



## What's in it for me?

Your teacher and parents will be pleased if you do well in your Mathematics examination but **you** will gain most. The more qualifications you obtain the more choices you will have in the job market.

Good qualifications can lead to higher salaries. They can also lead to more exciting and interesting careers. There are possibilities of foreign travel, stimulating challenges and the chance to make a worthwhile contribution to society.

If you want these things, **now** is the time to act. Tomorrow is too late.

Even if your chosen career is nothing to do with Mathematics, employers will still be interested in your Mathematics grade. Mathematics is an essential subject. It shows that you have the ability to think, reason and solve problems. No matter what your chosen career, Mathematics is vital.

You are not a child; you are a young adult. No-one can force you to revise. The decision must be yours.

### I want to do well, but how?

The first thing to do is to make up your mind to succeed.

You have to start **today** not tomorrow.

Take responsibility for yourself.

## — GET ORGANISED —

***You need a realistic revision plan, something you can stick to.***

The timetable planner will help.

***You need to know what to revise.***

The self-assessment charts will tell you what to learn.

***You need revision notes and examples.***

Your revision notebook will provide this.

If you are in Year 10 an hour each week will be enough.

If you are in Year 11 an hour will do but things are becoming critical. Two hours would be better.

(Do your revision in separate half-hour sessions at the same time each week.)



# Self-assessment chart Level 4 (Foundation Level)

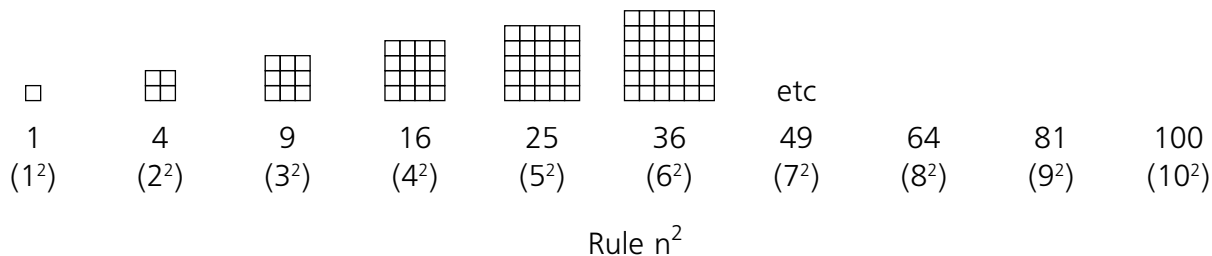
	Self-assessment weakness      strength ←—————→	Textbook page	Revision notebook page
<b>Number and Algebra</b>			
Place value	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	.....	.....
Multiplication facts	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	.....	.....
Solving problems without a calculator	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	.....	.....
Addition and subtraction of decimals	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	.....	.....
Calculation checks	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	.....	.....
Fractions and percentages	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	.....	.....
Number patterns	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	.....	.....
Formulae expressed in words	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	.....	.....
Co-ordinates in the first quadrant	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	.....	.....
<b>Shape, Space and Measures</b>			
3-D models	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	.....	.....
Common 2-D shapes	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	.....	.....
Congruent shapes	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	.....	.....
Rotational symmetry	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	.....	.....
Reflection	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	.....	.....
Measurement	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	.....	.....
Perimeter, area and volume	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	.....	.....
<b>Handling Data</b>			
Frequency tables	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	.....	.....
Median and mode	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	.....	.....
Frequency diagrams	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	.....	.....
Line graphs	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	.....	.....
Probability	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	.....	.....



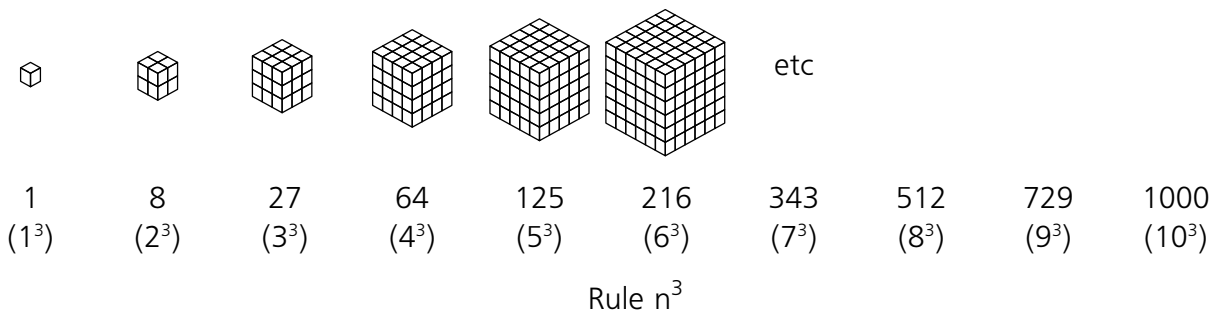
## Coursework projects: Patterns to memorise

