Probability-Answers

Key Stage3: 2003 Paper 1 Level 3-5

1.

Tier & Question					Throwing dice	
3-5	4-6	5-7	6-8			
10	5				Correct response	Additional guidance
a	a			2m	Indicates only the five points with positive integer coordinates whose sum is 6 eg	! *Point(s) not indicated accurately* Accept in parts (a) and (b) provided the pupil's intention is clear ! *Additional points indicated that assume zero to be on the dice* eg • (0, 6) and/or (6, 0) indicated If this is the only error, mark as 1, 0 ! *Additional points with non-integer coordinates whose sum is 6 indicated* eg If this is the only error, mark as 1, 0
				or 1m	Indicates at least four correct points with no incorrect points or Indicates all five correct points with not more than one incorrect point	
b	b			2m	Indicates only the six points with positive integer coordinates such that $y = x$ eg	! *Additional point indicated that assumes zero to be on the dice* eg • (0, 0) indicated If this error has been penalised in part (a), condone If this is the only error and it has not been penalised in part (a), mark as 1, 0 ! *Additional points with non-integer coordinates such that $y = x$ indicated* eg If this error has been penalised in part (a), condone If this is the only error and it has not been penalised in part (a), mark as 1, 0
				or 1m	Indicates at least five correct points with no incorrect points or Indicates all six correct points with not more than one incorrect point	

Tier & Question						
3-5	4-6	5-7	6-8			**Throwing dice (cont)**
10	5				**Correct response**	**Additional guidance**

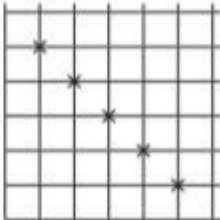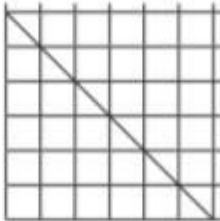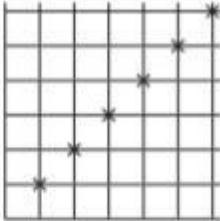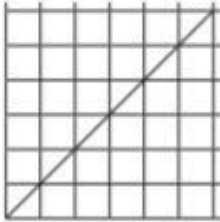| c | c | | | 1m | Completes the sentence to give a correct rule
eg
■ One less than the number on the red dice
■ Red – 1
■ Needing 1 added to get the number on the red dice | ✓ *Minimally acceptable rule*
eg
• 1 below the other dice
• The number below the red dice

✓ *Rule expressed algebraically*
eg
• $b = r - 1$
• $r - 1$

! *Rule that does not use the given starting phrase*
Accept only if unambiguous
eg, accept
• Red = blue + 1
eg, do not accept
• 1 more on the red

✗ *Ambiguous rule*
eg
• – 1
• 1 below
• A number below the red dice
• The number lower than the red dice
• Followed by the number on the red dice

✗ *Incomplete rule*
eg
• Less than the number on the red dice

✗ *Rule not generalised*
Do not accept rules only shown through particular numerical examples
eg
• $2 - 1 = 1, 3 - 2 = 1, 4 - 3 = 1$ etc |

Key Stage 3: 2003 Paper 2 Level 3-5

2.

Tier & Question						Coins
3-5	4-6	5-7	6-8			
16	10	5			Correct response	Additional guidance
a	a	a		1m	Gives a correct explanation eg ■ $\frac{2}{4} = \frac{1}{2}$ ■ Two of the four coins are 10p so half of them are 10p ■ 20p is $\frac{1}{4}$, so is 1p, and $\frac{1}{4} + \frac{1}{4} + \frac{1}{2} = 1$ ■ Each coin has $\frac{1}{4}$ chance and $\frac{1}{4} + \frac{1}{4} = \frac{1}{2}$	✓ *Minimally acceptable explanation* eg • $\frac{2}{4}$ • Two out of four • Two is half of four • Two are tens, two not ✗ *Incomplete explanation* eg • It's 50/50 • There are two tens, a twenty and a 1p • There are two 10ps • Half the coins are 10ps • 20p is $\frac{1}{4}$, so is 1p
b	b	b		1m (U1)	Identifies the values of the four coins as 20, 10, 2 and 1 and gives the probability $\frac{1}{4}$, or equivalent probability	! *Values of coins identified but doubt expressed as to whether this is the only possible combination* Condone ✗ *Probability stated without values of coins identified*

Key Stage 3: 2003 Paper 1 Level 4-6

3.

