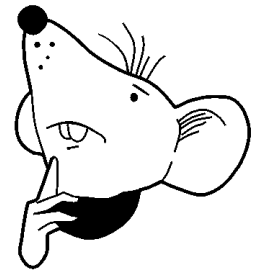
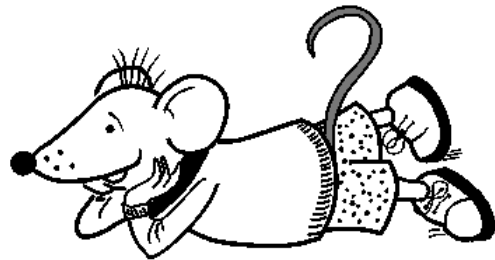
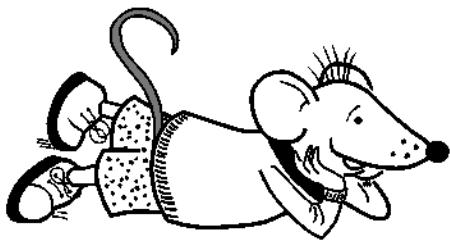


MENTAL ARITHMETIC



YEAR 6

AUTUMN TERM



MathSphere

MENTAL ARITHMETIC : YEAR 6 : AUTUMN TERM : WEEK 1

Paper 1	Answer	Paper 2	Answer
1. What does the digit 4 represent in 411 375?	<i>4 hundred thousand</i>	1. What does the digit 4 represent in 141 116?	<i>Forty thousand</i>
2. What does the digit 4 represent in 345 890?	<i>forty thousand</i>	2. What does the digit 4 represent in 1 223 489?	<i>Four hundred</i>
3. Write in figures: four hundred thousand and fifty five.	400 055	3. Write in figures: five hundred thousand seven hundred and sixty four.	500 764
4. Write in figures: two hundred and twenty two thousand.	222 000	4. Write in figures: three million.	3 000 000
5. How many times larger is 45 000 than 45?	1 000	5. How many times larger is 26 000 than 26?	1 000
6. How many times larger is 560 000 than 56?	10 000	6. How many times larger is 490 000 than 49?	10 000
7. How many £10 notes in £1 200?	120	7. How many £10 notes in £1 400?	140
8. How many £10 notes in £3 000?	300	8. How many £10 notes in £2 000?	200
9. What is 0.6 times 10?	6	9. What is 0.5 times 10?	5
10. What is 0.4 times 10?	4	10. What is 0.1 times 10?	1
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 6 : AUTUMN TERM : WEEK 2

Paper 3	Answer	Paper 4	Answer
1. What are two eighTEens?	36	1. What are two sixTEens?	32
2. Double 19.	38	2. Double 17.	34
3. What are two sixty fives?	130	3. What are two forty fives?	90
4. Double 35.	70	4. Double 55.	110
5. 9 times 4.	36	5. 9 times 6.	54
6. 9 times 8.	72	6. 9 times 9.	81
7. What is the product of 105 and 3?	315	7. What is the product of 202 and 4?	808
8. What is the product of 50 and 4?	200	8. What is the product of 60 and 5?	300
9. 0.8 times 10.	8	9. 0.3 times 10.	3
10. 0.2 times 10	2	10. 0.9 times 10	9
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 6 : AUTUMN TERM : WEEK 3

Paper 5	Answer	Paper 6	Answer
1. Share 72 by 9.	8	1. Share 45 by 9.	5
2. Share 64 by 8.	8	2. Share 40 by 8.	5
3. 18×5	90	3. 16×5	80
4. 15×4	60	4. 19×4	76
5. 6 times 99.	594	5. 4 times 99.	396
6. 12 times 99.	1188	6. 11 times 99.	1089
7. 3 divided by 4.	0.75	7. 6 divided by 4.	1.5
8. 2 divided by 10.	0.2	8. 7 divided by 10.	0.7
9. £4.41 times 10.	£44.10	9. £8.05 times 10.	£80.50
10. £2.38 times 10.	£23.80	10. £7.02 times 10.	£70.20
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 6 : AUTUMN TERM : WEEK 4