The following patterns should be **memorised**. They are useful for coursework and examinations.

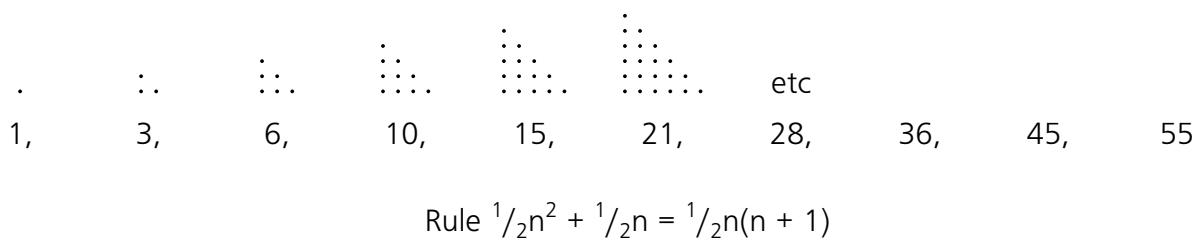
### Square numbers (eg $5 \times 5 = 25$ , therefore 25 is a square number)



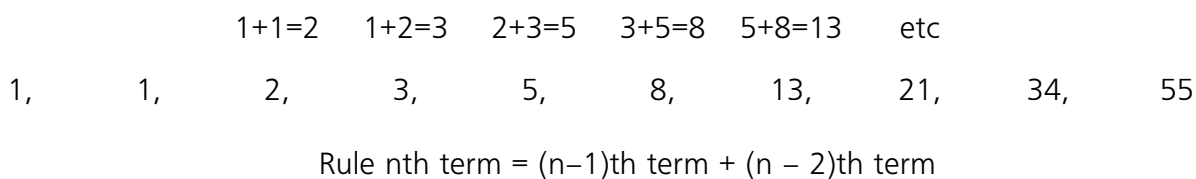
### Cube numbers (eg $6 \times 6 \times 6 = 216$ , therefore 216 is a cube number)



### Triangle numbers



### Fibonacci sequence





## Aural test: Intermediate Level

Ask a parent or friend to read each question twice. Allow fifteen minutes for the test.

- 1 In a sale, a book priced at £20 was reduced to £15. What percentage reduction on the original price is this?
- 2 How many 23 pence stamps can I buy for £5 and how much change will there be?
- 3 What is the difference in height between a man who is 1.8 metres tall and a boy who is 128 centimetres tall?
- 4 In a test I got 32 marks out of 40. This was recorded as a percentage. What percentage was this?
- 5 What is the area of a rectangular field which is 700 metres long and 600 metres wide?
- 6 A car started its journey at 11.45 and arrived at 12.30. It travelled at a speed of 60 kilometres per hour. How far did it travel?
- 7 What is the difference between the square of 16 and the square root of 16?
- 8 How many sides do four separate cubes have?
- 9 A ferry left Poole at 13.20 and arrived at Cherbourg at 19.10. How long did the journey take?
- 10 The average of three numbers is eight. Two of the numbers are six and seven. What is the other number?
- 11 A door is 2.4 metres high. How many millimetres is this?
- 12 A video recorder costs £300 plus  $17\frac{1}{2}$  per cent VAT. How much is the VAT?
- 13 Mr Saunders is paid time and a half for overtime. He earns £27 for three hours overtime. What is his normal hourly rate of pay?
- 14 80 per cent of a class are present and five pupils are absent. How many pupils are present?
- 15 I ran 4250 metres in a ten kilometre race. How far short of the finish was I?