

NAME: \_\_\_\_\_

GRADE: \_\_\_\_\_

# MATHS WORKSHEETS

## TERM 2



**MULTIPLICATION / DIVISION / TIME**

**TESSELATIONS / TANGRAMS**

<b>SYLLABUS</b>	<b>INSTAMATHS</b>	<b>WKSHEET</b>
Tables (multiplying)	18; 20; 23; 25;	
Tables (patterning)	30	
Tables (dividing)	19; 21; 24;	
Long multiplication by 1 digit	31; 32;	
Long multiplication by 2 digits	33	
Tables (multiply and divide)	22;	
Multiplication by 10, 100, 1000	26; 27;	3
Zeros in multiplication	28	
Traditional multiplication		4,
Dividing by 10 and 100	29;	5
Short Division	35; 36	6
The 4 operations	37	
Word Problems	38	
<b>MEASUREMENT (Time)</b>		
Measuring Time		7
24 hr clock showing am and pm	83; 85; 86	
Converting Time		8
Hours and Minutes/Bus time table		9
Using a Calender	87; 88	10
Roman numerals (to be learned)	84	10
Time Quiz	84	11
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<b>SPACE AND SHAPE</b>		
Tesselations/Tangrams		12-15
<b>MATHLETICS:</b>		
Operations / Patterns and Algebra		16



## MULTIPLYING BY 10, 100 AND 1000

### *Worked example:*

761 people attend a concert. They each pay R10 for a ticket. What is the total amount in ticket sales?

### **Solution:**

761 people each pay R10, so we multiply 761 by 10. The answer is R 7 610

### **Exercise 1**

- (a)  $3 \times 10$  \_\_\_\_\_ (b)  $123 \times 10$  \_\_\_\_\_
- (c)  $2347 \times 10$  \_\_\_\_\_ (d)  $34 \times 100$  \_\_\_\_\_
- (e)  $234 \times 100$  \_\_\_\_\_ (f)  $5632 \times 100$  \_\_\_\_\_
- (g)  $3 \times 1000$  \_\_\_\_\_ (h)  $65 \times 1000$  \_\_\_\_\_
- (i)  $877 \times 1000$  \_\_\_\_\_ (j)  $4568 \times 1000$  \_\_\_\_\_

## INSTAMATHS EXERCISES

Tables - 2 3 4	Instamaths 18	Total 20	Your mark:
Tables - 5 6 7	Instamaths 20	Total 20	Your mark:
Tables - 8 9	Instamaths 23	Total 10	Your mark:
Mixed Tables	Instamaths 25	Total 20	Your mark:
Patterning 9 and 11	Instamaths 30	Total 20	Your mark:
Long multiplication 1 digit	Instamaths 31	Total 10	Your mark:
Long multiplication 1 digit	Instamaths 32	Total 20	Your mark:
Long multiplication 2 digits	Instamaths 33	Total 20	Your mark:
Multiplication 10,100, 1000	Instamaths 26	Total 20	Your mark:
Multiplication 10,100, 1000	Instamaths 27	Total 20	Your mark:
Zeros in multiplication	Instamaths 28	Total 20	Your mark:

## LONG MULTIPLICATION

### EXERCISE 1

1. $45 \times 5$	3. $345 \times 2$
2. $64 \times 4$	4. $273 \times 8$

### EXERCISE 2

1. $78 \times 53$	3. $54 \times 37$
2. $45 \times 42$	4. $67 \times 28$

### EXERCISE 3

1. $341 \times 56$	3. $536 \times 66$
2. $523 \times 34$	4. $642 \times 32$

### EXERCISE 4

1. $2\ 436 \times 23$	4. $6\ 432 \times 31$	7. $3\ 264 \times 12$
2. $1\ 564 \times 14$	5. $4\ 639 \times 27$	8. $4\ 687 \times 11$
3. $3\ 143 \times 35$	6. $1\ 043 \times 29$	9. $6\ 832 \times 77$

### PROBLEM SOLVING

1. A hotel ordered 347 bags of potatoes. If there were 45 potatoes in each bag, how many potatoes were ordered?
2. A gardener planted 239 trays of pansies. Each tray had 23 pansies in them. How many pansies did he plant?
3. A banana tree had 534 bunches of bananas on them. How many bananas were there on the tree if there were 34 bananas in each bunch?
4. I ordered 142 pizzas and cut them into 14 pieces. How many pieces did I have altogether?