Paper 7	Answer	Paper 8	Answer
1. A half is the same as how many quarters?	2 quarters	1. A half is the same as how many sixths?	3 sixths
2. A half is the same as how many tenths?	5 tenths	2. A half is the same as how many eighths?	4 eighths
3. How many halves are there in one and a half?	3 halves	3. How many halves are there in two and a half?	5
4. How many halves are there in four and a half?	9 halves	4. How many halves are there in five and a half?	11
5. What is two tenths of 30?	6	5. What is two tenths of 20?	4
6. What is three tenths of 40?	12	6. What is three tenths of 50?	15
7. If 10 fairground tickets cost £4.50, how much would one cost?	45p	7. If 10 fairground tickets cost £6.50, how much would one cost?	65p
8. If 10 cans of drink cost £3.30, how much would one cost?	33p	8. If 10 cans of drink cost £2.80, how much would one cost?	28p
9. What number is half way between one and a quarter and one and three quarters?	one and a half	9. What number is half way between two and a half and three?	two and three quarters
10. How many sixths in one whole one?	6 sixths	10. How many sevenths in one whole one?	7 sevenths
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 6 : AUTUMN TERM : WEEK 5

Paper 9	Answer	Paper 10	Answer
1. 10 bags of carrots cost £4.60. How much would one bag cost?	46p	1. 10 boxes of strawberries cost £9.60. How much would one box cost?	96p
2. 10 bottles of drink cost £7.00. How much would one bottle cost?	70p	2. 10 bottles of cola cost £6.50. How much would one bottle cost?	65p
3. How many quarters in one and a quarter?	5 quarters	3. How many quarters in two and a quarter?	9 quarters
4. How many quarters in two and a half?	10 quarters	4. How many quarters in three and a half?	14 quarters
5. What is four tenths of 20?	8	5. What is three tenths of 50?	15
6. What is nine tenths of 100?	90	6. What is eight tenths of 100?	80
7. Write 0.07 as a fraction.	$\frac{7}{100}$	7. Write 0.04 as a fraction.	$\frac{4}{100}$
8. Write 0.03 as a fraction.	$\frac{3}{100}$	8. Write 0.09 as a fraction.	$\frac{9}{100}$
9. Write 0.13 as a fraction.	$\frac{13}{100}$	9. Write 0.35 as a fraction.	$\frac{35}{100}$
10. Write 0.29 as a fraction.	$\frac{29}{100}$	10. Write 0.67 as a fraction.	$\frac{67}{100}$
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 6 : AUTUMN TERM : WEEK 6

Paper 11	Answer	Paper 12	Answer
1. If you roll a one to six dice what is the probability of rolling a three?	1/6	1. If you roll a one to six dice what is the probability of rolling a six?	1/6
2. If you roll a one to six dice what is the probability of rolling an odd number?	1/2	2. If you roll a one to six dice what is the probability of rolling an even number?	1/2
3. Multiply 3.5 by 100.	350	3. Multiply 1.8 by 100.	180
4. Multiply 3.5 by 1 000.	3 500	4. Multiply 2.4 by 1 000.	2 400
5. How many times larger is 45 000 than 45?	1 000	5. How many times larger is 33 000 than 33?	1 000
6. How many times larger is 3 600 than 36?	100	6. How many times larger is 4 500 than 45?	100
7. What is 0.7 times 10?	7	7. What is 0.8 times 10?	8
8. What is 0.7 times 100?	70	8. What is 0.8 times 100?	80
9. The temperature is -4° . It falls by 5° . What is the temperature now?	-9°	9. The temperature is -2° . It falls by 6° . What is the temperature now?	-8°
10. The temperature is -3° . It rises by 6° . What is the temperature now?	3°	10. The temperature is -4° . It rises by 5° . What is the temperature now?	1°
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 6 : AUTUMN TERM : WEEK 7