Tier & Question					Throwing dice	
3-5	4-6	5-7	6-8			
10	5				**Correct response**	**Additional guidance**
a	a			**2m**	Indicates only the five points with positive integer coordinates whose sum is 6 eg	**!** *Point(s) not indicated accurately* Accept in parts (a) and (b) provided the pupil's intention is clear **!** *Additional points indicated that assume zero to be on the dice* eg • (0, 6) and/or (6, 0) indicated If this is the only error, mark as 1, 0 **!** *Additional points with non-integer coordinates whose sum is 6 indicated* eg If this is the only error, mark as 1, 0
				or **1m**	Indicates at least four correct points with no incorrect points *or* Indicates all five correct points with not more than one incorrect point	
b	b			**2m**	Indicates only the six points with positive integer coordinates such that $y = x$ eg	**!** *Additional point indicated that assumes zero to be on the dice* eg • (0, 0) indicated If this error has been penalised in part (a), condone If this is the only error and it has not been penalised in part (a), mark as 1, 0 **!** *Additional points with non-integer coordinates such that $y = x$ indicated* eg If this error has been penalised in part (a), condone If this is the only error and it has not been penalised in part (a), mark as 1, 0
				or **1m**	Indicates at least five correct points with no incorrect points *or* Indicates all six correct points with not more than one incorrect point	

Tier & Question					Correct response	Additional guidance
3-5	4-6	5-7	6-8			
10	5					
c	c			1m	Completes the sentence to give a correct rule eg ■ One less than the number on the red dice ■ Red − 1 ■ Needing 1 added to get the number on the red dice	✓ *Minimally acceptable rule* eg • 1 below the other dice • The number below the red dice ✓ *Rule expressed algebraically* eg • $b = r - 1$ • $r - 1$! *Rule that does not use the given starting phrase* Accept only if unambiguous eg, accept • Red = blue + 1 eg, do not accept • 1 more on the red ✗ *Ambiguous rule* eg • − 1 • 1 below • A number below the red dice • The number lower than the red dice • Followed by the number on the red dice ✗ *Incomplete rule* eg • Less than the number on the red dice ✗ *Rule not generalised* Do not accept rules only shown through particular numerical examples eg • $2 - 1 = 1, 3 - 2 = 1, 4 - 3 = 1$ etc

Key Stage 3: Paper 2 Level 4-6

4.

Tier & Question					Correct response	Additional guidance
3-5	4-6	5-7	6-8			**Coins**
16	10	5				
a	a	a		1m	Gives a correct explanation eg • $\frac{2}{4} = \frac{1}{2}$ • Two of the four coins are 10p so half of them are 10p • 20p is $\frac{1}{4}$, so is 1p, and $\frac{1}{4} + \frac{1}{4} + \frac{1}{2} = 1$ • Each coin has $\frac{1}{4}$ chance and $\frac{1}{4} + \frac{1}{4} = \frac{1}{2}$	✓ *Minimally acceptable explanation* eg • $\frac{2}{4}$ • Two out of four • Two is half of four • Two are tens, two not ✗ *Incomplete explanation* eg • It's 50/50 • There are two tens, a twenty and a 1p • There are two 10ps • Half the coins are 10ps • 20p is $\frac{1}{4}$, so is 1p
b	b	b		1m (U1)	Identifies the values of the four coins as 20, 10, 2 and 1 and gives the probability $\frac{1}{4}$, or equivalent probability	! *Values of coins identified but doubt expressed as to whether this is the only possible combination* Condone ✗ *Probability stated without values of coins identified*

Key Stage 3: 2004 Paper 1 Level 3-5

5.

