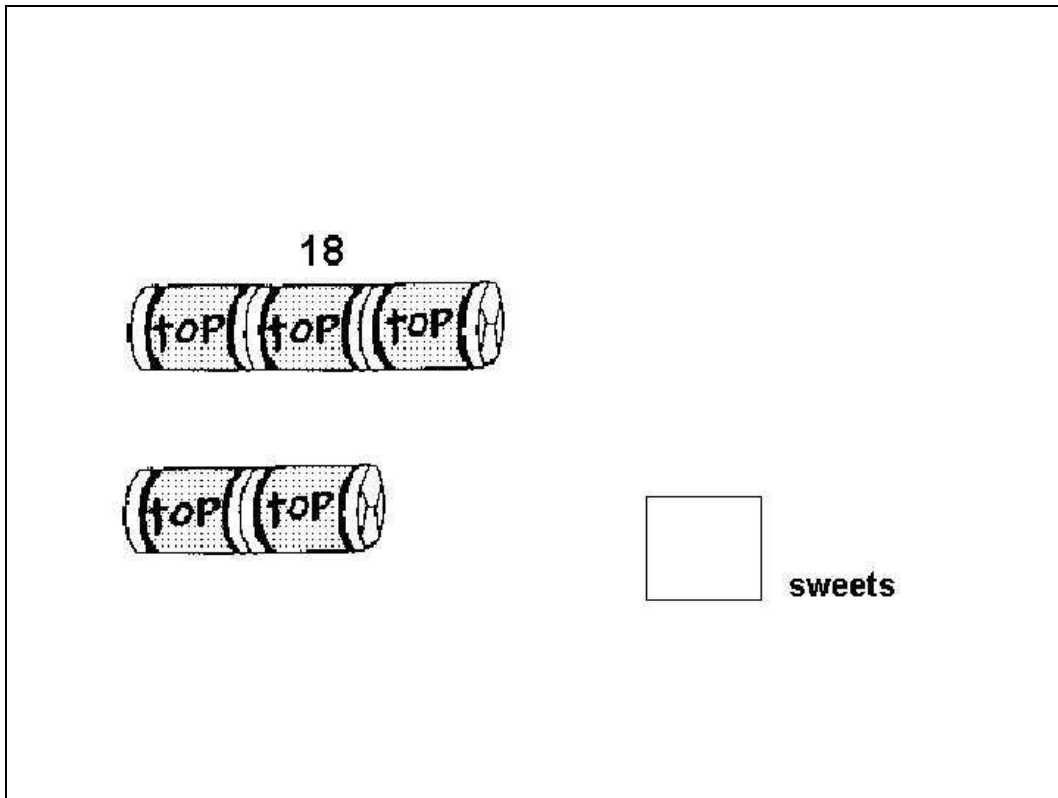
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 Yes	14340	77.4	77.4	77.4
2 No	4195	22.6	22.6	100.0
Total	18535	100.0	100.0	

**sd141 Qu.14 (previous square): Response**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	32	.2	.2	.2
2	4	.0	.0	.2
3	10	.1	.1	.3
4	372	2.0	2.0	2.3
5	25	.1	.1	2.4
6	143	.8	.8	3.2
7	22	.1	.1	3.3
8	748	4.0	4.1	7.4
9	14340	77.4	78.1	85.5
10	2257	12.2	12.3	97.8
11	114	.6	.6	98.5
12	55	.3	.3	98.8
13	17	.1	.1	98.9
14	5	.0	.0	98.9
15	2	.0	.0	98.9
16	31	.2	.2	99.1
17	144	.8	.8	99.8
18	7	.0	.0	99.9
19	1	.0	.0	99.9
20	5	.0	.0	99.9
49	1	.0	.0	99.9
105	1	.0	.0	99.9
30000 Other response	14	.1	.1	100.0
Total	18350	99.0	100.0	
Missing -1 Not attempted	185	1.0		
Total	18535	100.0		

**sd142 Qu.14 (previous square) attempted**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 Yes	18350	99.0	99.0	99.0
2 No	185	1.0	1.0	100.0
Total	18535	100.0	100.0	



The roll of sweets on top has 18 sweets.

