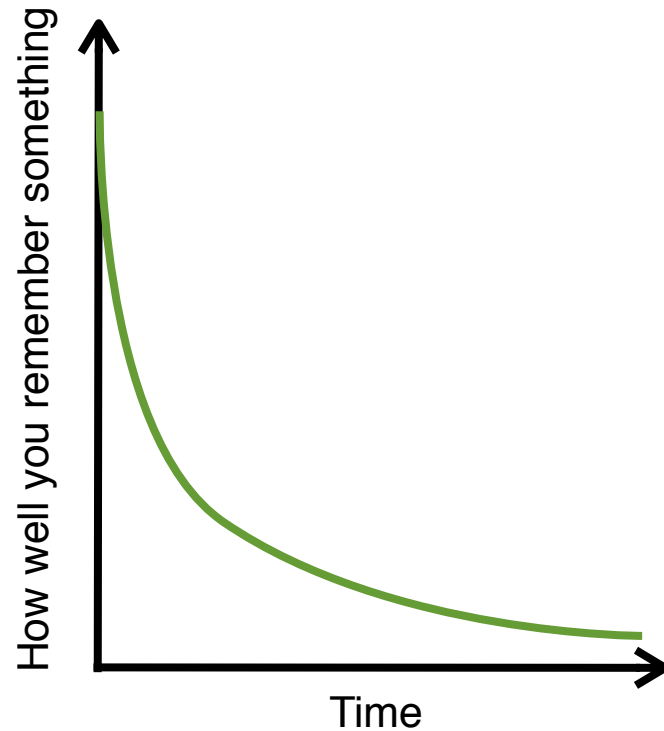


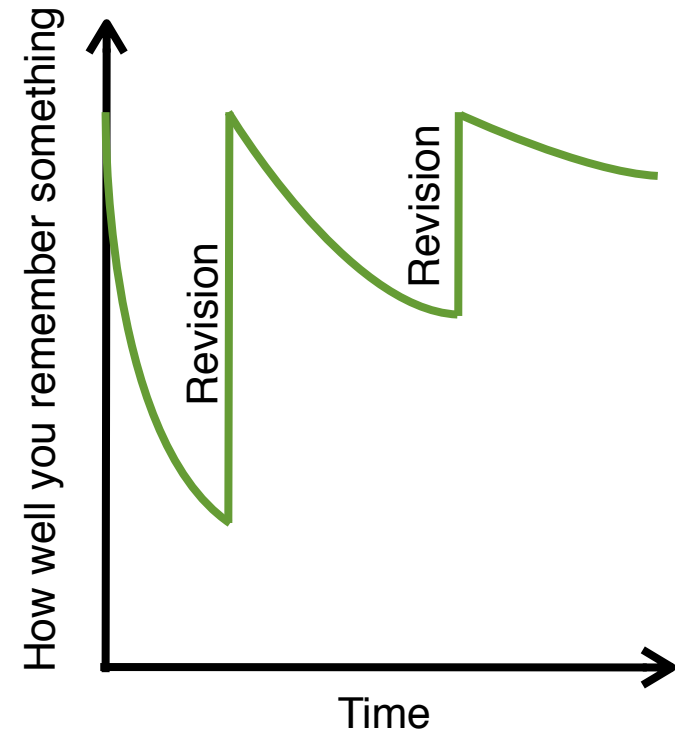
Revision Grids

Level 5



No Revision

VS



With Revision

By Great Maths Teaching Ideas

Revision Grids

Level 5

Welcome and thank you for downloading this Level 5 Revision Grids pack from ***Great Maths Teaching Ideas***.

These resources are to help pupils revise maths topics at level 5 in preparation for their assessments. The questions cover the whole curriculum at level 5.