Tier & Question						
3-5	4-6	5-7	6-8		**Correct response**	**Plasters**
15	**10**	**3**			**Correct response**	**Additional guidance**
a	a	a	1m	$\frac{1}{35}$		! *Answer given as a decimal or a percentage without a correct fraction shown* Accept decimals within the following ranges, or their percentage equivalents: part (a) 0.028 to 0.03 inclusive part (b) 0.45 to 0.46 inclusive part (c) 0.54 to 0.55 inclusive
b	b	b	1m	$\frac{16}{35}$		! *Words given alongside a correct probability* Ignore eg, for part (a) accept • Unlikely, $\frac{1}{35}$
c	c	c	1m	$\frac{19}{35}$		

Key Stage 3: 2004 Paper 1 Level 4-6

6.

Tier & Question					Plasters	
3-5	4-6	5-7	6-8			
15	10	3			Correct response	Additional guidance
a	a	a	1m	$\frac{1}{35}$		! *Answer given as a decimal or a percentage without a correct fraction shown* Accept decimals within the following ranges, or their percentage equivalents: part (a) 0.028 to 0.03 inclusive part (b) 0.45 to 0.46 inclusive part (c) 0.54 to 0.55 inclusive
b	b	b	1m	$\frac{16}{35}$		! *Words given alongside a correct probability* Ignore eg, for part (a) accept • Unlikely, $\frac{1}{35}$
c	c	c	1m	$\frac{19}{35}$		

Key Stage 3: 2005 Paper 2 Level 3-5

7.

Tier & Question					Counters	
3-5	4-6	5-7	6-8			
20	12	4			Correct response	Additional guidance
a	a	a	1m	$\frac{1}{3}$ or equivalent probability		! *Value rounded* Accept 0.33 or better, or the percentage equivalents
b	b	b	1m	3		

Key Stage 3: 2005 Paper 2 Level 4-6

8.

Tier & Question					Correct response	Additional guidance
3-5	4-6	5-7	6-8		**Counters**	
20	12	4			Correct response	Additional guidance
a	a	a		1m	$\frac{1}{3}$ or equivalent probability	! *Value rounded* Accept 0.33 or better, or the percentage equivalents
b	b	b		1m	3	

9.

Tier & Question					Correct response	Additional guidance
3-5	4-6	5-7	6-8		**Hands**	
	20	12	4		Correct response	Additional guidance
a	a	a		1m	$\frac{7}{15}$ or equivalent probability	! *Value rounded or truncated* Accept 0.46(...) or 0.47 or the percentage equivalents Do not accept 0.5 unless a correct method or a more accurate value is seen
b	b	b		1m	$\frac{1}{10}$ or equivalent probability	! *Follow through* Accept follow through from an incorrect total number of pupils seen in part (a), provided their total is not 4, 16 or 27 eg, from $\frac{14}{29}$ for part (a) accept • $\frac{3}{29}$
c	c	c		1m	$\frac{2}{3}$ or equivalent probability	! *Value rounded* Accept 0.66(...) or 0.67 or the percentage equivalents

10.

Tier & Question					Spinning	
3-5	4-6	5-7	6-8			
	22	14	6		Correct response	Additional guidance
				2m	0.15 or equivalent probability	✗ *For 2m, incorrect notation* eg • $0.1\frac{1}{2}$ • 0.1.5
				or 1m	Shows or implies the intention to add the given probabilities, subtract the sum from 1 and then divide by 2, even if there are errors eg ▪ 0.1 + 0.6 = 0.7 $\frac{1-0.7}{2}$ ▪ 0.3 ÷ 2 ▪ $\frac{1.5}{10}$	

Key Stage 3: 2006 Paper 2 Level 3-5

11.

