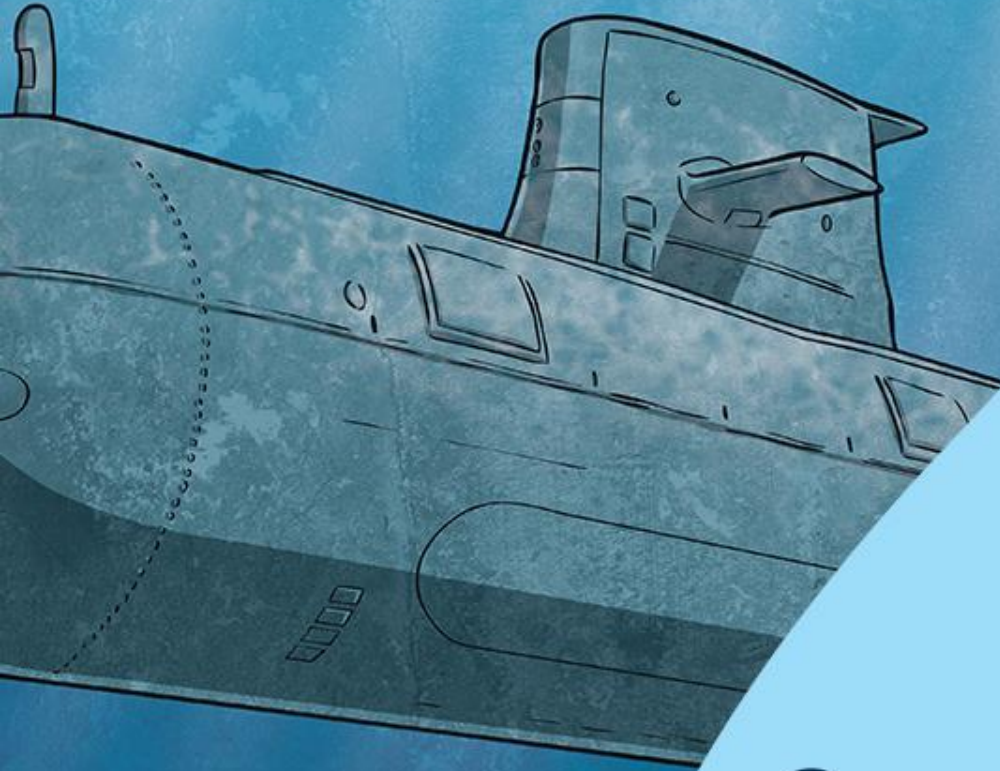


Diving into Mastery



Common Multiples



Diving into Mastery Guidance for Educators

Each activity sheet is split into three sections, diving, deeper and deepest, which are represented by the following icons:



Diving



Deeper



Deepest

These carefully designed activities take your children through a learning journey, initially ensuring they are fluent with the key concept being taught; then applying this to a range of reasoning and problem-solving activities.

These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding.

Aim

- Identify common factors, common multiples and prime numbers.

Common Multiples

Diving

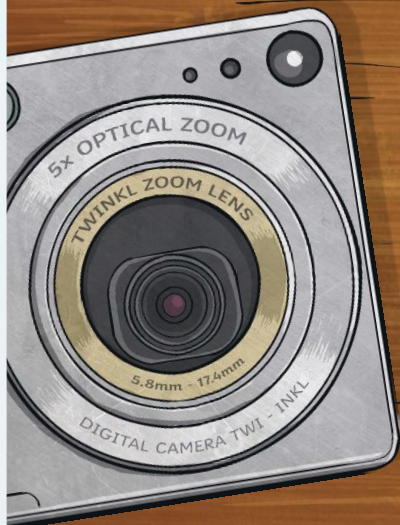


1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Write these 100 squares to identify the common multiples of 3 and 8.

