TRINIDAD AND TOBAGO
SECONDARY ENTRANCE ASSESSMENT

ANSWER BOOKLET

TRINIDAD AND TOBAGO
SECONDARY ENTRANCE ASSESSMENT

ANSWER BOOKLET

FILL IN ALL THE INFORMATION REQUESTED CLEARLY AND LEGIBLY.

TEST CODE | 0 | 4 | 2 | 3 | 4 | 0 | 1 | 1 |

TEST CODE | 0 | 4 | 2 | 3 | 4 | 0 | 1 | 1 |

SUBJECT MATHEMATICS 2014

SUBJECT MATHEMATICS 2014

Please place your label here.

Please place your label here.

READ THE FOLLOWING INSTRUCTIONS CAREFULLY:

1. **This test is divided into THREE sections.**
2. **Make sure you read the instructions before you start to work on any section.**
3. **Write all your answers in this test booklet.**
4. **DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.**

WRITE THE NAME OF YOUR SCHOOL BELOW:

WRITE YOUR FULL NAME BELOW:

DATE OF BIRTH

Day	*Month*	*Year*

SEX: MALE ☐ FEMALE ☐

DO NOT WRITE IN THIS SPACE

FOLDER NUMBER

DO NOT WRITE IN THIS SPACE

FOLDER NUMBER

NOTHING HAS BEEN OMITTED.

GO ON TO THE NEXT PAGE

DO NOT WRITE ON THIS PAGE.

Strand	No.	Question	Score	Marker Initials
Number	1	1–8		
	2	21–28		
	3	41–42		
Measurement & Money	4	9–15		
	5	29–35		
	6	43–44		
Geometry	7	16–18		
	8	36–39		
	9	45		
Statistics	10	19–20		
	11	40		
	12	46		
TOTAL				

Instructions for the Mathematics Test

You are NOT allowed to use **calculators**.

This test has THREE sections with a total of 46 questions.

SECTION I has 20 questions (Nos. 1 to 20).

SECTION II has 20 questions (Nos. 21 to 40).

SECTION III has 6 questions (Nos. 41 to 46).

You have **75 minutes** for this test.

Answer ALL questions.

Read EACH question CAREFULLY before answering it.

Show ALL working in the column provided.

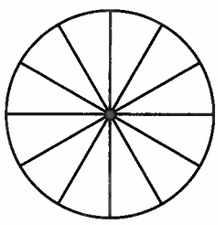
Marks will be given for correct steps taken.

Work carefully but do NOT spend too much time on any one question.

DO NOT BEGIN UNTIL YOU ARE TOLD TO DO SO.

SECTION I

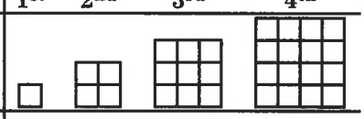
Each question is worth 1 mark. Answer ALL questions.
Show ALL working in the Working Column.

No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*			
				KC	AT	PS
1.	4 1 7 – 3 9 2 Answer _____		1.			
2.	Write 3.49 to the NEAREST TENTH. Answer _____		2.			
3.	A pizza was cut into 12 equal slices as shown below.  Shade $\frac{1}{3}$ of the pizza.		3.			
4.	Write ONE of the following symbols $>$ $=$ $<$ in the box below so that the number sentence is correct. $\frac{3}{4}$ ☐ $\frac{7}{12}$		4.			

GO ON TO THE NEXT PAGE

No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*			
				KC	AT	PS
5.	A piece of ribbon is $\frac{7}{10}$ m long. A piece measuring $\frac{2}{5}$ m is cut off. What is the length, in **metres**, of the remaining piece? Answer _____ m		5.			
	Questions 6 and 7 refer to the following information. In a spelling contest, Peter was given 40 words to spell. He spelt 32 words correctly.					
6.	What fraction of the total number of words did he spell correctly? Answer _____		6.			
7.	Peter must spell at least 90% of the words correctly to qualify for a consolation prize. How many words should he have spelt correctly to qualify? Answer _____ words		7.			