How many sweets do you think there are in the small roll below?

Write your answer in the box.

[Coding: The number written was copied into the boxes in item 18 on the coding sheet.]

[Editing: The response recorded on the coding sheet is presented as SD151. An indicator of whether the child got the answer correct was derived as SD150 by recoding (12 = 1)(else = 2) in SD151. An indicator of whether the child attempted the question was derived as SD152 by recoding (-1 = 2)(else = 1) in SD151.]

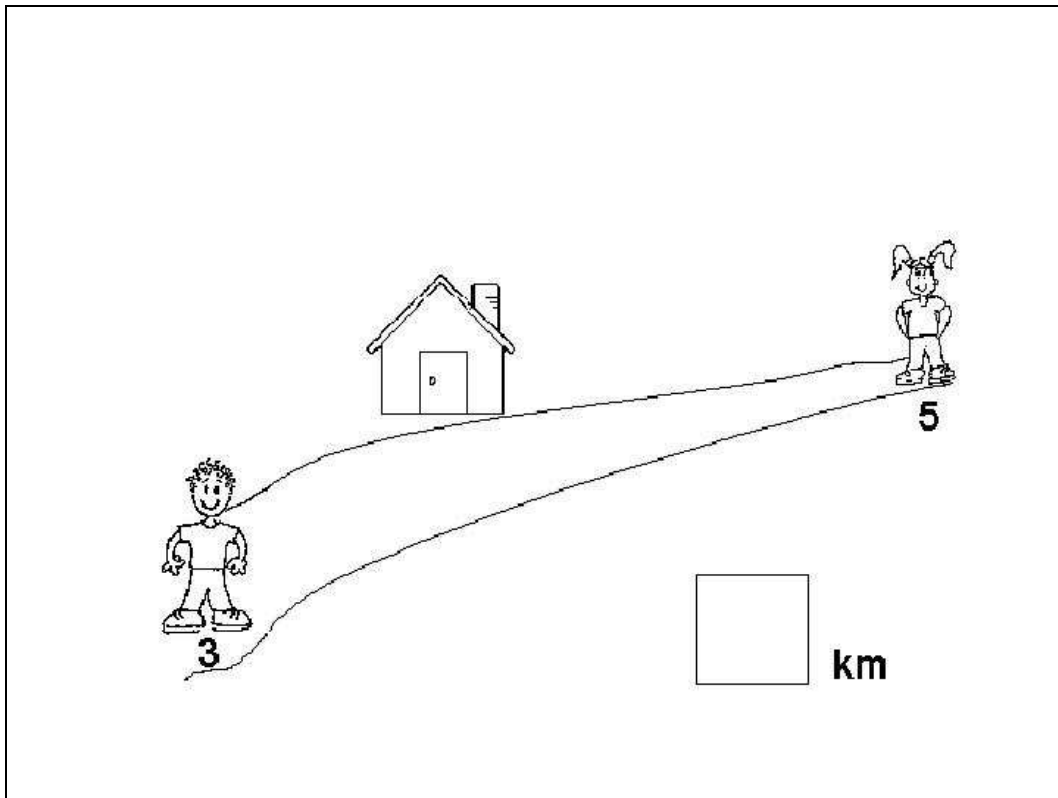
**sd150 Qu.15 (# top sweets) correct**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	9369	50.5	50.5	50.5
	2 No	9166	49.5	49.5	100.0
	Total	18535	100.0	100.0	

Frequency table for SD151 not included as it is too long.

**sd152 Qu.15 (# top sweets) attempted**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	17822	96.2	96.2	96.2
	2 No	713	3.8	3.8	100.0
	Total	18535	100.0	100.0	



Two friends were walking on the beach.