There are many ways in which you can use the revision grids in the classroom. You can use them just as straightforward worksheets for individual or pair work. Alternatively, they can be used as a '4 in a line' game where pupils take it in turns to answer a question and if they get it right they put a coloured counter on the square. First to get 4 in a line wins. This can also work nicely as a whole-class starter or plenary if you have a projector and/or interactive whiteboard.

If you want to promote collaboration and independent learning getting pupils to work in pairs with a textbook as a reference and then coming to you to see how many they have right is a good strategy. Only tell them how many they have right, not which ones so they have to go away and discuss it with other groups to work out where they have gone wrong and what they need to do to correct it.

My inspiration for creating these Revision Grids came from the excellent blog MEDIAN by Don Steward. <http://donsteward.blogspot.co.uk/> His blog is full of wonderful teaching resources and I can't recommend it highly enough. Be sure to take a read.

I hope you and your pupils have fun lessons with lots of learning using these Revision Grids. Drop me a line and let me know how you get on: williamgeorgeemeny@gmail.com

William Emeny

Revision Grids

1	Negative numbers	2	Negative numbers	3	Negative numbers	4	Negative numbers	5	Negative numbers
$3 - 5$		$(-5) - 7$		$(-12) + 10$		$(-4) + 15$		$3 + (-8)$	
6	Negative numbers	7	Negative numbers	8	Negative numbers	9	Negative numbers	10	Negative numbers
$5 - (-16)$		$(-4) \times 5$		$(-8) \times (-3)$		$18 \div (-3)$		$(-81) \div (-9)$	
11	Add	12	Subtract	13	Multiplying	14	Multiplying	15	Multiplying
$8.908 + 12.63$		$152.324 - 23.96$		2.34×10		0.00403×100		4.49×1000	
16	Dividing	17	Dividing	18	Dividing	19	Multiplying	20	Multiplying
$8.982 \div 10$		$73.93 \div 100$		$7.1 \div 1000$		3×0.6		26×4.35	

Revision Grids- Answers

Level 5 Sheet 1

1		2		3		4		5	
-2		-12		-2		11		-5	
6		7		8		9		10	
21		-20		24		-6		9	
11		12		13		14		15	
21.538		128.364		23.4		0.403		4490	
16		17		18		19		20	
0.8982		0.7393		0.0071		1.8		113.1	

Revision Grids

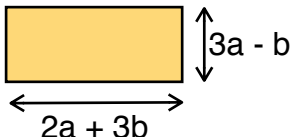
1	Multiplying	2	Multiplying	3	Multiplying	4	Dividing	5	Dividing
0.3 X 4.6		3.5 X 4.39		7.92 X 5.61		6.8 ÷ 4		41.4 ÷ 9	
6	Dividing	7	Rounding	8	Rounding	9	Rounding	10	Rounding
Five friends eat out in a restaurant. The bill is £82.75. How much do they pay each if they all pay the same?		Round 3.27 to the nearest whole number		Round 45.5 to the nearest whole number		Round 4.847 to 1 decimal place		Round 5.02 to 1 decimal place	
11	Rounding	12	Rounding	13	Fractions	14	Fractions	15	Fractions
Round 4.569 to 2 d.p.		Round 84.9999 to 3 d.p		$\frac{1}{5}$ of 45		$\frac{3}{7}$ of 21		$\frac{5}{8} = \frac{?}{40}$	
16	Fractions	17	Fractions	18	Simple Interest	19	Simple Interest	20	Simple Interest
Odd one out? $\frac{12}{42}$ $\frac{2}{7}$ $\frac{5}{21}$		Which is biggest? $\frac{3}{4}$ $\frac{14}{20}$ $\frac{2}{5}$		Find the simple interest on a loan of £5000 over 6 years at 10% per annum		I take out a loan of £10 000 over 3 years with a simple interest rate of 6%. What is my monthly repayment?		I have £8000 in a bank account for 3 years and receive £240 simple interest. What is the simple interest rate?	