No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*	KC	AT	PS
8.	The first four shapes in a pattern are shown below. EACH shape is made from squares of the same size.					

Shape	**1st**	**2nd**	**3rd**	**4th**
Pattern				
Number of Squares	**1**	**4**	**9**	**16**

How many squares would form the 6th shape?

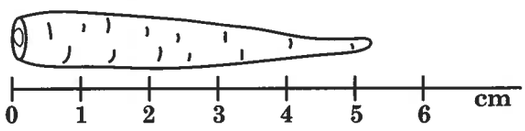
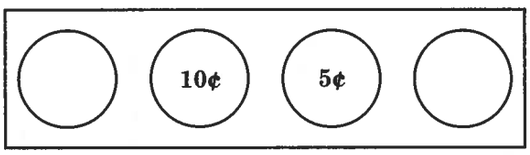
Answer _____ squares 8.

DO NOT WRITE HERE	**KC (2)**		**AT (4)**		**PS (2)**		**TOTAL (8)**	

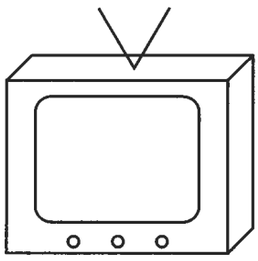
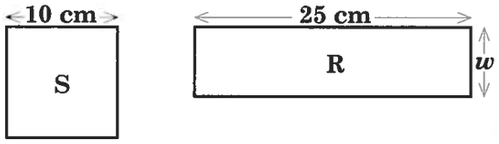
	Complete correctly the sentences in <u>Questions **9** and **10**</u>.					
9.	1 litre = _____ cm^3.		9.			
10.	120 minutes = _____ hours.		10.			

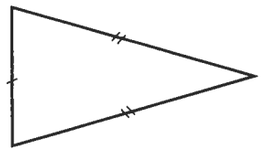
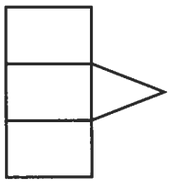
GO ON TO THE NEXT PAGE

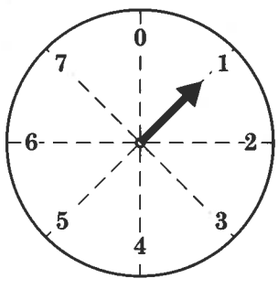
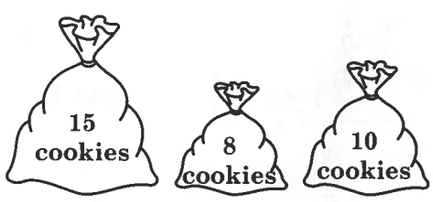
04234011/T&T SEA 2014

No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*			
				KC	AT	PS
11.	The length of a carrot is measured below.  What is its length to the NEAREST centimetre? Answer _____ cm		11.			
12.	A square sheet of paper has sides of 11 cm. What is its area? Answer _____ cm^2		12.			
13.	Shari has 4 coins on her desk. They have a total value of 50 ¢. The value of 2 coins is shown in the diagram below.  Write the correct value on EACH of the other 2 coins.		13.			

GO ON TO THE NEXT PAGE

No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*			
				KC	AT	PS
14.	A sales clerk is preparing a tag to show the selling price for a television.  Complete the tag below. **Cost Price** \$1 740.00 **Discount** \$174.00 **Selling Price**		14.			
15.	A square, labelled *S*, and a rectangle, labelled *R*, are shown below. **(The shapes are not drawn to scale.)**  Both shapes have the **same** area. Calculate the width, *w*, of rectangle *R*? Answer _____		15.			
DO NOT WRITE HERE	**KC (2)**		**AT (4)**		**PS (1)**		**TOTAL (7)**	

No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*			
				KC	AT	PS
16.	The triangle shown below has ONLY two sides of equal length.  What type of triangle is it? Answer _____		16.			
17.	Complete the drawing below to show the net of a triangular-based prism. 		17.			