They started walking from a house.

The boy walked 3km one way.

The girl walked 5km the other way.

How far apart are the two friends?

Write your answer in the empty box.

[Coding: The number written was copied into the boxes in item 19 on the coding sheet.]

[Editing: The response recorded on the coding sheet is presented as SD161. An indicator of whether the child got the answer correct was derived as SD160 by recoding (8 = 1)(else = 2) in SD161. An indicator of whether the child attempted the question was derived as SD162 by recoding (-1 = 2)(else = 1) in SD161.]

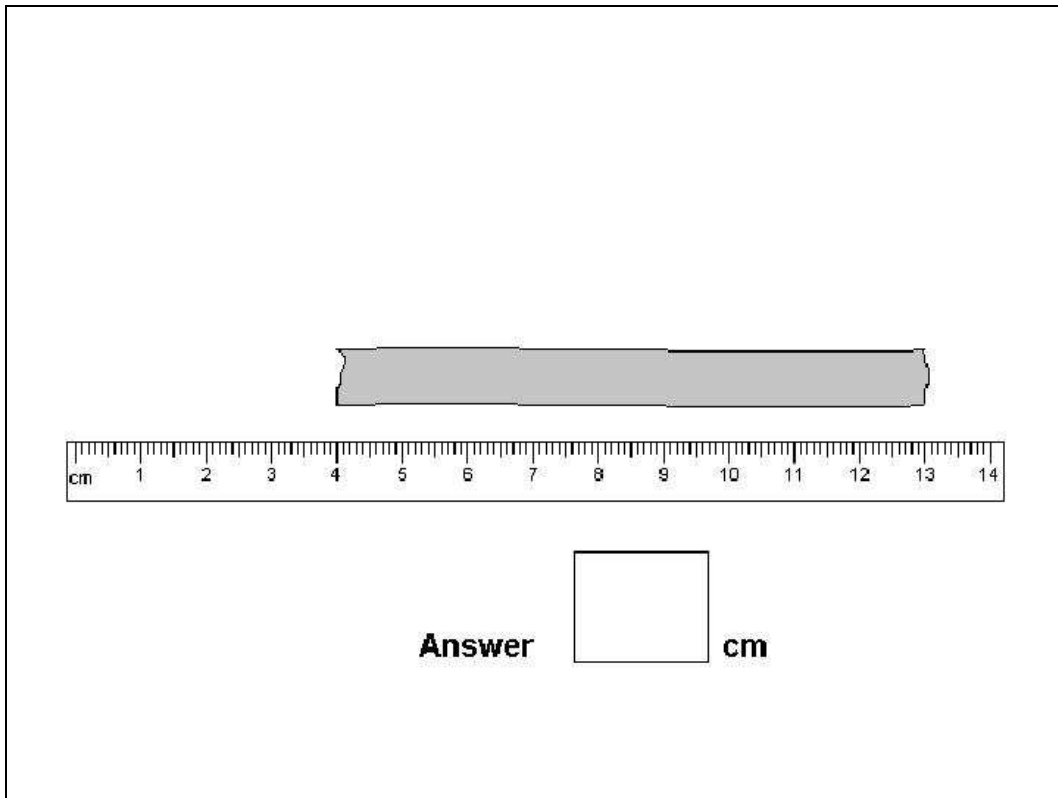
**sd160 Qu.16 (distance apart 2) correct**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 Yes	6932	37.4	37.4	37.4
2 No	11603	62.6	62.6	100.0
Total	18535	100.0	100.0	

Frequency table for SD161 not included as it is too long.

**sd162 Qu.16 (distance apart 2) attempted**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 Yes	18264	98.5	98.5	98.5
2 No	271	1.5	1.5	100.0
Total	18535	100.0	100.0	



(Make sure there are no rulers on the table before this question is asked)

Here is a picture of a ribbon and a ruler.

How long is the ribbon?

Use the ruler in the picture to help you find out.