Revision Grids- Answers

Level 5 Sheet 2

1		2		3		4		5	
1.38		15.365		44.4312		1.7		4.6	
6		7		8		9		10	
£16.55		3		46		4.8		5.0	
11		12		13		14		15	
4.57		85.000		9		9		$\frac{25}{40}$	
16		17		18		19		20	
$\frac{5}{21}$		$\frac{3}{4}$		£3000		£327.78 (to nearest penny)		1%	

Revision Grids

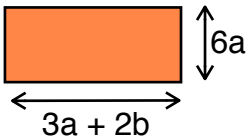
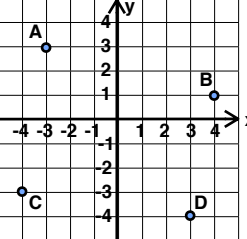
1	Multiplying	2	Multiplying	3	Dividing	4	Dividing	5	Percentages
26 X 458		372 X 832		2198 ÷ 7		938 ÷ 14		62% of 350	
6	Percentages	7	Percentages	8	PFF	9	HCF	10	LCM
82% of 400		A dress is reduced by 25% in a sale. The original price was £80. What is the sale price?		Write 92 as a product of prime factors		What is the highest common factor of 120 and 84?		What is the lowest common multiple of 30 and 25	
11	Ratio	12	Proportion	13	Proportion	14	Proportion	15	Collecting like terms
Share £45 in the ratio 4 : 5		There are 8 chocolate bars in a pack. How many are there in 15 packs?		I need 300g of flour to make pancakes for 4 people. How much flour will I need to make pancakes for 6 people?		I need 400g of sugar to make 30 iced buns. How many iced buns will 1kg of sugar make?		Simplify $a + a + a$	
16	Collecting like terms	17	Collecting like terms	18	Collecting like terms	19	Multiplying algebraic terms	20	Multiplying algebraic terms
Simplify $3a + 2b + 5a - 4b$		Simplify $3x^2 + 2x + 3x$		Perimeter of this shape? 		Simplify $3 \times a$		Simplify $b \times b$	

Revision Grids- Answers

Level 5 Sheet 3

1		2		3		4		5	
11 908		309 504		314		67		217	
6		7		8		9		10	
328		£60		2 X 2 X 23		12		150	
11		12		13		14		15	
£20 : £25		120		450g		75		3a	
16		17		18		19		20	
$8a - 2b$		$3x^2 + 5x$		$10a + 4b$		3a		b^2	

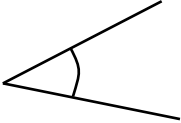

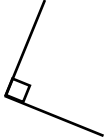
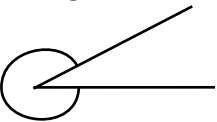
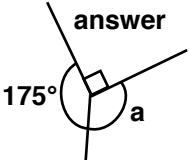
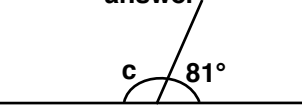
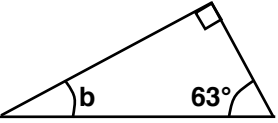
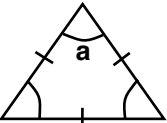
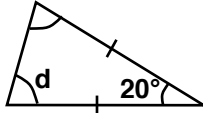
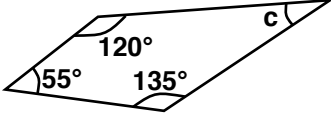
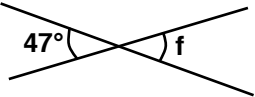
Revision Grids

