





Read the instructions on the **ANSWER SHEET** and fill in your **NAME**, **SCHOOL** and **OTHER INFORMATION**.

Use a pencil. Do **NOT** use a coloured pencil or a pen. Rub out any mistakes completely.

You MUST record your answers on the ANSWER SHEET.

Mark only **ONE** answer for each question.

Your score will be the number of correct answers.

Marks are **NOT** deducted for incorrect answers.

### There are **4 MULTIPLE-CHOICE QUESTIONS** (1–4).

Use the information provided to choose the **BEST** answer from the four possible options.

On your **ANSWER SHEET** fill in the oval that matches your answer.

There is 1 FREE-RESPONSE QUESTION (5).

Write your answer in the boxes provided on the **ANSWER SHEET** and fill in the ovals that match your answer.

You may use a ruler and spare paper.

You are **NOT** allowed to use a calculator.

# MATHEMATICS

# DO NOT OPEN THIS BOOKLET UNTIL INSTRUCTED.

**STUDENT'S NAME:** 

1.	Maree shaded some squares on a grid.         Image: state	3.	Laura has a lunch break from 11:50 am to 1:20 pm.Image: transform of the transform of tra
2.	<image/> Sarah has \$5 to spend on lunch.Image juice orange juice s1.50Image juice salad sandwich \$2.50Image juice bun \$2.00Image juice salad sandwich, which do bigImage juice and one apple bun \$2.00Image juice and one apple bun b	4.	What is the missing number in this number pattern?

## **QUESTION 5 IS FREE RESPONSE.**

Write your answer in the boxes provided on the ANSWER SHEET and fill in the ovals that match your answer.

5. Here is the start of a pattern.



The number below each triangle gives the total number of dots on the triangle.

The number inside the triangle gives the number of dots on each side of the triangle.

When the total number of dots on a triangle in this pattern is 72, how many dots are there on each of its sides?

# END OF PAPER

# **ACKNOWLEDGMENT**

Copyright in this booklet is owned by UNSW Global Pty Limited, unless otherwise indicated. Every effort has been made to trace and acknowledge copyright. UNSW Global Pty Limited apologises for any accidental infringement and welcomes information to redress the situation.

# THE FOLLOWING YEAR LEVELS SHOULD SIT THIS PAPER:

Year 6
Primary 6
Primary 6
Class 6
Year 7
Standard 6
Class 6
Year 7
Primary 5
Grade 6

Indian Subcontinent Region: India, Sri Lanka, Nepal, Bhutan and Bangladesh.
 Middle East Region: United Arab Emirates, Qatar, Kuwait, Saudi Arabia, Egypt, Bahrain, Oman, Turkey, Lebanon, Tunisia, Morocco, Libya, Algeria and Jordan.
 Pacific Region: Vanuatu, Papua New Guinea and Fiji.
 Southern Africa Region: South Africa, Botswana, Lesotho, Swaziland, Zimbabwe and Namibia.



© 2017 UNSW Global Pty Limited. Copyright in this document is owned by UNSW Global Pty Limited.







# HOW TO FILL OUT THIS SHEET:

### USE A PENCIL

- Print your details clearly in the boxes provided.
  Make sure you fill in only <u>one</u> oval in each column.
- · Rub out all mistakes completely.
- Do not use a coloured pencil or pen.

EXAMPLE 1: <u>Debbie Bach</u>												
FIRST NAME							LAST NAME					
D	E	В	В	I	E	7	В	A	С	Н	7	
O	0	0	0	0	00		0	0	0	0		
B	B			B	B			B	B	Œ		
C	Õ	Õ	Õ	ō	1		Ô	Õ	ē	7		
E		0 F	رو	(~			0 E	ج	(r			
	-	9										

	EXAMPLE 2: Chan Ai Beng												
FIRST NAME LA							ѕт	NA	ME				
	С	Н	Α	Ν		Α	Ι		В	Е	Ν	G	
	O	Ō	0	Ō		O	Ō	۲	Ō	Ō	Ō	Ō	C
		e	e	G		6	e	e	õ	e	e	e	
	D	õ	7			õ	õ	õ	ŏ	ŏ	ē		
	G	~				G	G	Ē	Ē	~			

Г

EXAMPLE 3: Jamal bin Abas           FIRST NAME         LAST NAME													
J	Α	M	Α	L		В	Ι	Ν	Α	В	Α	S	
O	0	$\overline{O}$	0	Ο	•	Ο	0	C	Ο	0	Ο	Ο	
A	•	A	0	A	A	A	A	Q	0	A	۲	A	
B	B	B	B	B	B	۲	B	0	B	۲	B	œ	
C	C	C	C	C	C	C	C		C	C	C	r	
D	D	D	D	D	D	P			▣	D	$( \  \  )$		
Œ	(E)	œ)	(E)	œ)	(F				E	F			