Write your answer in the empty box.

[Coding: The number written was copied into the boxes in item 20 on the coding sheet.]

[Editing: The response recorded on the coding sheet is presented as SD171. An indicator of whether the child got the answer correct was derived as SD170 by recoding (9 = 1)(else = 2) in SD171. An indicator of whether the child attempted the question was derived as SD172 by recoding (-1 = 2)(else = 1) in SD171.]

**sd170 Qu.17 (ribbon length) correct**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	7907	42.7	42.7	42.7
	2 No	10628	57.3	57.3	100.0
	Total	18535	100.0	100.0	

Frequency table for SD171 not included as it is too long.

**sd172 Qu.17 (ribbon length) attempted**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	18328	98.9	98.9	98.9
	2 No	207	1.1	1.1	100.0
	Total	18535	100.0	100.0	

Many thanks for your help  
Please return this booklet together with  
those of the child(ren) to:

Professor Jean Golding  
Children of the Nineties - ALSPAC  
Institute of Child Health  
24 Tyndall Avenue  
Bristol  
BS8 1BR                      Tel: Bristol 928 5007



## Derived Variables

### Number of questions answered correctly

This was derived as SD180:

#### sd180 # Questions answered correctly

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	39	.2	.2	.2
1	60	.3	.3	.5
2	121	.7	.7	1.2
3	228	1.2	1.2	2.4
4	378	2.0	2.0	4.5
5	636	3.4	3.4	7.9
6	923	5.0	5.0	12.9
7	1189	6.4	6.4	19.3
8	1667	9.0	9.0	28.3
9	1953	10.5	10.5	38.8
10	2180	11.8	11.8	50.6
11	2216	12.0	12.0	62.5
12	2122	11.4	11.4	74.0
13	1861	10.0	10.0	84.0
14	1390	7.5	7.5	91.5
15	898	4.8	4.8	96.4
16	457	2.5	2.5	98.8
17	217	1.2	1.2	100.0
Total	18535	100.0	100.0	

### Number of questions attempted

This was derived as SD181:

#### sd181 # Questions attempted

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	19	.1	.1	.1
1	1	.0	.0	.1
3	2	.0	.0	.1
4	3	.0	.0	.1
5	2	.0	.0	.1
6	3	.0	.0	.2
7	5	.0	.0	.2
8	7	.0	.0	.2
9	15	.1	.1	.3
10	10	.1	.1	.4
11	20	.1	.1	.5
12	34	.2	.2	.7
13	64	.3	.3	1.0
14	219	1.2	1.2	2.2
15	546	2.9	2.9	5.1
16	1979	10.7	10.7	15.8
17	15606	84.2	84.2	100.0
Total	18535	100.0	100.0	

## YEAR 4 SCHOOLS MATHS TESTS - 2001

1a. ID: 

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--	--

0	1
---	---

OR

b. 

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--	--	--	--	--	--	--	--

0	1
---	---

2. Date of test:

--	--

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--	--	--	--

3. Child's date of birth:

--	--

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1	9		
---	---	--	--

4. Coins:

Correct coins to make 8p? Yes 

1
---

 No 

2
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5. Toys in box 

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6. Rabbits 

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7. Windows 

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8. Orange squash (1)  
(tick answers stated)

(i)	(ii)	(iii)			
<table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>1</td></tr></table>	1	<table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>1</td></tr></table>	1	<table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>1</td></tr></table>	1
1					
1					
1					

9. Distance apart (1)  km
10. Blocks
11. How many squares ahead?
12. How many outfits?
13. Difference in height  cm
14. Orange squash (2)  
(tick answers stated) (i) (ii) (iii)
- ☐ 1 ☐ 1 ☐ 1
15. Sweets in big roll
16. Biscuits  
(Write 'F' in the single box if any fraction was written by the child)
17. Previous square number
18. Sweets in small roll
19. Distance apart (2)  km
20. Ribbon  cm

13/06/2002