## DIVIDING BY 10 and 100

### Dividing by 10

When you divide by 10 you **move all the digits one place to the right** and then numbers become 10 times smaller. **If the number ends with a zero you can simply remove it.**

For example:  $250 \div 10 = 25$



### Dividing by 100

When you divide by 100 you **move all the digits two place to the right** and then numbers become 100 times smaller. **If the number ends with two zeros you simply remove them.**

For example:  $2\ 500 \div 100 = 25$



### EXERCISE 1

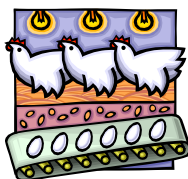
1. $5\ 100 \div 10 =$	2. $1\ 100 \div 10 =$	3. $1\ 630 \div 10 =$	4. $7\ 040 \div 10 =$
5. $1\ 900 \div 10 =$	6. $2\ 140 \div 10 =$	7. $8370 \div 10 =$	8. $1970 \div 10 =$

### EXERCISE 2

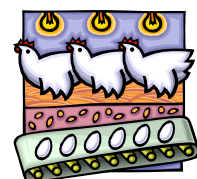
1. $5\ 100 \div 100 =$	2. $1\ 100 \div 100 =$	3. $17\ 300 \div 100 =$	4. $73\ 000 \div 100 =$
5. $16\ 800 \div 100 =$	6. $3\ 100 \div 100 =$	7. $81\ 200 \div 100 =$	8. $14\ 900 \div 100 =$

## INSTAMATHS EXERCISES

Dividing by 10 and 100	Instamaths 29	Total 20	Your mark:
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$12 \div 2$	$14 \div 14$
$12 \div 1$	$14 \div 7$
$13 \div 13$	$14 \div 2$
$13 \div 1$	$14 \div 1$



## SHORT DIVISION

### EXERCISE 1

1. $429 \div 3$	2. $303 \div 3$	3. $180 \div 6$	4. $282 \div 2$
5. $100 \div 5$	6. $260 \div 4$	7. $141 \div 3$	8. $400 \div 5$

### EXERCISE 2

1. $175 \div 7$	2. $440 \div 4$	3. $220 \div 10$	4. $410 \div 5$
5. $540 \div 6$	6. $148 \div 4$	7. $450 \div 9$	8. $200 \div 8$
9. $234 \div 9$	10. $459 \div 3$	11. $462 \div 6$	12. $188 \div 2$

### EXERCISE 3 (WITH REMAINDERS)

1. $169 \div 7$	2. $430 \div 4$	3. $342 \div 10$	4. $217 \div 5$
5. $531 \div 6$	6. $151 \div 4$	7. $471 \div 9$	8. $214 \div 3$

## INSTAMATHS EXERCISES

Dividing by 2 3 4	Instamaths 19	Total 20	Your mark:
Dividing by 5 6 7	Instamaths 21	Total 10	Your mark:
Dividing by 8 9	Instamaths 24	Total 20	Your mark:
Multiply and divide by 6	Instamaths 22	Total 10	Your mark:
Short Division	Instamaths 35	Total 20	Your mark:
“Long” Division	Instamaths 36	Total 10	Your mark:
The four operations	Instamaths 37	Total 20	Your mark:
Word Problems	Instamaths 38	Total 10	Your mark:

## PROBLEM SOLVING

1. I have 480 cm of ribbon. How many 6 cm lengths can I get from it?
2. I have 528 eggs. If I put 6 eggs into a box, how many egg boxes would I use?
3. I have R320 and tickets for a show cost R8 each? How many tickets can I buy?
4. There are 148 children in grade 4. How many teams of 5 can they make?