Tier & Question					Cat food	
3-5	4-6	5-7	6-8			
18	9	1			Correct response	Additional guidance
a	a	a		1m	$\frac{1}{4}$ or equivalent probability	
b	b	b		1m	$\frac{1}{3}$ or equivalent probability	! *Probability rounded* Accept 0.33 or better, or percentage equivalents
c	c	c		1m	0.3 or equivalent probability	

Key Stage 3: 2006 Paper 2 Level 4-6

12.

Tier & Question					Correct response	Cat food
3-5	4-6	5-7	6-8			
18	9	1			Correct response	Additional guidance
a	a	a		1m	$\frac{1}{4}$ or equivalent probability	
b	b	b		1m	$\frac{1}{3}$ or equivalent probability	! *Probability rounded* Accept 0.33 or better, or percentage equivalents
c	c	c		1m	0.3 or equivalent probability	

Key Stage 3: 2007 Paper 1 Level 3-5

13.

Tier & Question					Correct response	Sweets
3-5	4-6	5-7	6-8			
18	11	3			Correct response	Additional guidance
a	a	a		1m	$\frac{1}{20}$ or equivalent probability	
b	b	b		1m	Indicates green	✓ *Unambiguous indication of colour* eg • G

Key Stage 3: 2007 Paper 2 Level 3-5

14.

Tier & Question					Correct response	Spinners
3-5	4-6	5-7	6-8			
21	14	5			Correct response	Additional guidance
a	a	a		1m	Indicates B	
b	b	b		1m	Indicates A and D, in either order	

Key Stage 3: 2007 Paper 1 Level 4-6

15.

Tier & Question					Sweets	
3-5	4-6	5-7	6-8			
18	11	3			Correct response	Additional guidance
a	a	a	1m	$\frac{1}{20}$ or equivalent probability		
b	b	b	1m	Indicates green	✓ Unambiguous indication of colour eg • G

16.

Tier & Question					Counter probabilities	
3-5	4-6	5-7	6-8			
19	11	3			Correct response	Additional guidance
a	a	a	2m	Completes the table with the three correct values in the correct positions, ie	✓ Equivalent probabilities ✗ Incorrect notation eg • $\frac{1}{2.5}$

Colour of counters	Number of counters	Probability
Red	6	$\frac{2}{5}$
Blue	3	$\frac{1}{5}$
Green	6	$\frac{2}{5}$

			or 1m (U1)	Gives at least one correct value in the correct position	
b	b	b	1m (U1)	Indicates that the probability has decreased, ie	

☐
☑
☐
☐

Key Stage 3: 2007 Paper 2 Level 4-6

17.

Tier & Question					Correct response	Additional guidance
3-5	4-6	5-7	6-8			
21	14	5				
a	a	a		1m	Indicates B	
b	b	b		1m	Indicates A and D, in either order	

18.

Tier & Question					Correct response	Additional guidance
3-5	4-6	5-7	6-8			
	30	21	10			
			a	2m	0.61 or equivalent probability	
				or		
				1m	Shows the digits 61	
					or	
					Shows the value 0.39 or equivalent probability	
					or	

					Shows or implies a complete correct method with not more than one computational error
					 eg
					 ■ $1 - (0.08 + 0.13 + 0.07 + 0.08 + 0.03)$
					 ■ $0.08 + 0.13 + 0.07 + 0.08 + 0.03 = 0.38$
					                   (error)
					   $1 - 0.38 = 0.62$	

			b	2m	0.000936 or 9.36×10^{-4}, or equivalent probability	✗ For 2m, 9.36^{-04}
				or		
				1m	Shows the digits 936	
					or	
					Shows or implies a complete correct method with not more than one computational error eg ■ $0.13 \times 0.08 \times 0.09$ ■ 9.4×10^{-4}	

Key Stage 3: 2008 Paper 2 Level 3-5

19.

Tier & Question					Four cards	
3-5	4-6	5-7	6-8			
10	2				Correct response	Additional guidance

	2m	Matches all four statements to their correct positions, ie	! *Statement matched to more than one position* For 2m or 1m, do not accept as a correct match

	or		
	1m	Matches any two statements to their correct positions	

Key Stage 3: 2008 Paper 2 Level 4-6

20.