Paper 13	Answer	Paper 14	Answer
1. Adam travelled 35.5 km by train and 500 metres by foot. How far in kilometres did he travel altogether?	36 km	1. Jan travelled 42.5 km by train and 400 metres by foot. How far in kilometres did she travel altogether?	42.9 km
2. Alec went 24.6 km by train and then rode his bike a further 800 metres. How far in kilometres did he travel altogether?	25.4 km	2. Claire went 15.7 km by train and then rode her bike a further 800 metres. How far in kilometres did she travel altogether?	16.5 km
3. I cut 50 cm off a 3 metre piece of string. How much is left?	2.5m	3. I cut 70 cm off a 4 metre piece of string. How much is left?	3.3 m
4. Which is more: 5 inches of tape or 5 cm of tape?	5 inches	4. Which is more: 6 inches of tape or 6 cm of tape?	6 inches
5. One bag of potatoes weighed 5 kg. Another only weighed 4 kg and 450g. How much less did the second bag weigh?	550g	5. One bag of potatoes weighed 10 kg. Another only weighed 9 kg and 600g. How much less did the second bag weigh?	400g
6. How many grams of onions must be added to 2.75kg to make 3 kg?	250g	6. How many grams of onions must be added to 1.65kg to make 2 kg?	350 g
7. There is 250 ml of drink in a small bottle of drink. A large bottle holds four times as much. How much does a large bottle hold?	1000ml or 1 litre	7. There is 300 ml of drink in a small bottle of drink. A large bottle holds five times as much. How much does a large bottle hold?	1 500 ml or 1.5 l
8. Write 4.2 kilometres in metres.	4 200m	8. Write 6.3 kilometres in metres.	6 300m
9. Write 5.45 km in metres.	5 450m	9. Write 2.11 km in metres.	2 110m
10. About how many pints are there in one litre.	2 (1¾)	10. About how many pounds (lb) are there in one kilogram	2 (2.2)lb
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 6 : AUTUMN TERM : WEEK 8

Paper 15	Answer	Paper 16	Answer
1. How many years in a millennium?	1 000	1. How many years in a decade?	10
2. How many years in a century?	100	2. How many weeks in a year?	52
3. How many months in 2 years?	24	3. How many days in a leap year?	366
4. How many days in a year?	365	4. How many months in 5 years?	60
5. How many days in a fortnight?	14	5. How many minutes in three hours?	180
6. How many hours in two days?	48	6. How many hours in three days?	72
7. How many seconds in 5 minutes?	300	7. How many minutes in three and a half hours?	210
8. How many days are there in January.	31	8. How many days are there in December?	31
9. How many days in March?	31	9. How many days in June?	30
10. If today is Tuesday what day was it the day before yesterday?	Sunday	10. If it is Friday today, what day will it be the day after tomorrow?	Sunday
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 6 : AUTUMN TERM : WEEK 9

Paper 17	Answer	Paper 18	Answer
1. What is the area of a rectangle 6½ cm long and 4 cm wide?	26 sq cm	1. What is the area of a rectangle 10½ cm long and 8 cm wide?	84 sq cm
2. What is the area of a rectangle 10 cm long and 4½ cm wide?	45 sq cm	2. What is the area of a rectangle 10 cm long and 6½ cm wide?	65 sq cm
3. What is the perimeter of a rectangle 8 cm long and 2½ cm wide?	21 cm	3. What is the perimeter of a rectangle 9 cm long and 3½ cm wide?	25 cm
4. What is the perimeter of a rectangle 6½ cm long and 5 cm wide?	23 cm	4. What is the perimeter of a rectangle 8 cm long and 1½ cm wide?	19 cm
5. What is 3 794 g to the nearest whole kilogram?	4 kg	5. What is 2 694 g to the nearest whole kilogram?	3 kg
6. What is 2 536 g to the nearest whole kilogram?	3 kg	6. What is 1 486 g to the nearest whole kilogram?	1 kg
7. Write 3 cm in metres.	0.03 m	7. Write 1 cm in metres.	0.01 m
8. Write 8 cm in metres.	0.08 m	8. Write 9 cm in metres.	0.09 m
9. If two angles of a triangle add up to 100°, what is the third angle?	80°	9. If two angles of a triangle add up to 45°, what is the third angle?	135°
10. If two angles of a triangle add up to 50°, what is the third angle?	130°	10. If two angles of a triangle add up to 165°, what is the third angle?	15°
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 6 : AUTUMN TERM : WEEK 10