## MEASURING TIME

We can measure time in seconds, minutes, hours, days, weeks, fortnights, months, seasons, years, decades, centuries and millennia. You need to understand these units of measurement and know when to use each one.

**Seconds** - used for measuring a short length of time such as a quick sprint.

**Minutes** - used for measuring time that is quite short, but likely to be longer than 60 seconds such as a bus journey to school.

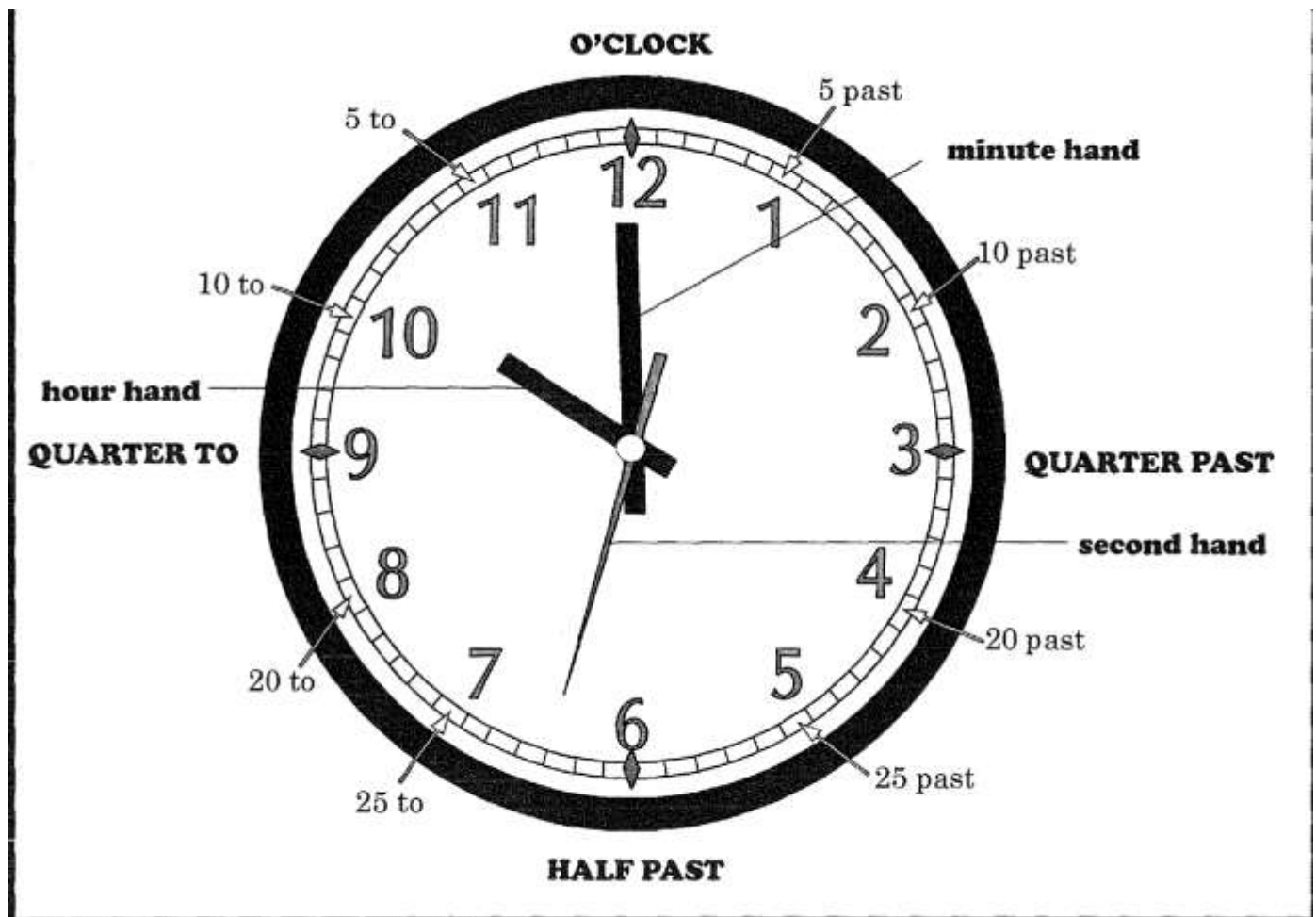
**Hours** - used for measuring longer periods of time, such as how many hours you have to work in a day or a week.