1	Multiplying algebraic terms	2	Multiplying algebraic terms	3	Multiplying algebraic terms	4	Expanding	5	Expanding
	Simplify $3a \times 4b$		Simplify $4y \times 10y$		Simplify $3ab \times 6b$		Expand $3(a + 4)$		Multiply out $4(c - 5)$
6	Expanding	7	Expanding	8	Expanding	9	Expanding	10	Coordinates
	Expand $3x(2x + 5)$		Expand and simplify $2(a + 5) + 3(a + 4)$		Expand and simplify $4(c - 2) - 3(c - 2)$		Area of this shape? 		 <p>Coordinates of points A, B, C and D?</p>
11	Coordinates	12	Coordinates	13	Equations	14	Equations	15	Equations
	Coordinate of midpoint of $(2, 8)$ and $(6, 2)$		Midpoint coordinate between $(-3, -1)$ and $(6, 4)$		Solve $x + 5 = 10$		Solve $3x = 36$		Solve $\frac{y}{4} = 12$
16	Equations	17	Equations	18	Equations	19	Formulae	20	Formulae
	Solve $2y + 5 = 11$		Solve $5z - 4 = 16$		Solve $\frac{y}{3} + 3 = 5$		A rectangle has length L and height H . Write a formula for the area A of the rectangle		A regular hexagon has sides of length X . Write a formula for the perimeter P of the hexagon

Revision Grids- Answers

1		2		3		4		5	
$12ab$		$40y^2$		$18ab^2$		$3a + 12$		$4c - 20$	
6		7		8		9		10	
$6x^2 + 15x$		$5a + 22$		$c - 2$		$18a^2 + 12ab$		A (-3, 3) B (4, 1) C (-4, -3) D (3, -4)	
11		12		13		14		15	
$(4, 5)$		$(1.5, 1.5)$		$x = 5$		$x = 12$		$y = 48$	
16		17		18		19		20	
$y = 3$		$z = 4$		$y = 6$		$A = LH$		$P = 6X$	

Revision Grids

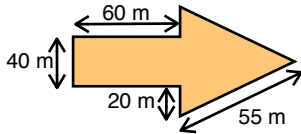
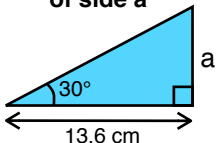
1	BIDMAS	2	BIDMAS	3	BIDMAS	4	Substitution	5	Substitution
	$3 + 2 \times 5$		$(3 + 5) \times (6 - 2)$		$4 \times 5 - 12 \div 4$		If $a = 3$, calculate the value of this expression $4a + 12$		If $c = 5$, calculate the value of this expression $3(c - 2) + 6$
6	Substitution	7	Substitution	8	Angles	9	Angles	10	Angles
	If $b = 9$, calculate the value of this expression $\frac{3b + 8}{5}$		If $a = -4$, calculate the value of this expression $5 - 3a$		What type of angle is this? 		What type of angle is this? 		What type of angle is this? 
11	Angles	12	Angles	13	Angles	14	Angles	15	Angles
	What type of angle is this? 		Draw an angle as close to 30° as possible without using a protractor. Then measure it using a protractor. Try to get within 10 degrees. If you didn't succeed, try again		Draw an angle as close to 280° as possible without using a protractor. Then measure it using a protractor. Try to get within 10 degrees. If you didn't succeed, try again		Calculate the size of angle a. Give a reason for your answer 		Calculate the size of angle c. Give a reason for your answer 
16	Angles	17	Angles	18	Angles	19	Angles	20	Angles
	Calculate the size of angle b. Give a reason for your answer 		Calculate the size of angle a. Give a reason for your answer 		Calculate the size of angle d. Give a reason for your answer 		Calculate the size of angle c. Give a reason for your answer 		Calculate the size of angle f. Give a reason for your answer 

Revision Grids- Answers

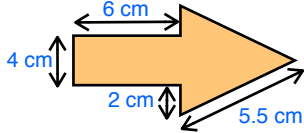
Level 5 Sheet 5

1	2	3	4	5
13	32	17	24	15
6	7	8	9	10
7	17	Acute	Obtuse	Right angle
11	12	13	14	15
Reflex			$a = 95^\circ$ Angles around a point add up to 360°	$c = 99^\circ$ Angles on a straight line add up to 180°
16	17	18	19	20
$b = 27^\circ$ Angles in a triangle add up to 180°	$a = 60^\circ$ Angles in an equilateral triangle are all 60°	$d = 80^\circ$ Base angles in an isosceles triangle are equal	$a = 50^\circ$ Angles in a quadrilateral add up to 360°	$f = 47^\circ$ Vertically opposite angles are equal




