Name   Date

DIVISIBILITY RULES 1-10 CHART

EVEN NUMBERS	ODD NUMBERS	DIVISIBLE BY 1
All **integers** where the last digit ends in 0, 2, 4, 6 or 8.	All **integers** where the last digit ends in 1, 3, 5, 7 or 9.	All **integers** are divisible by 1.
328 is even as the last digit is 8. 1314 is even as the last digit is 4.	1907 is odd as the last digit is 7. 2403 is odd as the last digit is 3.	147 **is divisible** by 1. 12.8 **is not divisible** by 1 because it is not an integer.
DIVISIBLE BY 2	**DIVISIBLE BY 3**	**DIVISIBLE BY 4**
All **even** integers are divisible by 2.	All **integers** where the total of the digits is divisible by 3 (in the 3 times table). This rule can be repeated if needed.	All **even** integers whose last two digits are divisible by 4. *A quick way to test this is to halve the last two digits twice and see if you get a whole number.*
318 **is divisible** by 2 because the last digit is 8 which is even. 513 **is not divisible** by 2 because it is an odd number.	714 **is divisible** by 3 because 7+1+4=12 and 12÷3=4 (divisible). 3515 **is not divisible** by 3 because 3+5+1+5=14 and 14÷3=4 $^2/_3$ (not divisible).	1328 **is divisible** by 4 because 28÷4=7. 793 **is not divisible** by 4 because it is odd. *870 is not divisible by 4 because half of 70=35 and half of 35=17 ½ .*
DIVISIBLE BY 5	**DIVISIBLE BY 6**	**DIVISIBLE BY 7**
All **integers** whose last digit is a 0 or 5.	All **even** integers which are divisible by 3 (see Divisible by 3 test).	Double the last digit and subtract the result from the number made by the other digits and see if it is divisible by 7. Repeat again if needed.
4185 **is divisible** by 5 because the last digit is 5. 319 **is not divisible** by 5 because the last digit is 9.	432 **is divisible** by 3 because it is even and the total of the digits is 4+3+2=9 and 9÷3=3 (divisible). 158 **is not divisible** by 3 because 1+5+8=14 and 14÷3=4 $^2/_3$ (not divisible).	1057 **is divisible** by 7 because 105-2x7=91. 91÷7=13 (divisible). 841 **is not divisible** by 7 because 84–2x1=82. 82÷7=11 $^5/_7$ (not divisible).
DIVISIBLE BY 8	**DIVISIBLE BY 9**	**DIVISIBLE BY 10**
All **even** integers where the last 3 digits are divisible by 8. *A quick way to test this is to halve the last 3 digits three times and see if you get a whole number.*	All **integers** where the total of the digits is divisible by 9 (in the 9 times tables). This rule can be repeated if needed.	All **integers** whose last digit is 0.
5312 **is divisible** by 8 because half of 312 is 156, half of 156 is 78 and half of 78=39 (a whole number). 1207 **is not divisible** by 8 because it is odd. *4284 is not divisible by 8 because half of 284=142 and half of 142 is 71 and half of 71 is 35.5 (not a whole number)*	2745 **is divisible** by 9 because 2+7+4+5=18 which is divisible by 9. 702 **is divisible** by 9 because 7+0+2=9 which is divisible by 9. 1024 **is not divisible** by 9 because 1+0+2+4=7 which is not divisible by 9.	5120 **is divisible** by 10 because the last digit is 0. 8039 **is not divisible** by 10 because the last digit is 9. 2815 **is not divisible** by 10 because the last digit is 5.

- An **integer** is a whole number which can be positive or negative.