## TYPES OF CLOCKS

A DIGITAL CLOCK



AN ANALOGUE CLOCK



## CONVERTING TIME DIGITAL (24 HR CLOCK) AND ANALOGUE (12 HR CLOCK)

With the 24 hour (digital) clock the time is shown in hours and minutes from midnight.

With am/pm or 12 hour (analogue) clock the day is split into the 12 hours running from midnight to noon (the am hours) and the other 12 hours running from noon to midnight (the pm hours).

24 hour clock		12 hour clock	
00:00		00:00 am	
01:00	13:00	01:00 am	01:00 pm
02:00	14:00	02:00 am	02:00 pm
03:00	15:00	03:00 am	03:00 pm
04:00	16:00	04:00 am	04:00 pm
05:00	17:00	05:00 am	05:00 pm
06:00	18:00	06:00 am	06:00 pm
07:00	19:00	07:00 am	07:00 pm
08:00	20:00	08:00 am	08:00 pm
09:00	21:00	09:00 am	09:00 pm
10:00	22:00	10:00 am	10:00 pm
11:00	23:00	11:00 am	11:00 pm
12:00	24:00	12:00 pm	00:00 am

Time in words	24 hour clock (digital clock)	12 hour clock (analogue clock)
1. seven o'clock in the evening	19:00	07:00 pm
2. quarter to ten in the evening		09:45 pm
3. twenty past two in the afternoon	14:20	
4. quarter past ten in the evening	22:15	
5. midnight		00:00 am
6. midday	12:00	
7. quarter past two in the evening		02:15 am
8. half past eleven in the evening		11:30 pm
9. quarter past eight in the morning	08:15	
10. quarter to 7 in the morning		06:45 am

### INSTAMATHS EXERCISES

24 hr clock	Instamaths 83	Total 10	Your mark:
24 hr clock	Instamaths 85	Total 10	Your mark:
24 hr clock	Instamaths 86	Total 10	Your mark:



## HOURS AND MINUTES/BUS TIME TABLE

**1 hr = 60 mins;  $\frac{3}{4}$  hr = 45 mins;  $\frac{1}{2}$  hr = 30 mins;  $\frac{1}{4}$  hr = 15 mins;**

**1 min = 60 secs**

Complete the following...

1 hour = 60 mins
2 $\frac{1}{2}$ hours = _____ mins
3 hours and 57 mins = _____ mins
4 $\frac{3}{4}$ hours = _____ mins
5 hours and 33 mins = _____ mins
6 $\frac{1}{4}$ hours = _____ mins

Write the following as hours and minutes.

330 mins = \_\_\_\_\_ hours \_\_\_\_\_ minutes

260 mins = \_\_\_\_\_ hours \_\_\_\_\_ minutes

470 mins = \_\_\_\_\_ hours \_\_\_\_\_ minutes

205 mins = \_\_\_\_\_ hours \_\_\_\_\_ minutes



### BUS TIMETABLE

DESTINATION	BUS
Cape Town	9:00am
Somerset West	10:15am
Worcester	11:00am
Caledon	1:45pm
Mossel Bay	2:10pm

1. How long does it take to get from Cape Town to Somerset West?	
2. How long does it take to go from Caledon to Mossel Bay?	
3. How long does it take to get from Somerset West to Worcester?	
4. How long does it take to get from Cape Town to Worcester?	
5. How long does it take to get from Worcester to Mossel Bay?	

