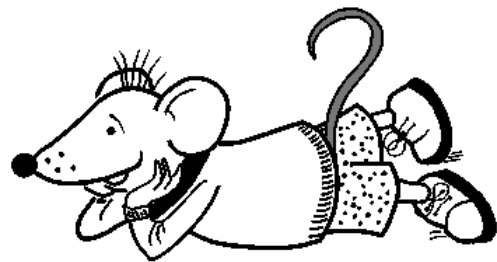
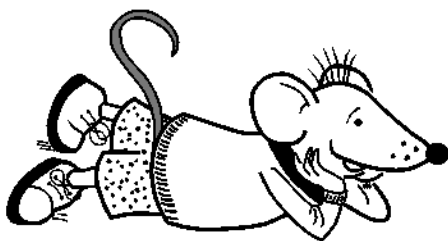


MENTAL ARITHMETIC

YEAR 5

AUTUMN TERM



MathSphere

MENTAL ARITHMETIC : YEAR 5 : AUTUMN TERM : WEEK 1

Paper 1	Answer	Paper 2	Answer
1. Write in figures: Sixty four thousand, eight hundred and thirty seven.	64 837	1. Write in figures: Fifty seven thousand, nine hundred and twenty three.	57 923
2. Write in figures: Twenty two thousand, six hundred and fifteen.	22 615	2. Write in figures: Sixteen thousand, two hundred and thirty seven.	16 237
3. What does the digit 5 stand for in the number: 57 392 ?	50 000	3. What does the digit 2 stand for in the number: 42 744 ?	2 000
4. What is the value of the digit 8 in the number: 79 841 ?	800	4. What is the value of the digit 6 in the number: 63 994 ?	60 000
5. What is 36 multiplied by 100 ?	3 600	5. What is 59 multiplied by 100 ?	5 900
6. How many £10 notes make £30 ?	3	6. How many £10 notes make £80 ?	8
7. Which is bigger: 14 569 or 14 695 ?	14 695	7. Which is bigger: 36 724 or 36 247 ?	36 724
8. How many times is 870 bigger than 87 ?	10	8. How many times is 560 bigger than 56 ?	10
9. A journey lasts 3 hours, give or take 10 minutes. What is the longest the journey could have taken?	3 hrs 10 min	9. A journey lasts 5 hours, give or take 20 minutes. What is the longest the journey could have taken?	5 hrs 20 min
10. The distance from New York to London is 6 804 miles. What is this to the nearest 1000 miles?	7 000 miles	10. The distance from Sydney to London is 19 681 miles. What is this to the nearest 1000 miles?	20 000 miles
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 5 : AUTUMN TERM : WEEK 2

Paper 3	Answer	Paper 4	Answer
1. What is the next number in this sequence: -7, -8, -9, -10, ?	-11	1. What is the next number in this sequence: -12, -14, -16, -18, ?	-20
2. What is the next number in this sequence: -12, -11, -10, -9, ?	-8	2. What is the next number in this sequence: -22, -20, -18, -16, ?	-14
3. What is the next number in this sequence: -4, -3, -2, -1, ?	0	3. What is the next number in this sequence: -12, -9, -6, -3, ?	0
4. The temperature is -6°C . It rises by 2°C . What is the temperature now?	-4°C	4. The temperature is -13°C . It rises by 5°C . What is the temperature now?	-8°C
5. Gita counts in sixes. What is the number she counts after 96 ?	102	5. Lisa counts in nines. What is the number she counts after 63 ?	72
6. Count back four fives from 134. What number do you get?	114	6. Count back three sixes from 60. What number do you get?	42
7. Fill in the missing number: <input type="text"/> , 28, 35, 42, 49.	21	7. Fill in the missing number: <input type="text"/> , 40, 48, 56, 64.	32
8. Ken counts a sequence beginning at 8 and going up in sevens. Is the number 21 in his sequence?	no	8. Tom counts a sequence beginning at 12 and going up in sixes. Is the number 30 in his sequence?	yes
9. Which of these numbers is in the eleven times table: 22, 56, 66, 89 ?	22 66	9. Which of these numbers is in the eleven times table: 43, 55, 77, 88 ?	55 77 88
10. What is 34×100 ?	3 400	10. What is 78×100 ?	7 800
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 5 : AUTUMN TERM : WEEK 3