No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*			
				KC	AT	PS
18.	Sunil changes the position of the arrow on the circular dial shown below.  He makes a quarter turn ANTI-CLOCKWISE. At which number is the arrow now pointing ? Answer _____		18.			
DO NOT WRITE HERE	**KC (1)**		**AT (1)**		**PS (1)**		**TOTAL (3)**	
19.	Cookies were packaged in three bags as shown below.  What is the mean number of cookies in a bag? Answer _____ cookies		19.			

No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*		
				KC	AT	PS
20.	The graph below shows the number of haircuts a barber did on five days of a particular week. **Day** / **Number of Haircuts** **Monday** — ☺ **Tuesday** — ☺ ☺ ☺ ☺ **Wednesday** — ☺ ☺ **Thursday** — ☺ ☺ **Friday** — ☺ ☺ ☺ ☺ ☺ ☺ The total number of haircuts done in the five days is 75. How many haircuts were done by the barber on Monday? Answer _____ haircuts		20.			
DO NOT WRITE HERE	**KC (0)**		**AT (1)**		**PS (1)**		**TOTAL (2)**			

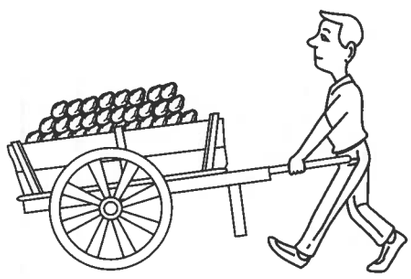
SECTION II

Each question is worth either 2 or 3 marks. Answer ALL questions. Show ALL working in the Working Column.

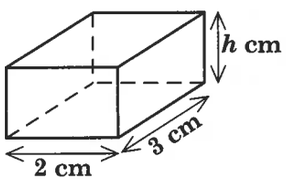
No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*			
				KC	AT	PS
21.	$5\frac{1}{2} - 2\frac{5}{8} =$ Answer _____ **(2 marks)**		21.			
22.	Simplify, **using decimal notation**, $7 + \frac{5}{10} + \frac{3}{100}$. Answer _____ **(2 marks)**		22.			
23.	Carrie had \$60 as an allowance for the week. She spent $\frac{2}{5}$ of it on snacks, $\frac{1}{4}$ of it on stickers and saved the remainder. (a) What fraction did she spend on snacks and stickers together? Answer _____ **(1 mark)** (b) How much money did she save? Answer \$ _____ **(1 mark)**		23.			

No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*			
				KC	AT	PS
24.	In a car park, $\frac{3}{5}$ of the cars are blue and the remainder are white. What **percentage** of the cars are white? Answer _____ % **(2 marks)**		24.			
25.	Alim collected seashells over the weekend. He collected 45 seashells on Saturday and three times as many on Sunday. (a) How many seashells did Ali collect on Sunday? Answer _____ seashells **(1 mark)** (b) What percentage of the seashells collected over the weekend did he collect on Saturday? Answer _____ % **(2 marks)**		25.			

No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*		
			KC	AT	PS
26.	The table below shows the points scored for hitting three different coloured targets in a video game. **Colour** / **Number of Points** White — 2 Blue — 3 Gold — 5 Ana scored 53 points in playing the game. She hit the blue target 4 times and the white target 3 times. How many times did she hit the GOLD target? Answer _____ times **(3 marks)**		26.		

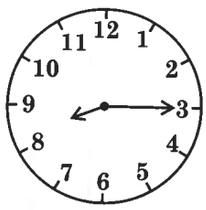
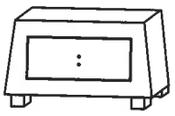
No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*	KC	AT	PS
27.	A fruit vendor transported 360 mangoes to the market. While transporting the mangoes, 10% of them were damaged.  (a) How many mangoes were damaged? Answer _____ mangoes **(1 mark)** (b) The mangoes that were not damaged were packed into boxes of 12. How many boxes were used to pack these mangoes? Answer _____ boxes **(2 marks)**		27.			
28.	Five years ago, Paul was $\frac{3}{8}$ his father's age. Paul's father is now 37 years old. How old is Paul now? Answer _____ **(3 marks)**		28.			