## USING A CALENDER



1. What date is your birthday?	
2. What day is your birthday on this year?	
3. How many Sundays are there in August?	
4. How many Fridays are there in January?	
6. How many days are there in April?	
7. Which is the shortest month?	
8. Besides January, March, May, August, October and December which month has 31 days?	
9. How many full weeks are there in each month?	
10. How many months is it from 1 <sup>st</sup> April to 1 <sup>st</sup> December?	
11. What will the date be 2 weeks from today?	
12. What day is Christmas Day on this year?	




### ROMAN NUMERALS (to be learned)

1 = I	2 = II	3 = III	4 = IV	5 = V	6 = VI
7 = VII	8 = VIII	9 = IX	10 = X	11 = XI	12 = XII

### INSTAMATHS EXERCISES

Using a calender	Instamaths 87	Total 10	Your mark:
Using a calender	Instamaths 88	Total 10	Your mark:

## TIME QUIZ

1	How many seconds are there in a minute?		
2	How many hours are there in a day?		
3	How many days are there in a week?		
4	How many days are there in a year?		
5	How many weeks are there in a year?		
6	How many months are there in a year?		
7	Which month comes after March?		
8	Which is the 8 <sup>th</sup> month of the year?		
9	Which month comes before November?		
10	Which month changes the number of days it has in it if it is a leap year?		
11	Which is the 6 <sup>th</sup> month of the year?		
12	How many minutes have passed in a quarter past the hour?		
13	How many minutes have passed if it is half past the hour?		
14	How many minutes have passed if it is quarter to the hour?		

### PROBLEMS



1	Sue got on the bus at 9 o' clock. The journey took half an hour. What time did she get off the bus?	
2	Playtime started at quarter past ten. It finished at quarter to eleven. How long was playtime?	
3	Grade 4 got on the school bus at five to 11. They arrived at the centre at half past twelve. How long was the bus journey?	
4	The children sat down to watch a film at quarter to five. It lasted an hour and a half. What time did the film end?	
5	Mary went into a shop at 10:30. She came out t 10:45. How long was she in the shop?	

### INSTAMATHS EXERCISES

Time Quiz	Instamaths 84	Total 10	Your mark:
Speed, Distance, Time	Instamaths 89	Total 20	Your mark:

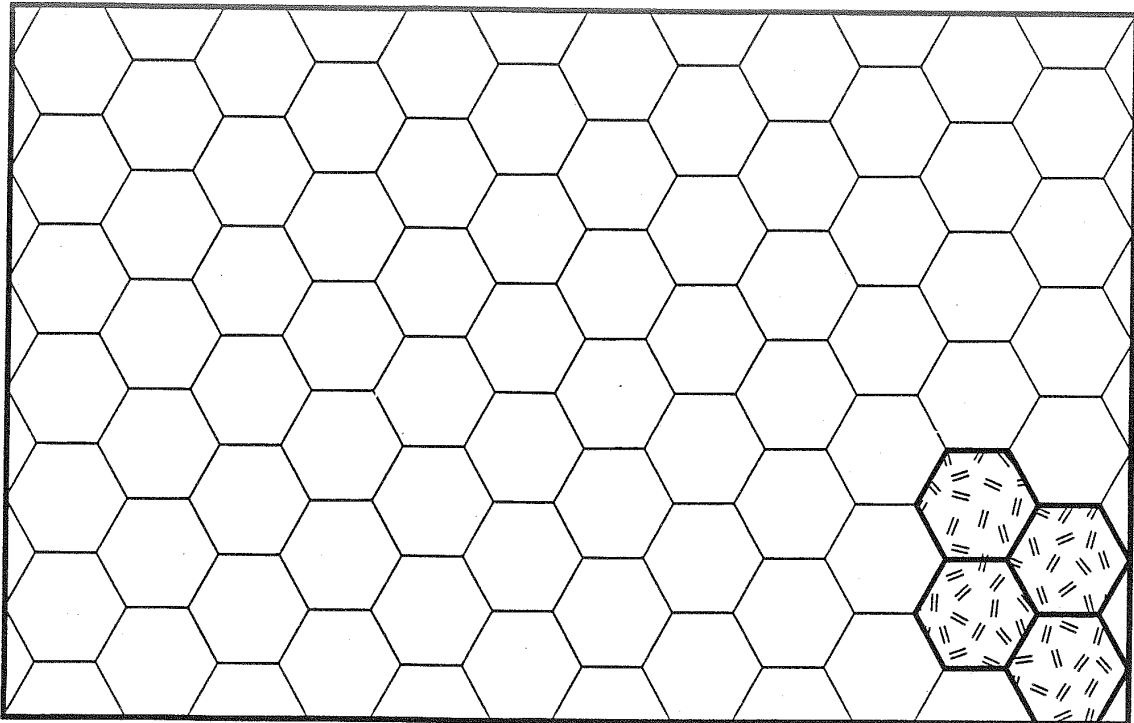
## SPACE AND SHAPE: TESSELLATIONS/TANGRAMS