Tier & Question					Four cards	
3-5	4-6	5-7	6-8			
10	2				Correct response	Additional guidance

	2m	Matches all four statements to their correct positions, ie	! *Statement matched to more than one position* For 2m or 1m, do not accept as a correct match

	or		
	1m	Matches any two statements to their correct positions	

21.

Tier & Question					Correct response	Additional guidance
3-5	4-6	5-7	6-8			**Counters in a bag**
			5			
		15				
	24					

				2m	Completes the sentence correctly with three positive integers r, w then y, such that $w = 2r$ and $y < r$ eg ■ 2, 4 then 1 ■ 3, 6 then 1 or 2 ■ 4, 8 then 1, 2 or 3	
				or		
				1m	Completes the sentence with three integers r, w then y, such that $w = 2r$ and $y = 0$ eg ■ 2, 4 then 0 ■ 3, 6 then 0 or Completes the sentence with three values r, w then y between zero and one, such that $r > \frac{1}{4}$, $w = 2r$ and $r + w + y = 1$ eg ■ $\frac{2}{7}$, $\frac{4}{7}$ then $\frac{1}{7}$ ■ 0.3, 0.6 then 0.1	✗ For 1m, values for r or w negative or zero eg • −1, −2 then 0 • 0, 0 then 0

Key Stage 3: 2009 Paper 1 Level 3-5

22.

Tier & Question				Mark	Correct response	Additional guidance
3-5	4-6	5-7	6-8			**T-shirts**
18	11	2				
a	a	a		1m	$\frac{1}{5}$ or equivalent probability	
b	b	b		1m	$\frac{2}{3}$ or equivalent probability	! *Value rounded* Accept 0.66(…) or 0.67 or the percentage equivalents
c	c	c		1m	$\frac{1}{3}$ or equivalent probability	! *Value rounded* Accept 0.33(…) or the percentage equivalent

Key Stage 3: 2009 Paper 2 Level 3-5

23.

	2m	Makes all four correct decisions, ie	✓ Unambiguous indication

True   False

✓   ☐

☐   ✓

☐   ✓

✓   ☐

eg
- ✓ for True, ✗ for False

or

1m   Makes three correct decisions

Key Stage 3: 2009 Paper 1 Level 4-6

24.

Tier & Question						T-shirts
3–5	4–4	5–7	6–8			
18	11	2		Mark	Correct response	Additional guidance
a	a	a		1m	$\frac{1}{5}$ or equivalent probability	
b	b	b		1m	$\frac{2}{3}$ or equivalent probability	! Value rounded Accept 0.66(...) or 0.67 or the percentage equivalents
c	c	c		1m	$\frac{1}{3}$ or equivalent probability	! Value rounded Accept 0.33(...) or the percentage equivalent

Key Stage 3: 2009 Paper 2 Level 4-6

25.

Tier & Question						Five bags
3–5	4–6	5–7	6–8			
	25	16	7	Mark	Correct response	Additional guidance

	2m	Matches all four bags to the correct probabilities, ie	! For 2m or 1m, bag matched to more than one probability Do not accept as a correct match

A $\frac{1}{4}$

B $\frac{1}{3}$

C $\frac{1}{2}$

D $\frac{5}{11}$

E $\frac{2}{5}$

or

1m   Matches two of the four bags to the correct probabilities

Key Stage 3: 2010 Paper 2 Level 3-5

26.

Tier & Question				Mark	Correct response	Additional guidance	Spinner
3-5	4-6	5-7	6-8				
15	5						

2m Matches all three statements correctly, ie

He will spin the number 3 — likely

He will spin the number 5 — even chance

He will spin the number 6 — impossible

He will spin a number less than 7 — certain

! Sentence matched to more than one description of probability

For 2m or 1m, do not accept as a correct match

or

1m Matches two statements correctly

Key Stage 3: 2010 Paper 1 Level 4-6

27.

