

Maths Transition
**Goodbye,
Year 6
Hello,
Year 7**

Booklet Two

Name _____

Make the Numbers 1 to 20

By using the digits 0 – 9 and the maths operators +, −, ×, ÷ and brackets, write sums to make each of the numbers 1 – 20.

- Each sum should have at least 3 operators in it.
- Do not repeat any digits in a sum.
- Only single digits can be used.
- For example, $5 + 1 \times 6 - 3 = 8$

Don't forget to apply the order of operations.

	= 1
	= 2
	= 3
	= 4
	= 5
	= 6
	= 7
	= 8

Make the Numbers 1 to 20

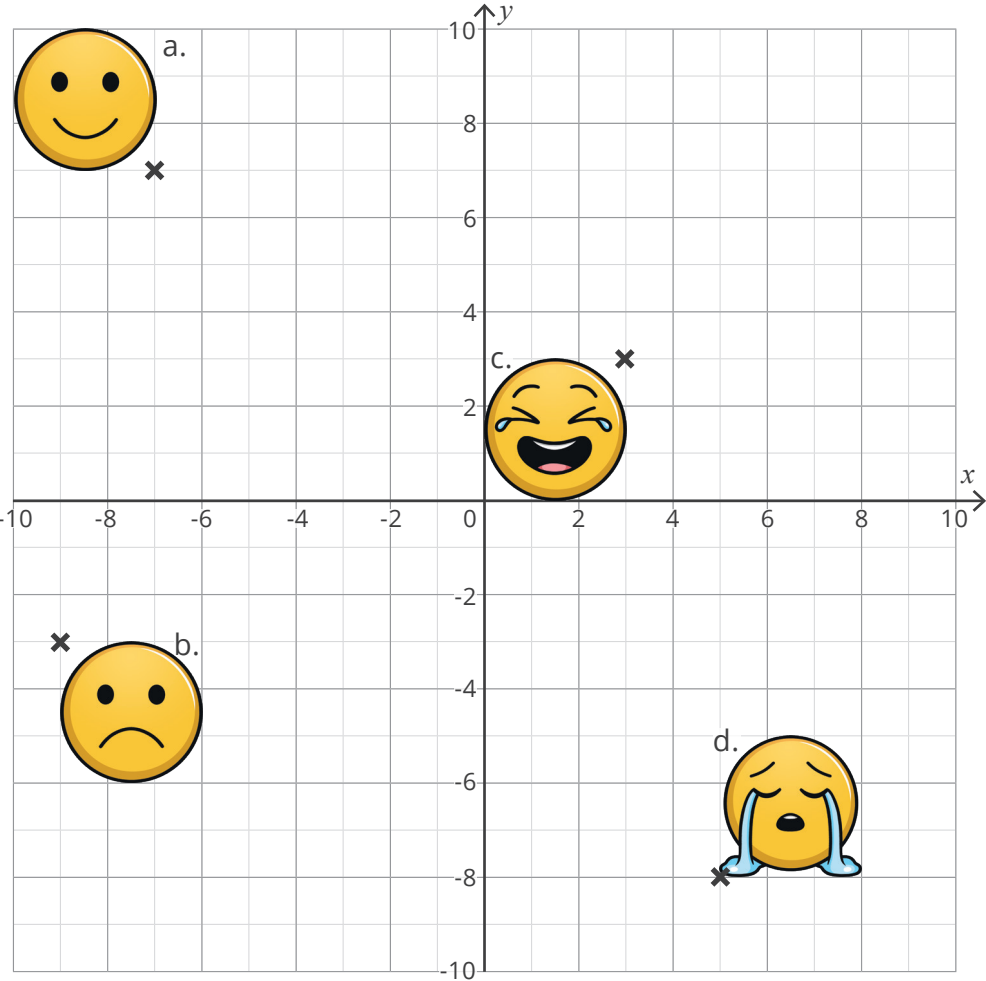
	= 9
	= 10
	= 11
	= 12
	= 13
	= 14
	= 15
	= 16
	= 17
	= 18
	= 19
	= 20



Red
Amber
Green

How did you find this challenge? Circle your choice.
Green = good, amber = okay, red = difficult.