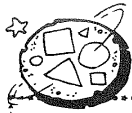
**A tessellation is when the same shape repeats itself without leaving spaces.** You may tessellate with squares, hexagons (6 sided figure) and octagons (8 sided figure). You may also tessellate with letters like the letters "F" and "S",

Colour in the tessellating hexagons to make a colourful display.

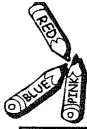
How many sides does this shape have? \_\_\_\_\_

What is this shape called? It is a \_\_\_\_\_



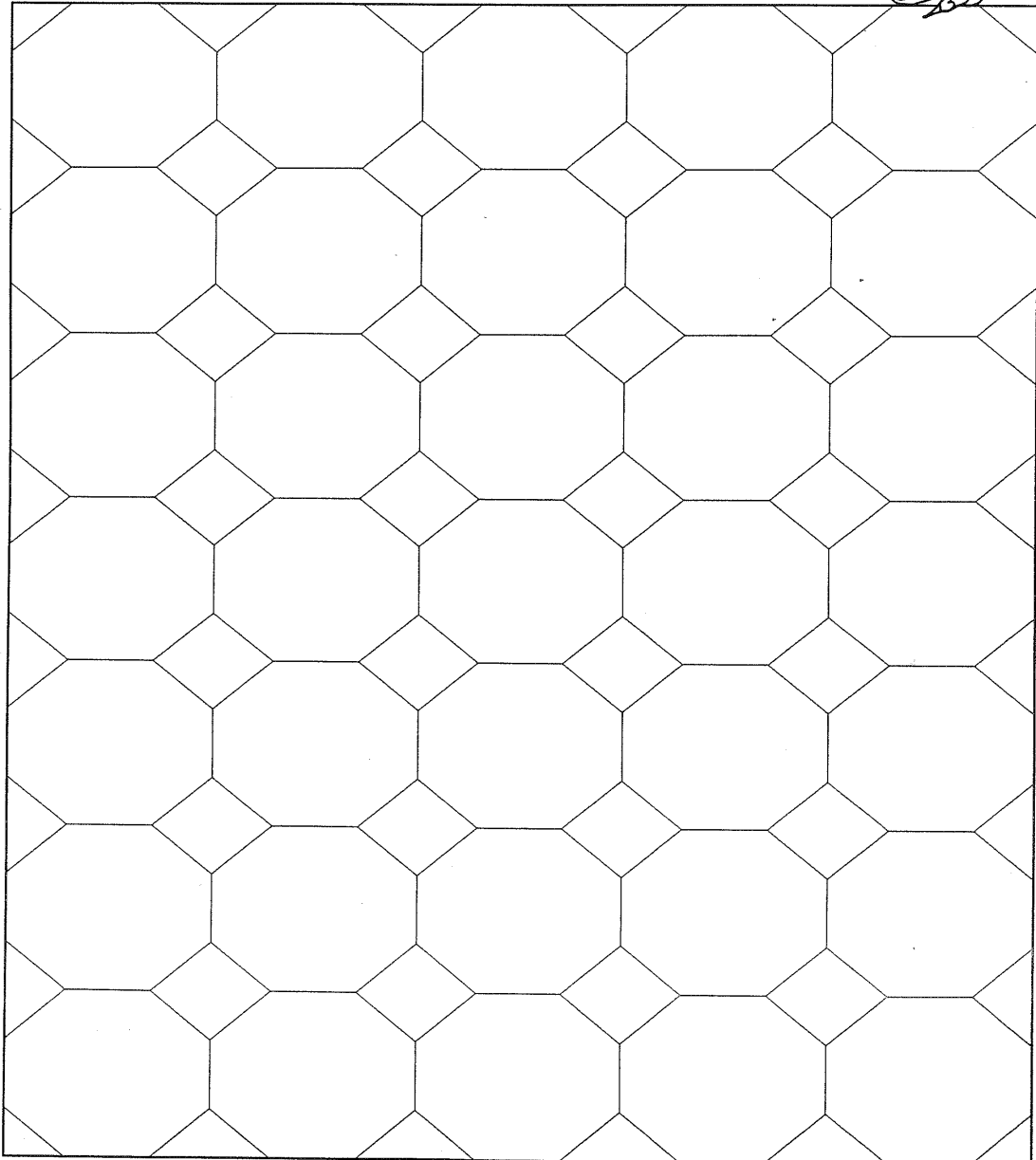
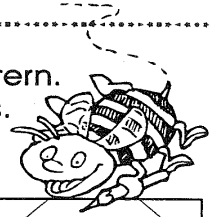