Т

#### FIRST NAME to appear on certificate Γ

### LAST NAME to appear on certificate

Are you male or female?	$\bigcirc$ Male $\bigcirc$ Female	DATE OF BIRTH	STUDENT ID	CLASS
			(optional)	(optional)
		Day Month Year		(optional)
Does anyone in your home usually		Day Month Year		
Does anyone in your home usually speak a language other than English?	° ⊂ Yes ⊂ No	Day Month Year		
Does anyone in your home usually speak a language other than English?	Yes O No	Day         Month         Year           0         0         0         0         0           1         1         1         1         1		
Does anyone in your home usually speak a language other than English? School name:	' 🔿 Yes 🔿 No	Day         Month         Year           0         0         0         0         0           1         1         1         1         1           2         2         2         2         2		
Does anyone in your home usually speak a language other than English? School name:	' OYes ONo	Day         Month         Year           0         0         0         0         0           1         1         1         1         1           2         2         2         2         2           3         3         3         3         3		
Does anyone in your home usually speak a language other than English? School name:	' OYes ONo	Day         Month         Year           0         0         0         0         0           1         1         1         1         1           2         2         2         2         2           3         3         3         3         3         3           4         4         4         4         4         4	0     0     0     0     0     0     0       1     1     1     1     1     1     1       2     2     2     2     2     2     2       3     3     3     3     3     3       4     4     4     4     4     4	
Does anyone in your home usually speak a language other than English? School name:	Y 🔿 Yes 🔿 No	Day         Month         Year           0         0         0         0         0           1         1         0         0         0         0           1         1         1         1         1         1           2         2         2         2         2         2           3         3         3         3         3         3           4         4         4         4         4           5         5         5         5         5	0     0     0     0     0     0     0       1     1     1     1     1     1     1       2     2     2     2     2     2     2       3     3     3     3     3     3       4     4     4     4     4     4       5     5     5     5     5     5	
Does anyone in your home usually speak a language other than English? School name: 	Yes O No	Day         Month         Year           0         0         0         0         0           1         1         1         1         1           2         2         2         2         2           3         3         3         3         3           4         4         4         4         4           5         5         5         5           6         6         6         6         6	0       0	
Does anyone in your home usually speak a language other than English? School name: Town / suburb:	Yes O No	Day         Month         Year           0         0         0         0         0           1         1         1         1         1           2         2         2         2         2           3         3         3         3         3           4         4         4         4         4           5         5         5         5           6         6         6         6	Image: Constraint of the constraint	
Does anyone in your home usually speak a language other than English? School name: Town / suburb:	Postcode:	Day         Month         Year           0         0         0         0         0           1         1         1         1         1         1           2         2         2         2         2         2           3         3         3         3         3         3           4         4         4         4         4         4           5         5         5         5         5           6         6         6         6         6           7         7         7         7         7           8         8         6         6         6	0       0	

# **TO ANSWER THE QUESTIONS**

### **MULTIPLE CHOICE**

Questions 1 to 4

### **Example:** 4 + 6 =

- 2 (A)
- (B) 9
- (C) 10
- (D) 24

The answer is  $\underline{10}$ , so fill in the oval  $\bigcirc$ , as shown.

A B 🔵 D

# **START**

1	A	B	C	D
2	A	B	C	D
3	A	B	C	D
4	A	B	C	D

## **FREE RESPONSE**

Question 5

### **Example:** 6 + 6 =

- The answer is <u>12</u>, so <u>WRITE</u> your answer in the boxes.
- Write only <u>ONE</u> digit in each box, as shown, and fill in the correct ovals, as shown.



	1	2
0	0	0
1		1
2	2	
3	3	3
4	4	4
5	5	5
6	6	6
$\bigcirc$	$\bigcirc$	$\bigcirc$
8	8	8
9	ത	9







5			
	0	0	0
	1	1	1
	2	2	2
	3	3	3
	4	4	4
	5	5	5
	6	6	6
	7	7	7
	8	8	8
	9	9	9



Your privacy is assured as UNSW Global Pty Limited fully complies with appropriate Australian privacy legislation. Visit www.eaa.unsw.edu.au for more details.



QUESTION	KEY	SOLUTION	STRAND	LEVEL OF DIFFICULTY
1	С	There are $10 \times 10 = 100$ squares. Half of 100 is 50. Maree has already shaded 15 so she needs to shade 35 squares more $(50 - 15 = 35)$ .	Number and Arithmetic	Easy
2	А	<pre>\$5 (lunch money) - \$2.50 (sandwich) = \$2.50 remaining \$1.50 (juice) + \$0.65 (apple) = \$2.15, so there is \$0.35 change All other options require more than the initial \$5 lunch money.</pre>	Number and Arithmetic	Easy
3	С	From 11:50 am to 1:50 pm is one and a half hours. From 11:50 am to 12:50 pm there is one hour, then from 12:50 pm to 1 pm there are 10 minutes and from 1 pm to 1:20 pm there are 20 minutes. Altogether it is 1 hour and 30 minutes (1 hour + 10 minutes + 20 minutes).	Measurement	Easy
4	В	The triangles contain a number which is the sum of the numbers in the two preceding triangles. 2 + 7 = 9 and $7 + 9 = 16$ . The missing number is $9 + 16 = 25$ .	Algebra and Patterns	Medium
5	25	To solve this, find the pattern then test it on the examples given. Number of dots on each side = total number of dots $\div$ 3 + 1 = 72 $\div$ 3 + 1 = 25	Algebra and Pattern	Hard

<b>Level of difficulty</b> refers to the expected level of difficulty for the question.
---

Easy	more than 70% of candidates will choose the correct option
Medium	about 50–70% of candidates will choose the correct option
Medium/Hard	about $30-50\%$ of candidates will choose the correct option
Hard	less than 30% of candidates will choose the correct option