

## differentiated interactive notes & practice worksheets

by Joy M. Hall Jonts by www.kevinandamanda.com



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<u>N</u> —			N
Add all the digits. If the sum is divisible by 9. so is the number. (9. 18. 27. 45 can use the hundreds chart to check) Example: $342 = 3+4+2 = 9$	Take the last digit and double it. Subtract that from the remaining numbers. Repeat until you have I or 2 digits. Is that number divisible by 7? If so, do a quick mental math division to double check.	it ends in a <u>5</u> or a <u>0</u> .	Add all the digits. If the sum is divisible by 3. so is the number. (3. 6.9.12.15can use the hundreds chart to check) Example: 645 = 6+4+5 = 15
the last three digits in the number are divisible by 8.	it is divisible by <u>BOTH</u> 2 and 3. Both rules have to work.	the last two digits are divisible by 4. (4, 8, 12, 16, 20 can use the hundreds chart to check)	it is even. (It ends with a 0. 2, 4, 6, or 8.)

Directions: Cut on the dotted lines and glue the notes on the inside of the foldable rules of divisibility page.

<u>MOTE:</u> There is one extra note that will be glued on the notes page separately from the rest.

the last three digits in the number are divisible by 8.	
<ol> <li>Take the last digit and double it.</li> <li>Subtract that from the remaining numbers.</li> <li>Repeat until you have for 2 digits.</li> <li>Is that number divisible by 7?</li> <li>If so, do a quick mental math division to double check.</li> </ol>	the last two digits are divisible by 4. (4.8,12,16, 20, – can use the hundreds chart to check)
it ends in a <u>5</u> or a <u>0</u> .	* A number is divisible by 10 if it ends with a <u>0</u> .
it is even. (It ends with a 0, 2, 4, 6, or 8.)	it is divisible by <u>BOTH</u> 2 and 3. Both rules have to work.
<ol> <li>Add all the digits.</li> <li>If the sum is divisible by         <ol> <li>so is the number. (3.</li> <li>9.12.15 can use             the hundreds chart to             check)         </li> </ol> </li> <li>Example: 645 = 6+4+5 = 15</li> </ol>	1. Add all the digits. 2. If the sum is divisible by 9. so is the number. (9. 18. 27. 45 can use the hundreds chart to check) Example: $342 = 3+4+2 = 9$

<b>Name</b> Directions: Use your notes on <u>Rules of Divisibility</u> to com	<b>do+e</b> plete this page. Circle each divisor that the number is
divisible by. 1. <b>432</b>	2. <b>357</b>
is this number divisible by	is this number divisible by
2 3 4 5 6 7 8 9 10	2 3 4 5 6 7 8 9 10
3. <b>2,360</b>	4. <b>5,671</b>
is this number divisible by	is this number divisible by
2 3 4 5 6 7 8 9 10	2 3 4 5 6 7 8 9 10
5. <b>16,303</b>	6. <b>38,475</b>
is this number divisible by	is this number divisible by
2 3 4 5 6 7 8 9 10	2 3 4 5 6 7 8 9 10
7. <b>400,005</b>	<sup>8.</sup> <b>782,340</b>
is this number divisible by	is this number divisible by
2 3 4 5 6 7 8 9 10	2 3 4 5 6 7 8 9 10
<sup>9.</sup> 7,321,694	<sup>10.</sup> <b>6,862,356</b>
is this number divisible by	is this number divisible by
2 3 4 5 6 7 8 9 10 Copyright © 21	2 3 4 5 6 7 8 9 10 OIZ Joy M. Hall Page 1

name <u>answer key</u>	date
Directions: Use your notes on <u>Rules of Divisibility</u> to com	plete this page. Circle each divisor that the number is
	0 <b>967</b>
1. <b>432</b>	Z. 351
is this number aivisible by	is this number aivisible by
2345678910	2 3 4 5 6 7 8 9 10
3 <b>9360</b>	A 5671
0. <b>2,300</b>	
is this number divisible by	is this number divisible by
	2345678910
5. <b>16,303</b>	<sup>6.</sup> <b>38,475</b>
ic thic number divisible hu	ic thic number divisible bu
2 3 4 5 6 7 8 9 10	2 3 4 5 6 7 8 9 10
7. <b>400,005</b>	<sup>8.</sup> <b>782,340</b>
is this number divisible bu	is this number divisible bu
9 7271604	10 6 867 256
». 1,521,094	10. 0,002,330
is this number divisible by	is this number divisible by
2 3 4 5 6 7 8 9 10	
Copyright © 2	012 Joy M. Hall Page 1

name	da+e
Directions: Use your notes on <u>Rules of Divisibility</u> to ca divisible by.	omplete this page. Circle each divisor that the number is
1. <b>432</b>	2. <b>357</b>
is this number divisible by 2 3 5 10	is this n∪mber divisible by 2 3 5 10
3. <b>2,360</b>	4. <b>5,671</b>
is this n∪mber divisible by 2 3 5 10	is this number divisible by 2 3 5 10
5. <b>16,303</b>	6. <b>38,475</b>
is this number divisible by 2 3 5 10	is this number divisible by 2 3 5 10
7. <b>400,005</b>	<sup>8.</sup> <b>782,340</b>
is this n∪mber divisible by 2 3 5 10	is this number divisible by 2 3 5 10
9. <b>7,321,694</b>	<sup>10.</sup> <b>6,862,356</b>
is this number divisible by 2 3 5 10 Copyright	is this number divisible by 2 3 5 10 © 2012 Joy M. Hall Page 1b

