Level 3 Test – Skills

Name . . . . . .

Number Facts Section 2 minutes Non-calculator

10 points minus 1 point per incorrect or missing answer. Minimum 0.

Score: /10

	Question	Answer	Tick
Q1	4 + 3		
Q2	8 + 5		
Q3	5 × 3		
Q4	12 – 3		
Q5	6 + 8		
Q6	21 ÷ 3		
Q7	8 × 7		
Q8	13 – 9		
Q9	4 + 7		
Q10	7 × 9		
Q11	3 × 6		
Q12	28 ÷ 4		
Q13	2 + 7		
Q14	56 ÷ 8		
Q15	18 – 9		

	Question	Answer	Tick
Q16	4 × 8		
Q17	11 – 4		
Q18	6 + 5		
Q19	42 ÷ 6		
Q20	36 ÷ 4		
Q21	5 × 4		
Q22	7 + 7		
Q23	11 – 6		
Q24	6 × 9		
Q25	40 ÷ 8		
Q26	9 × 2		
Q27	64 ÷ 8		
Q28	5 + 8		
Q29	12 – 9		
Q30	8 × 6		

Level 3 Test – Skills

Name . . . . . .

Mental Arithmetic Section 10 minutes Non-calculator

Each question is worth 1 mark. Only answers required. Scribbling paper allowed.

Score: /15

	Question	Answer	Tick
Q1	143 + 972		
Q2	350 – 186		
Q3	5500 × 400		
Q4	1860 ÷ 30 000		
Q5	125.5 × 4		
Q6	$1\frac{3}{5} \times 85$		
Q7	16 ÷ ¼		
Q8	0.4 × 0.05		
Q9	0.005 ÷ –200		
Q10	–2.8 – –4.1		
Q11	25 × –4.1		
Q12	$2\frac{2}{5} \times \frac{3}{4}$		
Q13	$15 \div \frac{5}{6}$		
Q14	9 – 12 ÷ (1 – 3 × 2)		
Q15	16 – 2 + 5 ÷ (2 + 2)		

Level 3 Test – Skills

Name . . . . . .

Problem Solving Section 45 minutes Calculators allowed

Work on the paper provided. Show your working and explain your thinking. You will get credit for solving the problems and for your communication. Part solutions will get part of the marks.

Problem Solving Score: /25

Communication Score: /10 .

Q1	Martha can pick a tray of raspberries in 11 minutes. 8 trays make up a box. If she is paid $36 each time she fills a box, how long will she have to work if she wants to earn at least $320?	/5
Q2	A fish tank contains 200 fish. 98% are black; 2% are white. How many black fish would you need to add to make 99% of the fish black?	/10
Q3	A matchbox is 4 times as likely to land flat as to land on an edge. The probability of it landing on an edge is 0.12 greater than the probability that it will land on an end. What is the probability that it will land either flat or on an end?	/10

Level 3 Test – Skills

Name . . . . . .

Investigating Section **1 week** **Calculators allowed**

Work on the paper provided. Show your working and explain your thinking. You will get credit for what you find and for your communication.

Investigating Score: /25

Communication Score: /15 .

This is 5 square baskets in a row seen from above. You have to put 2 different-coloured balls into them. Only one will fit into a basket.

One way is like this.

Another way is like this.

Yet another is like this.

How many ways can you find?

What about 3 different-coloured balls? 4 different-coloured balls? Etc.

What about other numbers of baskets?