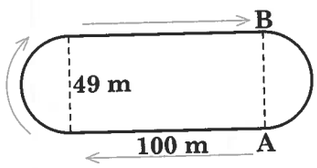
DO NOT WRITE HERE	**KC (5)**		**AT (10)**		**PS (5)**		**TOTAL (20)**	

No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*			
				KC	AT	PS
29.	The volume of the cuboid shown below is 48 cm^3. The length of the cuboid is 3 cm, the width is 2 cm and the height is h cm.  Calculate the value of h. Answer _____ **(2 marks)**		29.			
30.	Burns ran the following distances over a 2-week period while training for the Olympics. **Week** / **Distance Ran** 1 / 3 km 800 m 2 / 2.75 km What is the TOTAL distance covered by Burns over the 2 weeks? Answer _____ **(2 marks)**		30.			

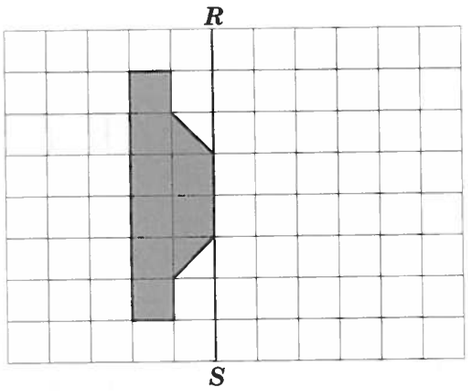
No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*	KC	AT	PS
31.	Mr Lee borrowed \$8000 from the bank to buy a used car. He paid simple interest at a rate of 12% per year for a period of 3 years. How much simple interest did Mr Lee pay? Answer \$ _____ **(2 marks)**		31.			
32.	Jane bought the 3 items shown below at the supermarket. **Notebook** **\$1.90** **Comb** **\$2.10** **Scissors** **\$3.65** (a) What is the TOTAL cost of the 3 items? Answer \$ _____ **(1 mark)** (b) Calculate Jane's EXACT change if she paid for the items with a \$20.00 bill. Answer \$ _____ **(2 marks)**		32.			

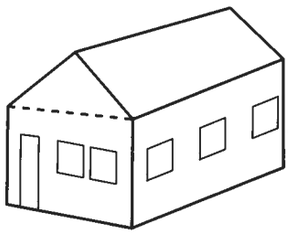
GO ON TO THE NEXT PAGE

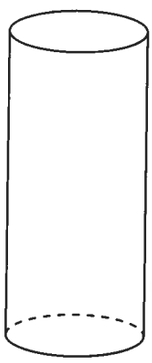
No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*			
				KC	AT	PS
33.	The time shown on Clock A is 15 minutes AHEAD of the correct time.  A  B (a) Insert the correct time on Clock B. Answer _____ **(1 mark)** (b) At the end of the next hour, Clock A gained an additional 5 minutes ahead of the correct time. What time will be shown on Clock A? Answer _____ **(2 marks)**		33.			

No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*		
			KC	AT	PS
34.	The diagram below shows a cycling track consisting of a rectangle and two semicircles.  A cyclist starts at point *A* and cycles in the direction of the arrows to point *B*. What distance did he cover? ($\pi = \frac{22}{7}$) Answer _____ metres **(3 marks)**				
35.	The school cafeteria bought 5 dozen silly bands at \$15 per dozen and sold them for \$2 EACH. (a) What was the profit, in **dollars**, made by the school cafeteria? Answer \$_____ **(2 marks)** (b) Calculate the profit as a percentage of the cost price. Answer _____ % **(1 mark)**				