Emoji Coordinates



Emoji Coordinates

1. For each emoji, state the coordinates of the vertex marked ✕.
 - a. _____
 - b. _____
 - c. _____
 - d. _____
2. Plot these coordinates on the grid and join them to make a square.
 $(-1, -4)$, $(-4, -4)$, $(-4, -7)$ and $(-1, -7)$.
Design your own emoji and draw it in the square.



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Fraction Wall Game

A game for two players (or more players can work in teams).

You will need:

- 4 dice
- A colouring pencil or pencils of your choice.

Instructions:

Decide who will go first. You might like to roll a dice and the person with the highest number goes first.

Player 1 rolls all four dice.

They can then select between 2 and 4 of the dice to use in their fractions.

For example, player one rolls a 3, 2, 1 and 6. They might select the 2 and the 3 and colour in two of the $\frac{1}{3}$ to make $\frac{2}{3}$ or they might select all 4 numbers and make the sum $\frac{2}{3} + \frac{1}{6} = \frac{5}{6}$ and colour in five of the $\frac{1}{6}$ to make $\frac{5}{6}$.

You can only use each digit that you have rolled on the dice once.

You must make at least one fraction.

You can use any of the operators +, −, × and ÷

Player 2 should check player 1's answer before having their turn.

The first player to colour in their fraction wall is the winner.

Fraction Wall Game

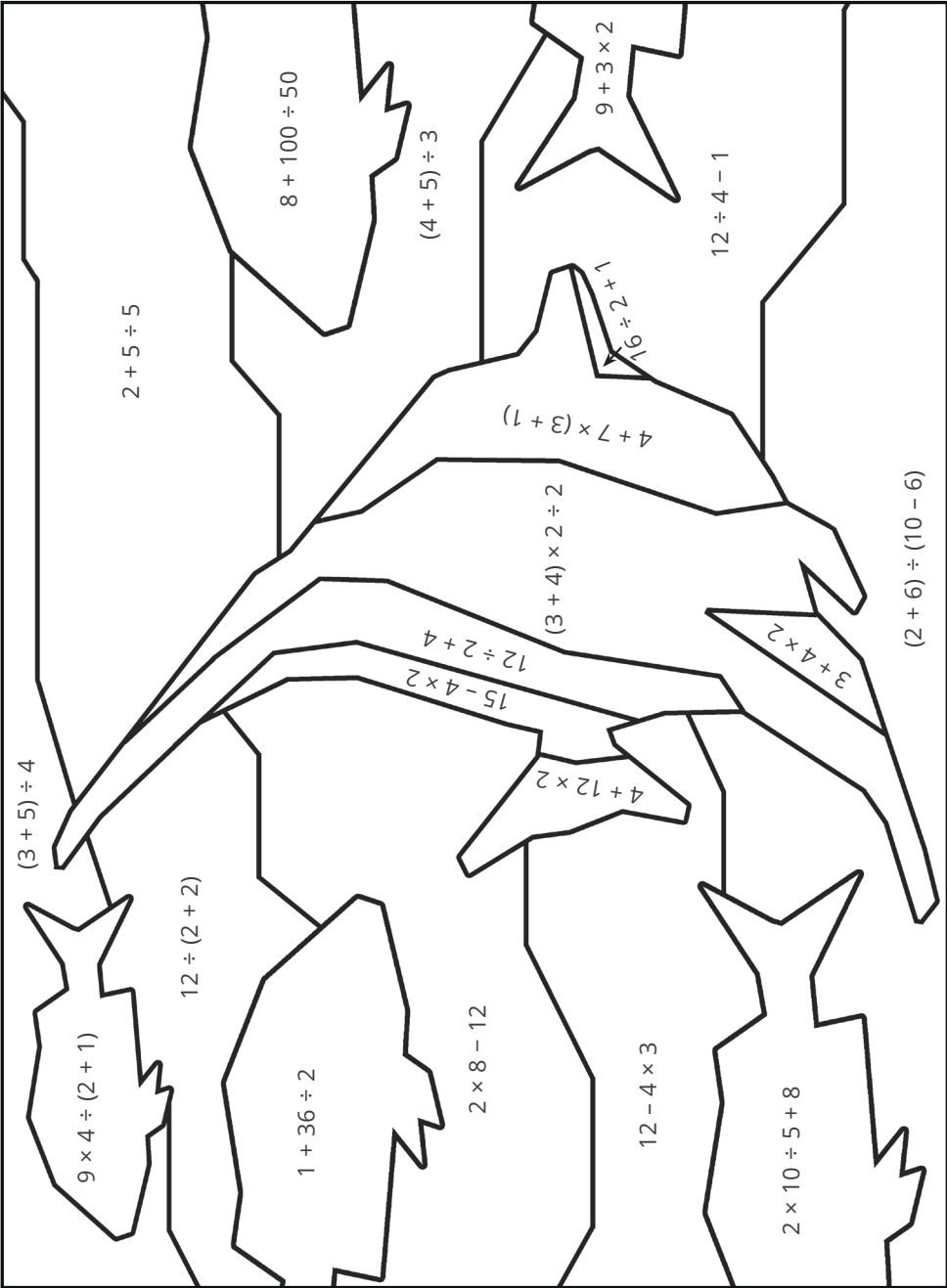
1									
$1\frac{1}{2}$					$1\frac{1}{2}$				
$1\frac{1}{3}$			$1\frac{1}{3}$			$1\frac{1}{3}$			
$1\frac{1}{4}$		$1\frac{1}{4}$		$1\frac{1}{4}$		$1\frac{1}{4}$		$1\frac{1}{4}$	
$1\frac{1}{5}$		$1\frac{1}{5}$		$1\frac{1}{5}$		$1\frac{1}{5}$		$1\frac{1}{5}$	
$1\frac{1}{6}$		$1\frac{1}{6}$		$1\frac{1}{6}$		$1\frac{1}{6}$		$1\frac{1}{6}$	
$1\frac{1}{7}$		$1\frac{1}{7}$		$1\frac{1}{7}$		$1\frac{1}{7}$		$1\frac{1}{7}$	
$1\frac{1}{8}$		$1\frac{1}{8}$		$1\frac{1}{8}$		$1\frac{1}{8}$		$1\frac{1}{8}$	
$1\frac{1}{9}$		$1\frac{1}{9}$		$1\frac{1}{9}$		$1\frac{1}{9}$		$1\frac{1}{9}$	
$1\frac{1}{10}$		$1\frac{1}{10}$		$1\frac{1}{10}$		$1\frac{1}{10}$		$1\frac{1}{10}$	