The common multiples are **24, 48, 72, 96.**



4 and 9

36 and 72

5 and 11

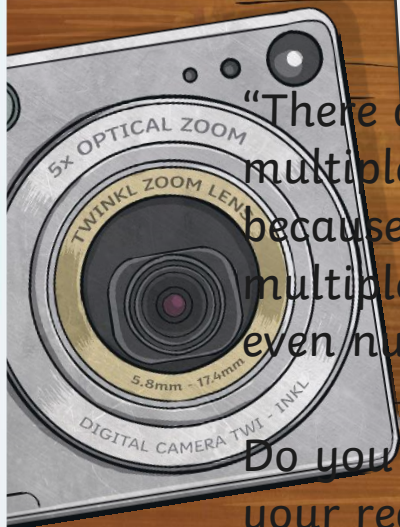
55 and 110

6 and 9

18 and 36

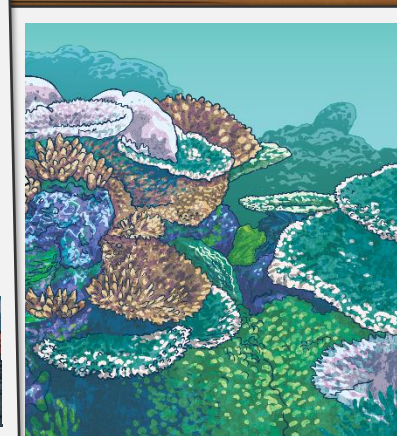
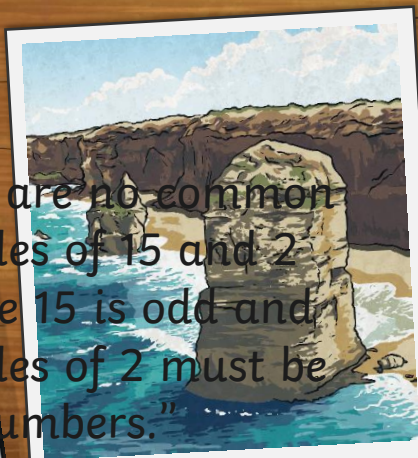


Write two common multiples
of these numbers:

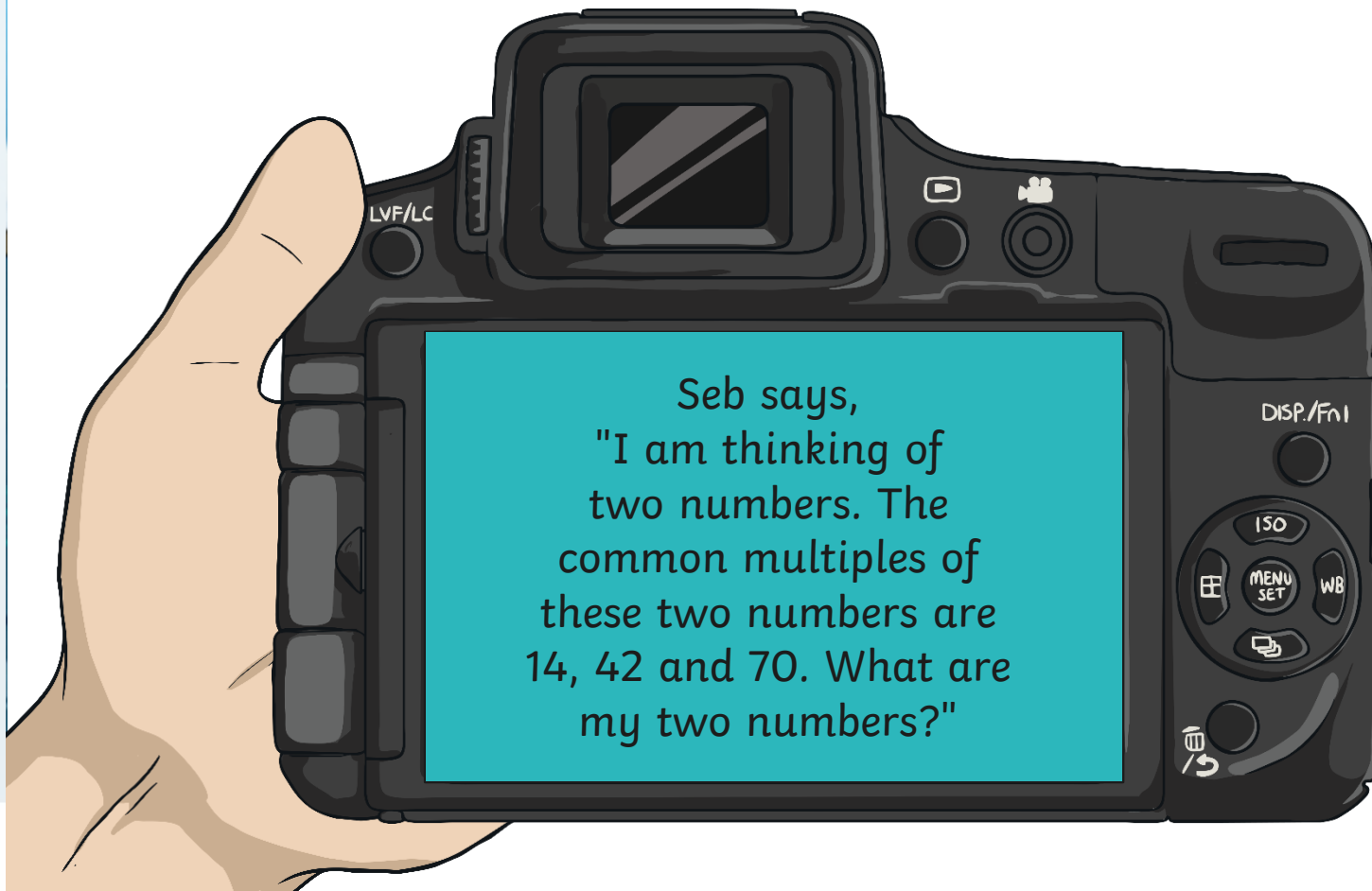
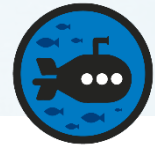


"There are no common multiples of 15 and 2 because 15 is odd and multiples of 2 must be even numbers."