Paper 5	Answer	Paper 6	Answer
1. Which of these numbers have the factor 5: 12, 45, 67, 90 ?	45 90	1. Which of these numbers have the factor 6: 19, 36, 60, 68 ?	36 60
2. What is 4×4 ?	16	2. What is 7×7 ?	49
3. What is 6×6 ?	36	3. What is 9×9 ?	81
4. What is one half of a half?	quarter	4. What is one half of a third?	sixth
5. What is one tenth of 560 ?	56	5. What is one tenth of 830 ?	83
6. What is $\frac{3}{10}$ of 40 ?	12	6. What is $\frac{8}{10}$ of 50 ?	40
7. Michael has three times as many stamps as Jean. If Michael has 36 stamps, how many does Jean have?	12	7. Joanne has five times as many stamps as Pete. If Joanne has 45 stamps, how many does Pete have?	9
8. Write $\frac{6}{10}$ as a decimal.	0.6	8. Write $\frac{8}{10}$ as a decimal.	0.8
9. Write $\frac{4}{10}$ as a decimal.	0.4	9. Write $\frac{1}{10}$ as a decimal.	0.1
10. What does the digit 8 in 5.8 represent?	$\frac{8}{10}$ or eight tenths	10. What does the digit 5 in 9.5 represent?	$\frac{5}{10}$ or five tenths
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 5 : AUTUMN TERM : WEEK 4

Paper 7	Answer	Paper 8	Answer
1. What is one half written as a decimal?	0.5	1. What is one quarter written as a decimal?	0.25
2. What is one quarter written as a decimal?	0.25	2. What is six tenths written as a decimal?	0.6
3. What fraction is equivalent to 0.75 ?	$\frac{3}{4}$	3. What fraction is equivalent to 0.25 ?	$\frac{1}{4}$
4. Add 50 to 678.	728	4. Add 90 to 277.	367
5. Add 111 and 556.	667	5. Add 111 and 748.	859
6. What is 130 subtract 35 ?	95	6. What is 370 subtract 80 ?	290
7. Decrease 100 by 55.	45	7. Decrease 100 by 37	63
8. What must I add to 34 to make 100 ?	66	8. What must I add to 92 to make 100 ?	8
9. What is the double of 64 ?	128	9. What is the double of 73 ?	146
10. If $456 + 983 = 1\,439$, what is $1\,439 - 983$?	456	10. If $733 + 888 = 1\,621$, what is $1\,621 - 733$?	888
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 5 : AUTUMN TERM : WEEK 5

Paper 9	Answer	Paper 10	Answer
1. If $56 \times 72 = 4\,032$, what is 72×56 ?	4 032	1. If $96 \times 88 = 8\,448$, what is 88×96 ?	8 448
2. What are two twelves?	24	2. What are three twelves?	36
3. What is $56 \times 12 \times 0$?	0	3. What is $94 \times 0 \times 15$?	0
4. What is the product of 25 and 4 ?	100	4. What is the product of 20 and 6 ?	120
5. What is the quotient of 21 and 7 ?	3	5. What is the quotient of 42 and 6 ?	7
6. What is the total of 56 and 80 ?	136	6. What is the total of 83 and 60 ?	143
7. What is the difference between 78 and 6 ?	72	7. What is the difference between 37 and 13 ?	24
8. What is one third of 24 ?	8	8. What is one quarter of 44 ?	11
9. What is six times eight?	48	9. What is nine times six?	54
10. What is twice 75 ?	150	10. What is twice 95 ?	190
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 5 : AUTUMN TERM : WEEK 6

Paper 11	Answer	Paper 12	Answer
1. What is twice seventy plus eighteen?	158	1. What is twice sixty five plus ten?	140
2. What is 36×100 ?	3 600	2. What is 48×100 ?	4 800
3. What is 36×50 ?	1 800	3. What is 48×50 ?	2 400
4. What is 15×20 ?	300	4. What is 35×20 ?	700
5. Ahmed buys twenty packs of marbles. There are twelve marbles in a pack. How many marbles does he buy altogether?	240	5. Trudy buys thirty packets of cakes. There are eight cakes in one packet. How many cakes does she buy altogether?	240
6. What is 23×3 ?	69	6. What is 34×3 ?	102
7. Which shape has six sides?	<i>hexagon</i>	7. Which shape has eight sides?	<i>octagon</i>
8. Which shape has four straight sides of equal length and four right angles?	<i>square</i>	8. Which shape has three straight sides, with two of them the same length ?	<i>isosceles triangle</i>
9. How many lines of symmetry does a regular hexagon have?	6	9. How many lines of symmetry does an equilateral triangle have?	3
10. What is the perimeter of a regular octagon if one side is nine centimetres long?	72 cm	10. What is the perimeter of an equilateral triangle if one side is thirteen centimetres long?	39 cm
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 5 : AUTUMN TERM : WEEK 7