# Tessellations



Two shapes can be used to make a tessellating pattern.  
The grid below is made from octagons and squares.

Colour the grid to make an interesting pattern.

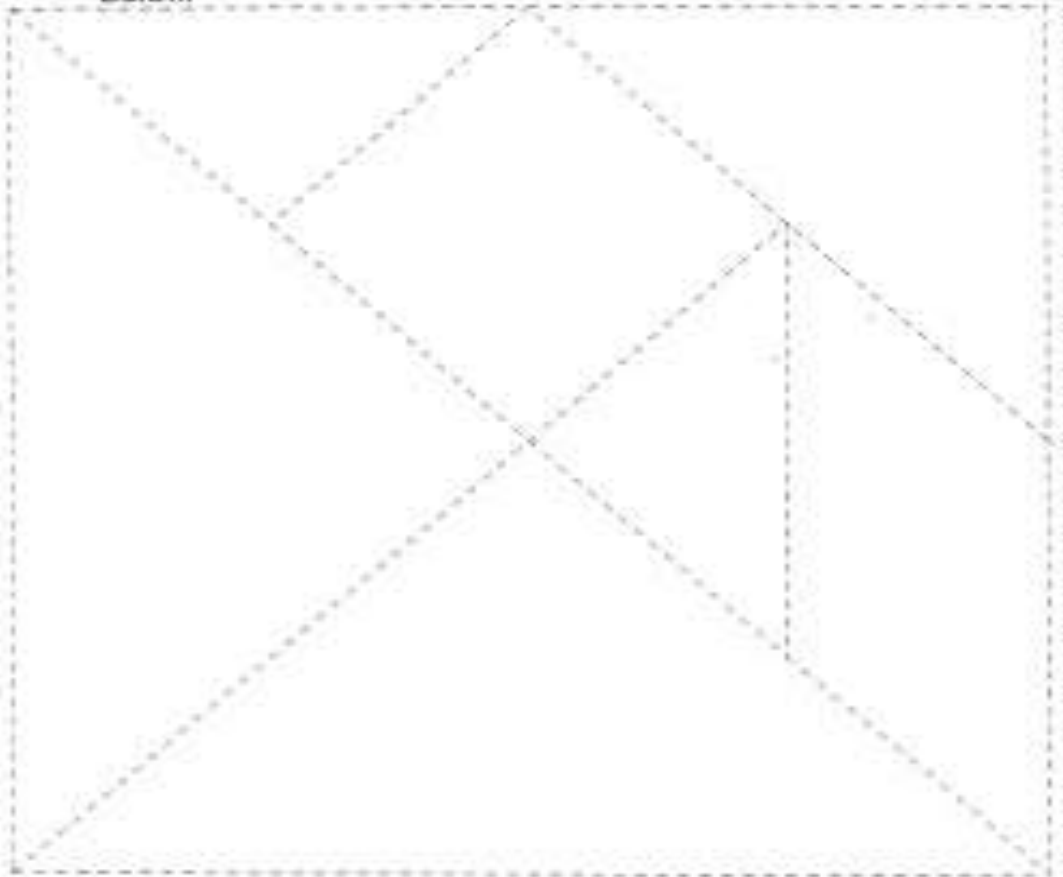




# Tangram Pictures – 1



Cut the tangram square along the dotted lines into its seven pieces and use these shapes to make the picture of the dog below.



## TANGRAMS

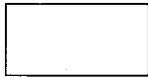
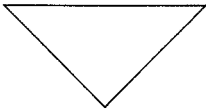

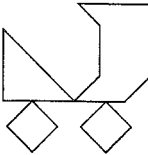
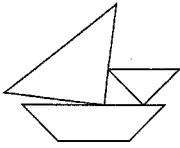
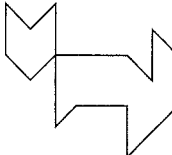
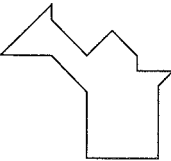
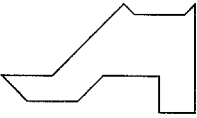
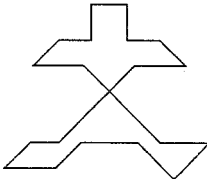
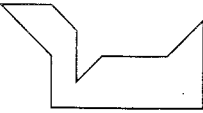
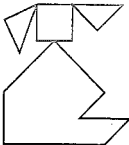

Go over the dotted lines in a dark colour. Trace the shapes onto an A4 page and cut out the 7 pieces. Try to make the dog (difficult) but then move on to the yacht, pram, cat, running man, triangle, teapot and shoe which are on the next page.



## Tangram Pictures – 2



Use the tangram pieces from the previous activity to make these tangram pictures.

rectangle 	triangle 	parallelogram 
pram 	yacht 	cat 
watering can 	shoe 	running person 
swimming swan 	mouse 	teapot 