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Colour by Numbers Order of Operations



Colour by Numbers Order of Operations

Answer the questions, then use the key to find out which colour to shade that section.

For example: $2 + 4 \times 3 = 14$, colour this yellow.

	Blue
	0 - 4

	Black
	5 - 9

	Yellow
	10 - 14

	Green
	15 - 19

	White
	20+



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Exit Year 6 and Enter Year 7

Solve the clues and find the four-digit code to enter year 7.

Clue 1:

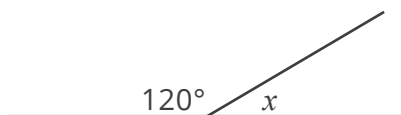
Convert 1752mm to metres.

Clue 2:

Calculate the volume of a cube with edges of 2cm.

Clue 3:

Work out the size of the missing angle labelled x .

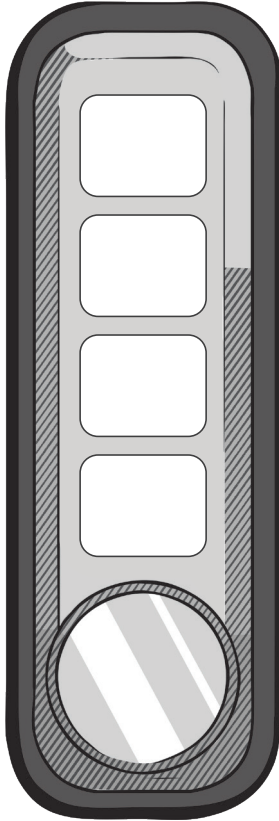


Clue 4:

Calculate the mean of this data set.

4, 7, 6, 8 and 5.

Exit Year 6 and Enter Year 7



The first digit of the code is given by the value of the hundredths in clue 1.

The second digit of the code is given by the value of the answer in clue 2.

The third digit of the code is given by the value of the tens in clue 3.

The fourth digit of the code is given by the value of the answer in clue 4.



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