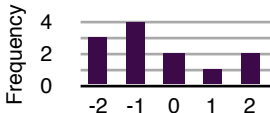
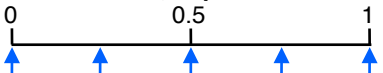
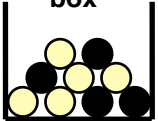
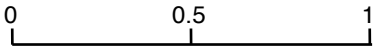
Revision Grids

1	Constructions	2	Constructions	3	Constructions	4	Units	5	Units
	Construct a SAS triangle 4.3cm, 36°, 5.7cm. Measure the side lengths and angles after the construction to check you are within $\pm 1\text{mm}$ and $\pm 1^\circ$		Construct a ASA triangle 48°, 6.8cm, 63°. Measure the side lengths and angles after the construction to check you are within $\pm 1\text{mm}$ and $\pm 1^\circ$		Construct a SSS triangle 4.9cm, 6.1cm, 5.8cm. Measure the side lengths after the construction to check you are within $\pm 1\text{mm}$		45 mm = cm		3.27 cm = m
6	Units	7	Units	8	Units	9	Units	10	Units
	0.65 km = m		120 mg = g		4.72 kg = g		12.4 l = cl		75 cl = ml
11	Units	12	Units	13	Units	14	Units	15	Units
	4598 ml = l		10 miles \approx km		7.5 cm \approx inches		3 kg \approx pounds		90 g \approx ounces
16	Units	17	Units	18	Scale drawing	19	Scale drawing	20	Scale drawing
	3 gallons \approx l		2 l \approx pints		Produce an accurate scale drawing to the scale 1 cm = 10 m 		Find the missing lengths if the scale is 3 cm = 5 m 6 cm = m cm = 15 m cm = 1 m		Produce an accurate scale drawing then measure the length of side a 

Revision Grids- Answers

1		2		3		4		5	
						4.5 cm		3.27 m	
6		7		8		9		10	
650 m		0.12 g		4720 g		1240 cl		750 ml	
11		12		13		14		15	
4.598 l		16 km (assuming 5 miles = 8 km)		3 inches (assuming 1 inch = 2.5 cm)		6.6 pounds (assuming 1 kg = 2.2 pounds)		3 ounces (assuming 1 ounce = 30 g)	
16		17		18		19		20	
13.5 l (assuming 1 gallon = 4.5 l)		3.5 pints (assuming 1 l = 1.75 pints)				6 cm = 10 m 9 cm = 15 m 0.6 cm = 1 m		a = 7.9 cm to 1 d.p.	