Tier & Question				Mark	Correct response	Additional guidance	Counters
3-5	4-6	5-7	6-8				
	27	18	9				

1m Completes the first two sentences correctly, ie
green
red

✓ Unambiguous indication

! Numbers given alongside correct colour
Ignore

1m Completes the last sentence correctly, ie
red and yellow, in either order

Key Stage 3: 2010 Paper 2 Level 4-6

28.

Spinner

Tier & Question				Mark	Correct response	Additional guidance
3–5	4–6	5–7	6–8			
15	5			2m	Matches all three statements correctly, ie	! Sentence matched to more than one description of probability
					He will spin the number 3 — certain	For 2m or 1m, do not accept as a correct match
					He will spin the number 5 — likely	
					He will spin the number 6 — even chance	
					He will spin a number less than 7 — unlikely	
					— impossible	
				or		
				1m	Matches two statements correctly	

29.

Dice probability

Tier & Question				Mark	Correct response	Additional guidance
3–5	4–6	5–7	6–8			
20	12	3				
a	a	a		1m	$\frac{5}{6}$ or equivalent probability	✓ 0.83(...) or better
b	b	b		1m	$\frac{1}{2}$ or equivalent probability	

Key Stage 3: 2011 Paper 1 Level 4-6

30.

Tier & Question						Dice
4–6	5–7					
11	2	Mark	Correct response		Additional guidance	

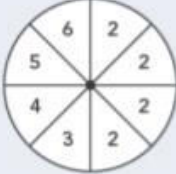| Mark	Correct response	Additional guidance

2m	States or implies that the probabilities for A and C are $\frac{1}{6}$ and that the probability for B is different or unknown
	eg
	• Dice A: The probability is $\frac{1}{6}$
	  Dice B: You would need to do an experiment
	  Dice C: It's the same as A
	• Dice A: It looks like probability is $\frac{1}{6}$ assuming they are fair dice
	  Dice B: I would guess that the probability is more
	  Dice C: It's $\frac{1}{6}$ if it is fair
		✓ **Explanations do not refer to 'probability'**
		eg, accept
		• Dice A: $\frac{1}{6}$
		  Dice B: Don't know
		  Dice C: $\frac{1}{6}$
		
		✓ **Probability for B quantified**
		Condone
		eg, accept
		• Dice A: $\frac{1}{6}$
		  Dice B: $\frac{1}{12}$
		  Dice C: $\frac{1}{6}$

or
1m
	States or implies that the probabilities for A and C are $\frac{1}{6}$ and does not comment on Dice B
	eg
	• Dice A: The probability is $\frac{1}{6}$
	  Dice B:
	  Dice C: It's the same as A
	
	or
	
	States or implies that the probabilities for A and C are the same and the probability for B is different or unknown
	eg
	• Dice A: The probability is the same as C
	  Dice B: You can't be sure
	  Dice C: It's the same as A
		✗ **Probability incorrectly expressed**
		Do not accept for 2m
		
		! **Probability incorrectly expressed**
		For 1m condone provided equality is implied
		eg, accept
		• Dice A: The probability is 1 in 6
		  Dice B: You can't be sure
		  Dice C: It's the same as A
		
		! **Likelihood expressed in words**
		For 1m, accept as implying equality
		eg, accept
		• Dice A: It's unlikely
		  Dice B: Likely
		  Dice C: It's unlikely

31.

