

# St. George's Day Multiplication Mosaic

Solve the calculations to reveal the hidden picture. Each answer has a special colour. Look at the number in each box, decide what it is a multiple of then colour in the highest value. For example, 18 is a multiple of 2, 3 and 9. As 9 is the highest value, the square would be coloured in red.

**Blue** = Multiple  
of 2

**Green** = Multiple  
of 3

**White** = Multiple  
of 5

**Black** = Multiple  
of 7

**Red** = Multiple  
of 9

76	94	58	38	8	81	74	36	44
68	44	2	26	82	12	52	93	4
16	62	86	46	87	6	57	69	88
92	32	96	15	35	40	50	56	20
14	69	49	48	78	33	3	51	12
39	33	6	66	24	27	39	93	39
63	55	54	25	90	5	33	66	4
57	24	78	51	3	6	12	93	32
68	8	82	94	22	3	87	24	62
34	86	2	46	64	39	96	48	58

**Challenge:** Which numbers below 10 are not included on the grid?

Could they be used on the grid? Explain your answer.

# St. George's Day Multiplication Mosaic **Answers**

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14	69	49	48	78	33	3	51	12
39	33	6	66	24	27	39	93	39
63	55	54	25	90	5	33	66	4
57	24	78	51	3	6	12	93	32
68	8	82	94	22	3	87	24	62
34	86	2	46	64	39	96	48	58

**Challenge:** Which numbers below 10 are not included on the grid?

**1, 7 and 9 are not included in the grid. 7 could be used in the grid because it is a multiple of 7. 9 could be used in the grid because it is a multiple of 3 and 9. 1 could not be used in this grid because it is not a multiple of 2, 3, 5, 7 or 9.**

# St. George's Day Multiplication and Division Mosaic

Solve the calculations to reveal the hidden picture. Each answer has a special colour.

Dark grey = 12	Light grey = 15	White = 18	Red = 24	Light blue = 36	Dark blue = 42	Skin tone = 50		
$12 \times 3$	$3 \times 4$	$1800 \div 50$	$4 \times 9$	$3 \times 5$	$2 \times 3 \times 6$	$1 \times 36$	$1 \times 36$	$2 \times 2 \times 9$
$2 \times 2 \times 3 \times 3$	$12 \div 1$	$2 \times 18$	$15 \div 1$	$165 \div 11$	$90 \div 6$	$18 \times 2$	$2 \times 18$	$108 \div 3$
$72 \div 2$	$6 \times 2$	$75 \div 5$	$100 \div 2$	$2 \times 25$	$5 \times 10$	$1 \times 15$	$720 \div 20$	$2 \times 6 \times 3$
$\frac{1}{5}$ of 180	$60 \div 5$	$3 \times 6$	$6 \times 7$	$150 \div 3$	$14 \times 3$	$2 \times 9$	$135 \div 9$	$360 \div 10$
$4 \times 3 \times 3$	$12 \times 1$	$25 \times 2$	$200 \div 4$	$50 \div 1$	$500 \div 10$	$1 \times 50$	$18 \times 2$	$1080 \div 30$
$72 \div 2$	$24 \div 2$	$\frac{1}{5}$ of 180	$10 \times 5$	$3 \times 8$	$250 \div 5$	$12 \times 3$	$3 \times 12$	$180 \div 5$
$6 \times 6$	$4 \times 3$	$4 \times 3 \times 3$	$5 \times 3$	$150 \div 10$	$30 \div 2$	$1 \times 36$	$4 \times 9$	$1 \times 36$
$48 \div 4$	$120 \div 10$	$1 \times 12$	$105 \div 7$	$\frac{1}{5}$ of 75	$36 \div 2$	$12 \times 2$	$90 \div 5$	$2 \times 9 \times 2$
$4 \times 9$	$2 \times 6$	$45 \div 3$	$\frac{1}{2}$ of 30	$15 \times 1$	$4 \times 6$	$48 \div 2$	$8 \times 3$	$\frac{1}{4}$ of 144
$72 \div 2$	$36 \div 3$	$1 \times 36$	$120 \div 8$	$60 \div 4$	$9 \times 2$	$120 \div 5$	$6 \times 3$	$3600 \div 100$

**Challenge:** I have one square left over that should be coloured in dark grey. List the questions that could be written in the box.