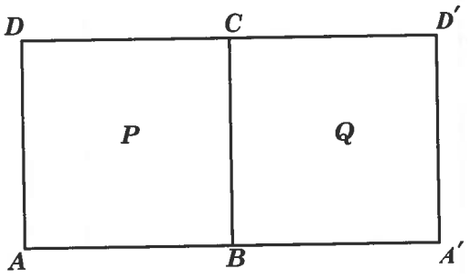
DO NOT WRITE HERE	**KC (4)**		**AT (10)**		**PS (4)**		**TOTAL (18)**	

No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*		
			KC	AT	PS
36.	The diagram below shows an incomplete plane shape and one of its lines of symmetry, *RS*.  (a) Complete the drawing of the shape. **(1 mark)** (b) Draw another line of symmetry, *PQ*, for the completed shape. **(1 mark)**	36.			

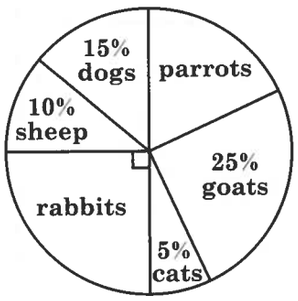
No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*			
				KC	AT	PS
37.	Use the diagram below to answer the questions that follow.  State the names of: (a) ONE plane shape in the diagram above Answer _____ _____ **(1 mark)** (b) ONE solid that would be needed to make a model of the building Answer _____ **(1 mark)**		37.			

No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*			
				KC	AT	PS
38.	The diagram below shows a cylindrical package closed at both ends.  (a) How many faces does the package have? Answer _____ faces **(1 mark)** (b) Draw the net of the package. **(2 marks)**		38.			

GO ON TO THE NEXT PAGE

No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*		
			KC	AT	PS
39.	The shape *ABCD* below is moved from its position at *P* to the position at *Q* so that Corner *A* is now at *A′* and Corner *D* is now at *D′*.  (a) What is the name of this movement? Answer _____ **(1 mark)** (b) Describe the movement in (a) FULLY. Answer _____ **(1 mark)** (c) Under the same movement in (a), describe what happens to Corner *B*. Answer _____ _____ **(1 mark)**		39.		
DO NOT WRITE HERE	**KC (2)**		**AT (5)**		**PS (3)**		**TOTAL (10)**		

GO ON TO THE NEXT PAGE

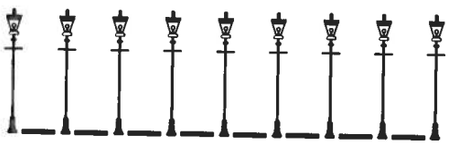
No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here* KC	AT	PS
40.	The pie chart below shows the favourite pets of the pupils in Standard 3.  (a) Which TWO pets are EQUALLY favoured? Answer _____ **(1 mark)** (b) What percentage of the pupils in Standard 3 favour parrots? Answer _____ % **(1 mark)**		40.		

DO NOT WRITE HERE	**KC (1)**		**AT (1)**		**PS (0)**		**TOTAL (2)**	

SECTION III

Each question is worth 5 marks. Answer ALL questions.
Show ALL working in the Working Column.

No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*			
				KC	AT	PS
41.	A fruit vendor has 160 fruits in his stall. Of these, $\frac{3}{8}$ are mangoes and 20% are plums. The **remainder** are avocados. (a) How many mangoes does he have? Answer _____ mangoes **(1 mark)** (b) Express the number of fruits that are plums as a DECIMAL fraction. Answer _____ **(1 mark)** (c) Calculate the number of avocados in the stall. Answer _____ avocados **(3 marks)**		41.			

No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*			
				KC	AT	PS
42.	Nine light posts are evenly spaced along a highway. A total of 144 plastic pipes of the same length are placed EQUALLY between the 9 posts.  (a) How many pipes are placed between the first and second posts? Answer _____ pipes **(3 marks)** (b) Each pipe is 7 m long. The pipes are connected end-to-end (just touching each other) between the posts. What is the distance between the first and second posts? Answer _____ m **(2 marks)**		42.			