Revision Grids

1	Pie charts	2	Pie charts	3	Pie charts	4	Averages	5	Averages														
<p>12 people were asked "what is your favourite fruit?" Their answers are shown in a pie chart:</p>  <ul style="list-style-type: none"> ● Banana = people ● Apple = people ● Pear = people 		<p>6 people were asked "what is your favourite colour?" Their answers are shown in a pie chart:</p>  <ul style="list-style-type: none"> ● Yellow = people ● Orange = people ● Red = people ● Blue = people 		<p>People were asked "what pets do you have?" Fill in the missing numbers of people:</p>  <ul style="list-style-type: none"> ● Cat = people ● Dog = people ● Fish = people ● None = 6 people 		<p>Calculate the mean of these numbers:</p> <p style="text-align: center;">12, 7, 3, 21, 9, 8</p>		<p>Calculate the median of these numbers:</p> <p style="text-align: center;">4, 6, 8, 2, 3</p>															
6	Averages	7	Averages	8	Averages	9	Averages	10	Averages														
<p>Calculate the median of these numbers:</p> <p style="text-align: center;">13, 11, 17, 1, 19, 4</p>		<p>Calculate the median of these numbers:</p> <p style="text-align: center;">21, 43, 18, 7, 29, 15</p>		<p>Calculate the mode of these numbers:</p> <p style="text-align: center;">6, 2, 3, 1, 2, 7, 8</p>		<p>Calculate the mode of these numbers:</p> <p style="text-align: center;">4, 7, 12, 4, 9, 7, 11, 19</p>		<p>Calculate the mode of these numbers:</p> <p style="text-align: center;">3, 6, 1, 32, 7, 9, 14, 19</p>															
11	Averages	12	Averages	13	Range	14	Probability	15	Probability														
<p>What is the modal score from rolling this die?</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Score</th> <th>Frequency</th> </tr> </thead> <tbody> <tr><td>1</td><td>12</td></tr> <tr><td>2</td><td>15</td></tr> <tr><td>3</td><td>11</td></tr> <tr><td>4</td><td>14</td></tr> <tr><td>5</td><td>10</td></tr> <tr><td>6</td><td>12</td></tr> </tbody> </table>		Score	Frequency	1	12	2	15	3	11	4	14	5	10	6	12	<p>What is the modal score on this golf course?</p> 		<p>Calculate the range of these numbers:</p> <p style="text-align: center;">12, 3, 14, 19, 21, 8, 7, 19</p>		<p>Which best describes the chance of throwing a head on a coin toss?</p> <p style="text-align: center;">impossible, unlikely, even chance, likely, certain</p>		<p>Which best describes the chance of getting a 1 when rolling a die?</p> <p style="text-align: center;">impossible, unlikely, even chance, likely, certain</p>	
Score	Frequency																						
1	12																						
2	15																						
3	11																						
4	14																						
5	10																						
6	12																						
16	Probability	17	Probability	18	Probability	19	Probability	20	Probability														
<p>Match the words to the arrows on the probability scale</p> <p style="text-align: center;">unlikely, likely, even chance, certain, impossible</p> 		<p>Is this a fair coin? Explain your answer</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Result</th> <th>Frequency</th> </tr> </thead> <tbody> <tr><td>Heads</td><td>14</td></tr> <tr><td>Tails</td><td>16</td></tr> </tbody> </table>		Result	Frequency	Heads	14	Tails	16	<p>Probability of choosing a black ball at random from this box</p> 		<p>Place a cross (x) on the probability scale to show the chance of not rolling a 6 on a fair die</p> 		<p>The chance it will rain on any one day is always 0.5 because either it will rain or it won't. True?</p>									
Result	Frequency																						
Heads	14																						
Tails	16																						

Revision Grids- Answers

1		2		3		4		5	
Banana = 3 people Apple = 3 people Pear = 6 people		Yellow = 2 people Orange = 2 people Red = 1 person Blue = 1 person		Cat = 8 people Dog = 4 people Fish = 6 people None = 6 people		10		4	
6		7		8		9		10	
12		19.5		2		4 and 7		No mode	
11		12		13		14		15	
2		-1		18		Even chance		Unlikely	
16		17		18		19		20	
		<p>Yes. The chance of getting a head or a tail is the same on a fair coin. We would expect the frequency of each to be <u>equal, or close to equal.</u></p>		$\frac{4}{9}$				<p>Not true! Depending on what weather systems are in your area and what time of year it is the chance it will rain on any one day may be a lot more or less than 0.5. <u>They are not equally likely outcomes</u></p>	

Revision Grids- Design your own. Questions

1		2		3		4		5	
6		7		8		9		10	
11		12		13		14		15	
16		17		18		19		20	

Revision Grids- Design your own. Answers

1		2		3		4		5	
6		7		8		9		10	
11		12		13		14		15	
16		17		18		19		20	