Paper 19	Answer	Paper 20	Answer
1. What is 2 000 subtract 1 750?	250	1. What is 4 000 subtract 2 999?	1 001
2. What is 3 000 subtract 1 999?	1 001	2. What is 5 000 subtract 3 998?	1 002
3. 5.3 plus 0.9	6.2	3. 7.4 plus 0.9	8.3
4. 5.7 plus 0.8	6.5	4. 6.6 plus 0.8	7.4
5. 4.7 plus 1.9	6.6	5. 4.4 plus 1.9	6.3
6. 8.2 plus 0.9	9.1	6. 7.2 plus 0.9	8.1
7. 2.6 subtract 0.9.	1.7	7. 8.4 subtract 0.9.	7.5
8. 1.7 subtract 0.9.	0.8	8. 9.2 subtract 0.9.	8.3
9. What is the difference between 1.1 and 4.5?	3.4	9. What is the difference between 2.2 and 6.6?	4.4
10. What is the difference between 1.3 and 2.2?	0.9	10. What is the difference between 1.5 and 3.1?	1.6
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 6 : AUTUMN TERM : WEEK 11

Paper 21	Answer	Paper 22	Answer
1. What number comes next in this sequence? 1, 4, 9, 16 ?	25	1. What number comes next in this sequence? 49, 36, 25, 16, ?	9
2. What number comes next in this sequence? -5, 10, 25, 40 ?	55	2. What number comes next in this sequence? 20, 15, 10, 5, ?	0
3. Is 43 a multiple of 3?	no	3. Is 23 a multiple of 3?	no
4. Is 324 a multiple of 9?	yes	4. Is 199 a multiple of 9?	no
5. What is 3 squared?	9	5. What is 5 squared?	25
6. What is 7 squared?	49	6. What is 8 squared?	64
7. The area of a square is 64 sq cm. What is the length of one side of the square?	8 cm	7. The area of a square is 36 sq cm. What is the length of one side of the square?	6 cm
8. The area of a square is 100 sq metres. What is the length of one side of the square?	10 m	8. The area of a square is 81 sq metres. What is the length of one side of the square?	9 m
9. Which of these is a prime number? 9, 12, 13, 24 ?	13	9. Which of these is a prime number? 8, 17, 21, 48?	17
10. Which of these numbers is a prime number? 4, 15, 21, 23 ?	23	10. Which of these numbers is a prime number? 2, 22, 200, 220 ?	2
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 6 : AUTUMN TERM : WEEK 12

Paper 23	Answer	Paper 24	Answer
1. Three fifths is the same as how many tenths?	6 tenths	1. Four fifths is the same as how many tenths?	8 tenths
2. One third is the same as how many ninths?	3 ninths	2. Two thirds is the same as how many ninths?	6 ninths
3. What is three tenths of 70?	21	3. What is seven tenths of 20?	14
4. What is four fifths of 100?	80	4. What is two fifths of 40?	16
5. How many thirds in one and two thirds?	5 thirds	5. How many thirds in two and two thirds?	8 thirds
6. How many tenths in three and three tenths?	33 tenths	6. How many tenths in four and six tenths?	46 tenths
7. 5 600 plus 2 500.	8 100	7. 4 600 plus 1 800.	6 400
8. 4 700 plus 1 800.	6 500	8. 3 300 plus 1 900.	5 200
9. 3 100 subtract 1 900.	1 200	9. 2 100 subtract 1 600.	500
10. 4 200 subtract 3 300.	900	10. 5 500 subtract 4 900.	600
Comment:		Comment:	