DO NOT WRITE HERE	**KC (3)**		**AT (5)**		**PS (2)**		**TOTAL (10)**	

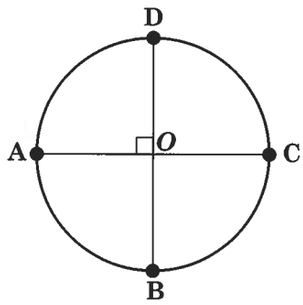
GO ON TO THE NEXT PAGE

No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*		
			KC	AT	PS
43.	An appliance store offers $33\frac{1}{3}$% discount on cash purchases. The original price on a refrigerator is \$8400. (a) What is the discounted price on the refrigerator? Answer \$ _____ **(2 marks)** (b) VAT at 15% is calculated on the discounted price. How much is the VAT? Answer \$ _____ **(1 mark)** (c) What is the FINAL cost of the refrigerator when purchased for cash? Answer \$ _____ **(2 marks)**		43.		

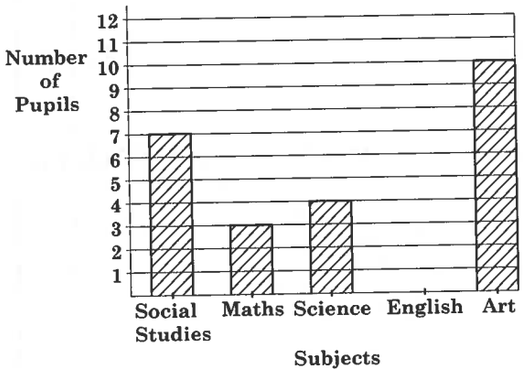
GO ON TO THE NEXT PAGE

No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*		
			KC	AT	PS
44.	Lance's weekly wage is calculated using the rates in the table below. Lance works for 8 hours daily. **Wage Rates** $10 per hour during the week (Monday to Friday) $15 per hour for weekends (Saturday and Sunday) (a) During one week, Lance worked on Monday, Wednesday, Friday and Saturday. How many hours did Lance work in that week? Answer _____ hours **(1 mark)** (b) Using the rates in the table above, calculate Lance's wage for that week. Answer $ _____ **(2 marks)** (c) Lance's wage last week was $400. He worked on Saturday and Sunday. How many HOURS did he work from Monday to Friday? Answer _____ hours **(2 marks)**		44.		

DO NOT WRITE HERE	**KC (3)**		**AT (5)**		**PS (2)**		**TOTAL (10)**	

No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*		
			KC	AT	PS
45.	Four points, A, B, C, D, are equally spaced around the edge of a circular spinner and connected to the centre O as shown in the diagram below.  (a) Raj turns the spinner so that A moves in an anti-clockwise direction to the position of B. What was the size of the angle through which the spinner moved? Answer _____ **(1 mark)** (b) Describe FULLY how Raj can turn the spinner so that B moves to the position of D. Answer _____ _____ _____ **(2 marks)**				

No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*			
				KC	AT	PS
	(c) Raj turned the spinner so that C moves 225° in a clockwise direction to a point M. Label the point M on the diagram on page 28. **(2 marks)**		45.			
DO NOT WRITE HERE	**KC (1)**		**AT (2)**		**PS (2)**		**TOTAL (5)**	

No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here* KC	AT	PS
46.	The incomplete bar graph below shows the favourite subjects of the 30 pupils in a Standard 5 class.  (a) How many **more** pupils favour Social Studies than Maths? Answer _____ pupils **(1 mark)** (b) What percentage of the class chose Maths as their favourite subject? Answer _____ % **(1 mark)** (c) How many pupils chose English as their favourite subject? Answer _____ pupils **(2 marks)**				

GO ON TO THE NEXT PAGE

No.	TEST ITEMS	WORKING COLUMN	*Do Not Write Here*			
				KC	AT	PS
	(d) Complete the graph on page 30 by drawing the bar to represent the number of pupils whose favourite subject is English. **(1 mark)**		46.			

DO NOT WRITE HERE	KC (1)		AT (2)		PS (2)		TOTAL (5)	

END OF TEST

IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST.