Names (pair) _____ Date _____

Divisibility by 10, 5 and 2

1 IN PAIRS In the chart, **circle** the multiples of 2, **colour** the multiples of 5 and **cross out** the multiples of 10. What do you notice?

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

Multiples of 10 end in the digit ☐

Multiples of 5 end in the digit ☐

Multiples of 2 end in the digit ☐

Remember

A number is divisible by $\mathbf{10}$ if its ones digit is 0, by $\mathbf{5}$ if its ones digit is 0 or 5, and by $\mathbf{2}$ if its ones digit is 0, 2, 4, 6 or 8. Numbers divisible by 2 are **even**; the others are **odd**.

Names (pair) _____ Date _____

Example

Why? Every number is tens plus ones: $4{,}375 = 437 \times 10 + 5$. The tens part ($437 \times 10$) is always divisible by 10, 5 and 2. So only the **ones digit** decides: 5 is divisible by 5, but not by 2 or 10.

2 ON YOUR OWN Split each number into tens and ones, then decide.

number	tens + ones	divisible by 2?	divisible by 5?	divisible by 10?
572	$572 = \square \times 10 + \square$	yes / no	yes / no	yes / no
1,935	$1{,}935 = \square \times 10 + \square$	yes / no	yes / no	yes / no
6,040	$6{,}040 = \square \times 10 + \square$	yes / no	yes / no	yes / no
2,018	$2{,}018 = \square \times 10 + \square$	yes / no	yes / no	yes / no
705	$705 = \square \times 10 + \square$	yes / no	yes / no	yes / no

3 ON YOUR OWN Fill in the missing digit (find every possibility).

$47\square$ is divisible by 5: _____

$3\square 0$ is divisible by 10: _____

$25\square$ is even: _____

$81\square$ is divisible by 2 and by 5: _____

4 IN PAIRS **Find the mistake.** Ivan says: "35 is even because $3 + 5 = 8$, and 8 is even." What is wrong?

5 IN PAIRS CHALLENGE Is the sum of two odd numbers even or odd? Try some examples, then explain.

The Hundred Chart app · otooly.com/hundred-chart

Multiples mode: choose 2, 5 and 10 together and look at the columns where the multiples lie.

★ ON YOUR OWN **Exit card.** Which of 340, 515, 728, $1{,}000$ are divisible by 5? _____ And by 2? _____