### MATHS GAME

1. Go to yellow **Maths** folder on your computer screen.
2. Click on **TANGRAM**
3. Start at the “**easy**” end and work through to “**very hard**”. Please mark off the work when you have done it.

Easy		Medium		Hard		V Hard	
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# GRADE 4 MATHLETICS

## OPERATIONS/PATTERNS AND ALGEBRA

OPERATIONS :	PATTERNS AND ALGEBRA
ARE YOU READY?	ARE YOU READY?
Estimate sums	Problems: add and subtract
Estimate differences	Missing values
Adding colossal columns	Find the missing number 1
Subtracting colossal columns	TEST
Add: common denominator	
Multiply 2 digit number: regroup	SOMETHING EASIER
Long division	Magic mental addition
Magic mental addition	Magic mental subtraction
Magic mental subtraction	Increasing patterns
Multiplication facts	
Fact families: multiply and divide	SOMETHING HARDER
Arithmetic laws	Problems : times and divide
TEST	Mass word problems
	Pick the next number
SOMETHING EASIER	Find the missing number 2
Additive addition	I am thinking of a number
Simple subtraction	
Multiplication arrays	
Short division	
Simplifying fractions	
Order of operations 1	
SOMETHING HARDER	
Column addition	
Column subtractions	
Division facts	
Contracted multiplication	
Add: no common denominator	
Highest common factor	
Order of operations 2	

