ANSWERS



maths Focus: 109ical and systematic thinking: finding all possibilities:

Helpful Hints: if you record your findings systematically, you will be much less likely to miss any out

Level I	Level 2	Level 3
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Simon has a spinner which has three colours and a 6-sided dice. He spins the spinner and rolls the dice.



The spinner lands on a colour and the dice rolls onto a number. Can you find all 18 possible combinations? Record them in an organised way.

Y, 1	G, 1	R, 1	
Y, 2	G, 2	R, 2	
Y, 3	G, 3	R, 3	
Y, 4	G, 4	R, 4	
Y, 5	G, 5	R, 5	
Y, 6	G, 6	R, 6	

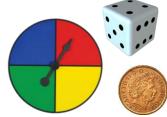
Simon has a spinner which has three colours, a 6-sided dice and a penny which has a head and tails side. He spins the spinner, rolls the dice and throws the penny.



The spinner lands on a colour, the dice rolls onto a number and the coin lands on heads of tails. Can you find all possible combinations? Record them in a systematic way. = 36

TAILS, Y, 1	TAILS, G, 1	TAILS, R, 1
TAILS, Y, 2	TAILS, G, 2	TAILS, R, 2
TAILS, Y, 3	TAILS, G, 3	TAILS, R, 3
TAILS, Y, 4	TAILS, G, 4	TAILS, R, 4
TAILS, Y, 5	TAILS, G, 5	TAILS, R, 5
TAILS, Y, 6	TAILS, G, 6	TAILS, R, 6
HEADS, Y, 1	HEADS, G, 1	HEADS, R, 1
HEADS, Y, 2	HEADS, G, 2	HEADS, R, 2
HEADS, Y, 3	HEADS, G, 3	HEADS, R, 3
HEADS, Y, 4	HEADS, G, 4	HEADS, R, 4
HEADS, Y, 5	HEADS, G, 5	HEADS, R, 5
HEADS, Y, 6	HEADS, G, 6	HEADS, R, 6

Simon has a spinner which has four colours, a 6-sided dice and a penny which has a head and tails side. He spins the spinner, rolls the dice and throws the penny.



The spinner lands on a colour, the dice rolls onto a number and the coin lands on heads of tails. Can you find all possible combinations? Record them in a systematic way. = 48

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TAILS, Y, 1	TAILS, G, 1	TAILS, R, 1	TAILS, B, 1
TAILS, Y, 2	TAILS, G, 2	TAILS, R, 2	TAILS, B, 2
TAILS, Y, 3	TAILS, G, 3	TAILS, R, 3	TAILS, B, 3
TAILS, Y, 4	TAILS, G, 4	TAILS, R, 4	TAILS, B, 4
TAILS, Y, 5	TAILS, G, 5	TAILS, R, 5	TAILS, B, 5
TAILS, Y, 6	TAILS, G, 6	TAILS, R, 6	TAILS, B, 6
HEADS, Y, 1	HEADS, G, 1	HEADS, R, 1	HEADS, B, 1
HEADS, Y, 2	HEADS, G, 2	HEADS, R, 2	HEADS, B, 2
HEADS, Y, 3	HEADS, G, 3	HEADS, R, 3	HEADS, B, 3
HEADS, Y, 4	HEADS, G, 4	HEADS, R, 4	HEADS, B, 4
HEADS, Y, 5	HEADS, G, 5	HEADS, R, 5	HEADS, B, 5
HEADS, Y, 6	HEADS, G, 6	HEADS, R, 6	HEADS, B, 6