Do you agree? Explain your reasons.



The answer is incorrect
30, 60 and 90 are all
common multiples of 15 and 2. Alternate multiples of 15 are even numbers.



A black computer keyboard is visible in the top left corner. Below it, two Polaroid-style photographs of a rocky coastline with blue water and white waves are placed on a wooden desk. A green arrow-shaped callout box points to the photos.

6th, 12th, 18th, 24th
and 30th March

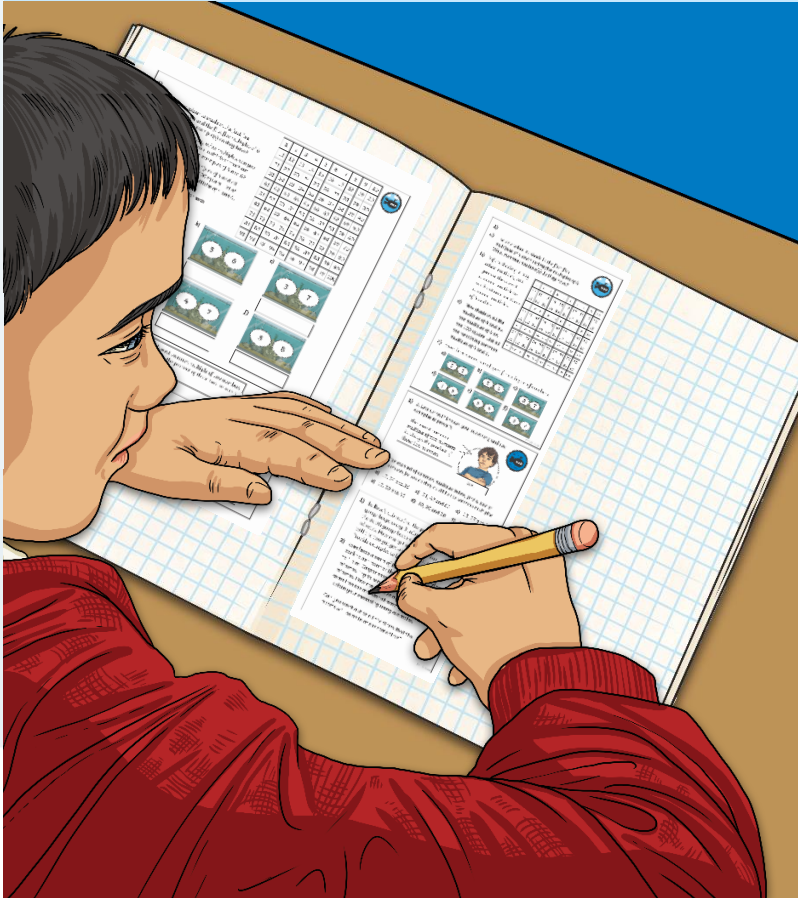
Marine

Marine biologist Macy checks the water temperature every two days and the water pH every three days.

On which dates in March will Macy check both the temperature and the pH?

Common Multiples

Dive in by completing your own activity!



1) Use one colour to shade in the first five multiples of 4 and the first five multiples of 6. What common multiple(s) do they have?

2) Before shading in any other multiples, can you use the lowest common multiple to work out another three common multiples of 4 and 6?

3) Now shade in all the multiples of 4 and all the multiples of 6 on the 100 square. List all the remaining common multiples of 4 and 6.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

4) In Rose's gauge below, the depth gauge sweeps at the depth of 10 minutes. How will the two... Provide exam...

5) Rose leads a back to her... to 1.0 p.m. Call minutes. Ing minutes. How come into the Explain our... Can you, wor... reports: ill e...

1) Is Levi correct? Explain your reasoning and use examples to prove it. The lowest common multiple of two numbers is always the product of those two numbers.

2) For each set of common multiples below, find a pair of numbers for which they could be the common multiples.

a) 12, 24 and 36 c) 21, 42 and 63 e) 18, 27 and 36

b) 15, 30 and 45 d) 10, 20 and 30 f) 36, 72 and 108

Need Planning to Complement this Resource?

National Curriculum Aim

Identify common factors, common multiples and prime numbers.

The screenshot shows the 'Marine Multiples' resource interface. At the top, there are three video thumbnails: 'Buzz, Whizz, Pop', 'Marine Multiples', and 'Sea of Numbers'. Below the thumbnails are several worksheets. The 'Marine Multiples' worksheet includes a grid for identifying common multiples of two numbers. The 'Common Multiples' worksheet has a table for listing multiples. The 'Sea of Numbers' worksheet has a grid for identifying common factors of two numbers.

The screenshot shows the 'Fun Factory' resource interface. At the top, there are three video thumbnails: 'Multiple Splat', 'Fun Factory', and 'What is a Common Factor?'. Below the thumbnails are several worksheets. The 'Fun Factory' worksheet includes a grid for identifying common factors of two numbers. The 'What is a Common Factor?' worksheet has a table for listing factors. The 'Multiple Splats' worksheet has a grid for identifying common multiples of two numbers.