nar	ne <mark>answer key</mark>	da <del>t</del> e	
Dire divisi	<b>ctions:</b> Use your notes on <u>Rules of Divisibility</u> to com No by	vplete this page. Circle ea	ch divisor that the number is
<b>1</b>	120 120	2	257
T.	452	<i>L</i> .	160
	is this number divisible bu	is this num	her divisible hu
		Z	5 10
3.	2.360	4. 5	.671
	2/200		
	is this number divisible by	is this num	ber divisible by
	2 3 5 10	2 3	5 10
5.	16.303	6. <b>3</b> 8	3.475
	ic thic number divicible bu	ic thic num	har divicibla bu
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7.	400,005	8. <b>78</b>	2,340
	•		•
	is this number divisible by	is this num	ber di∨isible by
	2 (3) (5) 10	2.6	
9.	7301604	10. 680	62356
•••	1221074		
	is this number divisible bu	is this num	ber divisible bu
		96	5 10
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name	date
Directions: Use your notes on <u>Rules of Divisibility</u> to comp	plete this page. Circle each divisor that the number is
	~ ~~~
1. <b>210</b>	Z. <b>588</b>
is this number aivisible by	is this number aivisible by
2 3 4 5 6 7 8 9 10	2 3 4 5 6 7 8 9 10
3 <b>1105</b>	4 4130
	- 4,1 <i>3</i> 2
is this number divisible by	is this number divisible by
2 3 4 5 6 7 8 9 10	2 3 4 5 6 7 8 9 10
5. <b>20,043</b>	6. <b>13,156</b>
ic thic purphon divicible but	ic thic purphon divicible but
is this normoer aivisible by	is this normoer aivisible by
2 3 4 5 6 7 8 9 10	2 3 4 5 6 7 8 9 10
7. <b>211,032</b>	<sup>8.</sup> <b>362,880</b>
is this number divisible by	is this number divisible by
2 3 4 5 6 7 8 9 10	2 3 4 5 6 7 8 9 10
0 0024027	10 <b>6 400 706</b>
9. 2,031,031	10. <b>4,120,190</b>
is this number divisible by	is this number divisible by
2 3 4 5 6 7 8 9 10	2 3 4 5 6 7 8 9 10
Page 2 Copyright © 20	DI2 Joy M. Hall

name

answer keu

date

Directions: Use your notes on <u>Rules of Divisibility</u> to complete this page. Circle each divisor that the number is divisible by.

2.

<b>l</b> .	210		
is 23	Hhis n∪mber divisible by 3) 4 (5) (6) (7) 8 9 (10)		
3.	1,105		
is 2 3	Hhis n∪mber divisible by 3 4 5 6 7 8 9 10		
5.	20,043		
is 2	Hhis n∪mber divisible by 3) 4 5 6 7 8 (9) 10		
7.	211,032		
is this number divisible by $2345678910$			

9. 2,031,037

is this number divisible by... Copyright @ 2012 Joy M. Hall Page 2

is this number divisible by... (4)(6) (7) 4. 4,132

is this number divisible by... 3 (4) 7 8 

6. 13,156

is this number divisible by... 

## 8. 362,880

is this number divisible by... 

is this number divisible by...

<sup>10.</sup> **4,128,796** 

name	date
Directions: Use your notes on <u>Rules of Divisibil</u> divisible by.	$\underline{ity}$ to complete this page. Circle each divisor that the number is
1. <b>210</b>	2. <b>588</b>
is this number divisible by	y is this number divisible by
2 3 5 10	2 3 5 10
3. <b>1,105</b>	4. <b>4,132</b>
is this n∪mber divisible by 2 3 5 10	y is this number divisible by 2 3 5 10
5. <b>20,043</b>	6. <b>13,156</b>
is this n∪mber divisible by 2 3 5 10	y is this number divisible by 2 3 5 10
7. <b>211,032</b>	<sup>8.</sup> <b>362,880</b>
is this n∪mber divisible by 2 3 5 10	j is this number divisible by 2 3 5 10
<sup>9.</sup> <b>2,031,037</b>	10. <b>4,128,796</b>
is this number divisible by	y is this number divisible by
2 3 5 10	2 3 5 10
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na	me <u>answer key</u>	da <del>l</del> e		
<b>Dire</b> divis	<b>ctions:</b> Use your notes on <u>Rules of Divisibility</u> ; ible by.	to complete this page. Circle each divisor that the number is		
1.	210	2. <b>588</b>		
	is this number divisible by	is this number divisible by		
	23510	2 3 5 10		
З.	1,105	<sup>4.</sup> <b>4,132</b>		
	is this number divisible by	is this number divisible by		
	2 3 5 10	2 3 5 10		
5.	20,043	6. <b>13,156</b>		
	is this number divisible by	is this number divisible by		
	2 3 5 10	2 3 5 10		
7.	211,032	8. <b>362,880</b>		
	is this number divisible by	is this number divisible by		
	2 3 5 10	2350		
9.	2,031,037	<sup>10.</sup> <b>4,128,796</b>		
	is this number divisible by	is this number divisible by		
Ē	<b>2 3 5</b> 10			
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## thank you for downloading

Rules of DIVISIBILITY

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