# St. George's Day Multiplication Mosaic **Answers**

Solve the calculations to reveal the hidden picture. Each answer has a special colour.

**Dark grey**  
= 12

**Light grey**  
= 15

**White**  
= 18

**Red**  
= 24

**Light blue**  
= 36

**Dark blue**  
= 42

**Skin tone**  
= 50

$12 \times 3$	$3 \times 4$	$1800 \div 50$	$4 \times 9$	$3 \times 5$	$2 \times 3 \times 6$	$1 \times 36$	$1 \times 36$	$2 \times 2 \times 9$
$2 \times 2 \times 3 \times 3$	$12 \div 1$	$2 \times 18$	$15 \div 1$	$165 \div 11$	$90 \div 6$	$18 \times 2$	$2 \times 18$	$108 \div 3$
$72 \div 2$	$6 \times 2$	$75 \div 5$	$100 \div 2$	$2 \times 25$	$5 \times 10$	$1 \times 15$	$720 \div 20$	$2 \times 6 \times 3$
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$48 \div 4$	$120 \div 10$	$1 \times 12$	$105 \div 7$	$\frac{1}{5}$ of 75	$36 \div 2$	$12 \times 2$	$90 \div 5$	$2 \times 9 \times 2$
$4 \times 9$	$2 \times 6$	$45 \div 3$	$\frac{1}{2}$ of 30	$15 \times 1$	$4 \times 6$	$48 \div 2$	$8 \times 3$	$\frac{1}{4}$ of 144
$72 \div 2$	$36 \div 3$	$1 \times 36$	$120 \div 8$	$60 \div 4$	$9 \times 2$	$120 \div 5$	$6 \times 3$	$3600 \div 100$

**Challenge:** I have one square left over that should be coloured in dark grey. List the questions that could be written in the box.

Accept any correct multiplication or division questions. For example,  $1 \times 12$ ,  $2 \times 6$ ,  $12 \div 1$ ,  $24 \div 2$ ,  $\frac{1}{2}$  of 24,  $\frac{1}{3}$  of 36.

# St. George's Day Multiplication and Division Mosaic

Identify the properties of the numbers in the grid to reveal the hidden picture. Each answer has a special colour.

**Green** = Prime numbers

**Red** = Square numbers

**Black** = Numbers with 6 factors

**Blue** = Numbers with 4 factors

87	8	25	91	81	14	55	21	57
27	6	41	41	3	65	33	82	7
51	19	18	13	28	37	10	49	43
71	7	29	2	67	36	21	77	17
20	5	37	31	16	14	69	9	11
47	12	6	53	34	64	46	93	83
15	86	26	79	23	3	2	31	19
39	62	61	13	89	43	47	11	8
22	29	35	73	10	5	85	17	22
74	15	94	97	58	23	38	59	95

**Challenge:** Find 3 numbers less than 100 that are not in this grid and explain why.

# St. George's Day Multiplication Mosaic **Answers**

Identify the properties of the numbers in the grid to reveal the hidden picture. Each answer has a special colour.

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71	7	29	2	67	36	21	77	17
20	5	37	31	16	14	69	9	11
47	12	6	53	34	64	46	93	83
15	86	26	79	23	3	2	31	19
39	62	61	13	89	43	47	11	8
22	29	35	73	10	5	85	17	22
74	15	94	97	58	23	38	59	95

**Challenge:** Find 3 numbers less than 100 that are not in this grid and explain why.

24, 30, 40, 42, 54, 56, 66, 70, 78, 88, - have 8 factors

36, 48, 80, - have 10 factors

60, 72, 84, 90, 96 - have 12 factors

(1 and 4 could have been put on the grid as they are square numbers.)