Paper 13	Answer	Paper 14	Answer
1. Julie is 153 cm tall. John is 25 cm taller. How tall is John?	178 cm	1. Mary is 127 cm tall. Wendy is 17 cm taller. How tall is Wendy?	144 cm
2. Ahmed is 103 cm tall. Peter is 17 cm shorter. How tall is Peter?	86 cm	2. Corrine is 109 cm tall. Henriette is 15 cm shorter. How tall is Henriette?	94 cm
3. Robyn saves £4.50 a week. How much has she saved after 6 weeks?	£27.00	3. Grandma gives £8.50 to each of her 4 grandchildren. How much does she give them altogether?	£34.00
4. What is the difference between £1.50 and 80p ?	70p	4. What is the difference between £7.30 and 90p ?	£6.40
5. Will the answer to $6\,782 + 5\,934$ be odd or even?	even	5. Will the answer to $8\,375 + 3\,892$ be odd or even?	odd
6. Will the answer to $9\,465 + 3\,877$ be odd or even?	even	6. Will the answer to $12\,725 + 8\,374$ be odd or even?	odd
7. What is the last digit in the answer to the sum: $57 + 92$?	9	7. What is the last digit in the answer to the sum: $25 + 73$?	8
8. What is the last digit in the answer to the sum: $553 + 744$?	7	8. What is the last digit in the answer to the sum: $888 + 927$?	5
9. What is the last digit in the answer to the sum: $488 + 375$?	3	9. What is the last digit in the answer to the sum: $174 + 588$?	2
10. Write down the months which have thirty days in them.	Apr Jun Sep Nov	10. Write down the months which have thirty one days in them.	Jan Mar May Jul Aug Oct Dec
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 5 : AUTUMN TERM : WEEK 8

Paper 15	Answer	Paper 16	Answer
1. What is the next number in the sequence: 1, 2, 4, 8, ?	16	1. What is the next number in the sequence: 1, 4, 16, 64, ?	256
2. What is the next number in the sequence: 2, 4, 8, 16, ?	32	2. What is the next number in the sequence: 1, 3, 5, 7, ?	9
3. What is my change from a £10 note if I spend £7.32 ?	£2.68	3. What is my change from a £10 note if I spend £4.39 ?	£5.61
4. What is my change from a £20 note if I spend £15.58 ?	£4.42	4. What is my change from a £20 note if I spend £13.62 ?	£6.38
5. There are twelve eggs in a box. How many eggs will there be in 5 boxes?	60	5. There are six chocolate eggs in a box. How many eggs will there be in 15 boxes?	90
6. A bus holds 36 people. How many people can sit on two buses?	72	6. A boat holds 24 people. How many people can sit on three boats?	72
7. Yasmin had a box of 100 biscuits. She ate one fifth of them. How many were left in the box? Was she poorly?	80 probably	7. Jemima had a packet of 60 chocolate drops. She ate one sixth of them. How many were left in the box?	50
8. Ravi paid £24.50 for two football tickets. How much was each ticket?	£12.25	8. Mike paid £17.60 for two CDs. How much was each CD?	£8.80
9. Danny used 300 grams of potatoes in a recipe. He had 1 700 grams of potatoes left in the cupboard. How many kilograms of potatoes had he in the cupboard to begin with?	2 Kg	9. Fred bought 2 Kg of sausages. He cooked one quarter of them for a barbecue. How many grams did he have left?	1 500 g
10. The Grand Prix car race began at 2.00 p.m. and finished at 3.47 p.m. How long did it last?	1 hr 47 mins	10. The Wanderers football match began at 1.40 p.m. and finished at 3.10 p.m. How long did it last?	1 hr 30 mins
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 5 : AUTUMN TERM : WEEK 9