Tier & Question						Win or lose
4–6	5–7					
18	9	Mark	Correct response		Additional guidance	

Mark	Correct response	Additional guidance
1m	Indicates Win and gives a correct explanation eg • $\frac{7}{12} > \frac{1}{2}$ • The numerator is more than half of the denominator • Six out of 12 is half, and this is more • 6 is half of 12 and 7 > 6 • The probability of losing is $\frac{5}{12}$ therefore he is more likely to win • $\frac{7}{12} > \frac{5}{12}$	✓ **Minimally acceptable explanation** eg • Half of 12 is 6 • 7 is over half way • It's over half • 7 is more than half • More than a half chance • Because 7 is only 5 away from 12 • 7 > 6 • 7 > 5 • Losing is $\frac{5}{12}$ • An even chance is $\frac{6}{12}$ ✗ **Incomplete or incorrect explanation** eg • He's more likely to win • The number at the top is lower than at the bottom • 7 is 5 away from 12 • 7 is close to 12 • It is over 6 • He has more than half % probability to win

32.

Coins and probability

Additional guidance

Mark	Correct response	Additional guidance
2m	Indicates **Both equally likely** and gives a correct explanation eg • Anna has 20p, 10p Her probability is $\frac{1}{2}$ Tom has 10p, 10p, 5p, 5p His probability is $\frac{2}{4} = \frac{1}{2}$ • Tom has two 10p coins and two other coins Anna has one 10p coin and one other Both have a half chance of choosing a 10p coin • For Tom the ratio of 10p coins to other coins is 2 : 2 = 1 : 1 For Anna the ratio is also 1 : 1 • For Tom, the ratio of total coins to 10p coins is 4 : 2 For Anna, the ratio of total coins to 10p coins is 2 : 1 4 : 2 = 2 : 1	✓ *Minimally acceptable explanation* eg • 20, 10 and 10, 10, 5, 5 1 in 2, 2 out of 4 (condone notation given context) • Tom 2 × 10p Anna 1 × 10p $\frac{1}{2}$ • Tom = 2 : 2 Anna = 1 : 1 • He 4 : 2 She 2 : 1 ✗ *For 2m, incomplete or incorrect explanation* eg • Both half • She has 20 and 10 He has 10, 10, 20 (error), 5 Both half
or 1m	Incorrect or no box ticked but gives a correct explanation or For both Tom and Anna, gives the correct coins eg • Anna has 20p, 10p Tom has 10p, 10p, 5p, 5p or For Anna or for Tom, gives the correct probability and the correct number of 10p coins eg • Tom 10, 10, 5, 5 $\frac{1}{2}$ • Tom has 2 × 10p coins and 2 other coins Half chance • Anna has one 10p coin and 1 other coin Probability = 0.5 or Gives the correct probability or the correct ratio of 10p coins to other coins and indicates that this applies to both Tom and Anna eg • Both have a half chance of choosing a 10p coin • The ratio of 10p coins to other coins is 1 : 1 (with 'both equally likely' ticked)	✓ *Minimally acceptable explanation* eg • Anna = 20, 10 Tom = 10, 10, 5, 5 ✓ *Minimally acceptable explanation* eg • Tom has 2 × 10p Half • Anna has one 10p 0.5 ✓ *Minimally acceptable explanation* eg • Half (with 'both equally likely' ticked) • Both 1 : 1

Key Stage 3: 2011 Paper 2 Level 4-6

33.

Tier & Question				Spinning
4–6	5–7			
11	1	Mark	Correct response	Additional guidance
a	a	1m	C	**!** *Spinners identified using probabilities* ie $\frac{1}{3}$ for part (a) and $\frac{1}{4}$ for part (b)
b	b	1m	B	Mark as 0, 1
c	c	1m	Shows or implies that 4 of the 8 numbers are 2 eg	✓ *The only sectors labelled are 2* eg

34.

Tier & Question				Word game
4–6	5–7			
24	14	Mark	Correct response	Additional guidance
a	a	1m	Gives a correct probability eg • $\frac{29}{100}$ • 0.29 • 29%	**!** *Probability* See general guidance on page 16
b	b	2m or 1m	Gives the values 8, 8 and 10 in the correct order 26 seen or Shows or implies ÷ 13 eg • 104 ÷ 13 • ÷ 13 seen • Answer 32, 32, 40	**!** *8 seen* Do not accept for 1m unless ÷ 13 is implied ✗ *13 seen without the operation*