Space Addition and Subtraction Facts up to 20 Mosaic

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

Green: 20	Blue: 15	Pink: 12

	10 + 10	20 + 0	19 + 1		1 + 19	14 + 6	10 + 10	
		15 + 5				19 + 1		
		12 + 8				0 + 20		
	13 + 7	16 + 4	7 + 13	6 + 14	19 + 1	17 + 3	12 + 8	
	5 + 15	10 + 5	18 + 2	12 + 3	12 + 8	14 + 1	6 + 14	
	0 + 20	17 + 3	14 + 6	3 + 17	15 + 5	5 + 15	8 + 12	
	11 + 9	6 + 6	12 + 0	11 + 1	7 + 5	10 + 2	3 + 17	
	8 + 12	1 + 19	4 + 16	9 + 11	20 + 0	16 + 4	11 + 9	
				10 + 10				
				2 + 18				

Challenge: How many ways can you make 10 using addition? Have you found all the ways? How do you know?

Space Addition and Subtraction Facts up to 20 Mosaic

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

Green: 20	Blue: 15	Pink: 12

	10 + 10	20 + 0	19 + 1		1 + 19	14 + 6	10 + 10
		15 + 5				19 + 1	
		12 + 8				0 + 20	
	13 + 7	16 + 4	7 + 13	6 + 14	19 + 1	17 + 3	12 + 8
	5 + 15	10 + 5	18 + 2	12 + 3	12 + 8	14 + 1	6 + 14
	0 + 20	17 + 3	14 + 6	3 + 17	15 + 5	5 + 15	8 + 12
	11 + 9	6 + 6	12 + 0	11 + 1	7 + 5	10 + 2	3 + 17
	8 + 12	1 + 19	4 + 16	9 + 11	20 + 0	16 + 4	11 + 9
				10 + 10			
				2 + 18			

10 + 0, 9 + 1, 8 + 2, 7 + 3, 6 + 4, 5 + 5, 4 + 6, 3 + 7, 2 + 8, 1 + 9, 0 + 10.

Space Addition and Subtraction Facts up to 20 Mosaic

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

Black: 15	Orange: 10	Red: 5

				7 - 2				
				17 - 12				
			15 - 10	12 - 7	6 - 1			
			10 - 5	20 - 5	13 - 8			
			8 - 3	17 - 2	19 - 14			
			14 - 9	5 - 0	9 - 4			
		16 - 11	11 - 6	20 - 15	18 - 13	15 - 10		
		7 - 2	5 - 0	6 - 1	20 - 15	14 - 9		
		8 - 3		20 - 10		12 - 7		
				15 - 5				

Challenge: How many ways can you add the numbers 12 and 5? How many ways can you subtract them? Are they the same or different? Why?

Space Addition and Subtraction Facts up to 20 Mosaic

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

Black: 15	Orange: 10	Red: 5

				7 - 2			
				17 - 12			
			15 - 10	12 - 7	6 - 1		
			10 - 5	20 - 5	13 - 8		
			8 - 3	17 - 2	19 - 14		
			14 - 9	5 - 0	9 - 4		
		16 - 11	11 - 6	20 - 15	18 - 13	15 - 10	
		7 - 2	5 - 0	6 - 1	20 - 15	14 - 9	
		8 - 3		20 - 10		12 - 7	
				15 - 5			

12 + 5 = 17, 5 + 12 = 17, 12 – 5 = 7. 12 cannot be taken from 5 as it is too small. Subtractions are not commutative.

Space Addition and Subtraction Facts up to 20 Mosaic

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

Grey: 3	Black: 6	Red: 12	Yellow: 18

			3 + 0	10 - 7	20 - 17				
20 - 2			1 + 2	3 + 3	15 - 12		16 + 2		
			16 - 13	2 + 1	17 - 14				
	6 - 3	9 - 6	11 - 8	20 - 17	10 - 7	2 + 1	12 - 9		
	12 - 9		6 - 3	19 - 16	3 + 0		5 - 2		
	1 + 2		7 - 4	2 + 4	5 - 2		9 - 6		
			3 - 0	8 - 5	10 - 4				
	17 + 1		18 - 15		14 - 11	12 - 6			
			2 + 1		3 - 0		18 - 12		
6 + 6	10 + 2	20 - 8	20 - 14	13 - 1	6 + 0	12 - 0	12 + 0	5 + 1	

Challenge question: The astronaut can see 3 yellow stars, 1 red planet and 2 blue planets. How many can she see altogether? How many different ways could you work out problem?

Space Addition and Subtraction Facts up to 20 Mosaic

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

Grey: 3	Black: 6	Red: 12	Yellow: 18

			3 + 0	10 - 7	20 - 17			
20 - 2			1 + 2	3 + 3	15 - 12		16 + 2	
			16 - 13	2 + 1	17 - 14			
	6 - 3	9 - 6	11 - 8	20 - 17	10 - 7	2 + 1	12 - 9	
	12 - 9		6 - 3	19 - 16	3 + 0		5 - 2	
	1 + 2		7 - 4	2 + 4	5 - 2		9 - 6	
			3 - 0	8 - 5	10 - 4			
	17 + 1		18 - 15		14 - 11	12 - 6		
			2 + 1		3 - 0		18 - 12	
6 + 6	10 + 2	20 - 8	20 - 14	13 - 1	6 + 0	12 - 0	12 + 0	5 + 1

3 + 1 + 2, 3 + 2 + 1, 1 + 3 + 2, 1 + 2 + 3, 2 + 1 + 3, 2 + 3 + 1.