Paper 17	Answer	Paper 18	Answer
1. How many grams are there in 6 Kg?	6 000	1. How many grams are there in 10 Kg?	10 000
2. How many grams are there in 2.3 Kg?	2 300	2. How many grams are there in 5.6 Kg?	5 600
3. How many centimetres are there in 4 metres?	400	3. How many centimetres are there in 9 metres?	900
4. How many centimetres are there in 6.5 metres?	650	4. How many centimetres are there in 8.2 metres?	820
5. How many millilitres are there in 4 litres?	4 000	5. How many millilitres are there in 9 litres?	9 000
6. How many centimetres are there in three quarters of a metre?	75	6. How many centimetres are there in one fifth of a metre?	20
7. Which metric unit would you use to measure the length of the classroom?	metre	7. Which metric unit would you use to measure the length of the your finger?	cm
8. Which metric unit would you use to measure the volume of a CD case?	ml (or cm^3)	8. Which metric unit would you use to measure the volume of a bucket?	litre
9. A rectangle is 12 cm long and four and a half centimetres wide. What is its perimeter?	33 cm	9. A rectangle is 15 cm long and three and a half centimetres wide. What is its perimeter?	37 cm
10. A rectangle is 14 cm long and two and a half centimetres wide. What is its area?	35 cm^2	10. A rectangle is 12 cm long and four and a half centimetres wide. What is its area?	54 cm^2
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 5 : AUTUMN TERM : WEEK 10

Paper 19	Answer	Paper 20	Answer
1. What is 4 p.m. on the 24 hour clock?	16:00 (or 1600)	1. What is 8 p.m. on the 24 hour clock?	20:00 (or 2000)
2. What is 9.30 p.m. on the 24 hour clock?	21.30	2. What is 7.45 p.m. on the 24 hour clock?	19.45
3. What is 15:20 on the 12 hour clock?	3.20 p.m.	3. What is 13:50 on the 12 hour clock?	1.50 p.m.
4. What is 08:15 on the 12 hour clock?	8.15 a.m.	4. What is 11:27 on the 12 hour clock?	11.27 a.m.
5. What unit would you use to measure the time needed to boil an egg?	minute	5. What unit would you use to measure the time needed to eat a cake?	minute (sec!!)
6. What unit would you use to measure the time it takes the Moon to go around the Earth?	day	6. What unit would you use to measure the time it takes to run 100 metres?	sec
7. How long is it from 9.30 a.m. to 2.30 p.m.?	5 hrs	7. How long is it from 2.40 a.m. to 2.40 p.m.?	12 hrs
8. How long is it from 8.30 a.m. to noon?	3hr 30 min	8. How long is it from 6.30 p.m. to midnight?	5hr 30 min
9. How many lines of symmetry does a regular hexagon have?	6	9. How many lines of symmetry does a regular octagon have?	8
10. Do all hexagons have the same number of lines of symmetry?	no	10. Do all octagons have the same number of lines of symmetry?	no
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 5 : AUTUMN TERM : WEEK 11

Paper 21	Answer	Paper 22	Answer
1. What are nine sevens?	63	1. What are five eights?	40
2. What are six eights?	48	2. What are four sevens?	28
3. What are ten seventeens?	170	3. What are ten eighTEENS?	180
4. What are four nines?	36	4. What are six nines?	54
5. How many cakes are there altogether, if there are nine boxes and each box holds six cakes?	54	5. How many chocolates are there altogether, if there are eight boxes and each box holds fifteen chocolates?	120
6. Which is greater: four eights or seven fives?	seven fives	6. Which is greater: three nines or five fives?	three nines
7. What is 28×3 ?	84	7. What is 36×4 ?	144
8. How many sixes are there in fifty four?	9	8. How many nines are there in eighty one?	9
9. How many sevens are there in forty nine?	7	9. How many eights are there in forty eight?	6
10. What is 120 divided by 10 ?	12	10. What is 450 divided by 10 ?	45
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 5 : AUTUMN TERM : WEEK 12

Paper 23	Answer	Paper 24	Answer
1. What is $45 + 78$?	123	1. What is $39 + 67$?	106
2. What is $73 + 96$?	169	2. What is $29 + 83$?	112
3. What is $156 + 90$?	246	3. What is $184 + 70$?	254
4. What is $376 + 100$?	476	4. What is $299 + 100$?	399
5. What is $728 + 200$?	928	5. What is $628 + 300$?	928
6. What is $839 + 200$?	1 039	6. What is $999 + 100$?	1 099
7. What is $1\ 000 - 9$?	991	7. What is $1\ 000 - 11$?	989
8. What is $1\ 000 - 20$?	980	8. What is $1\ 000 - 40$?	960
9. What is $560 - 32$?	528	9. What is $730 - 27$?	703
10. What is $2\ 000 - 70 + 70$?	2 000	10. What is $9\ 999 - 28 + 28$?	9 999
Comment:		Comment:	