



Name: _____

Tests of Divisibility

Date: _____

Remedial Worksheet

Grade 5A

Fill in the table with the divisibility rules:

Number	Rule
2	A number is divisible by 2 if it ends in _____, _____, _____, _____, or _____ (even digits).
3	A number is divisible by 3 if the _____ of its digits is divisible by 3.
4	A number is divisible by 4 if the last _____ digits form a number divisible by 4.
5	A number is divisible by 5 if it ends in _____ or _____.
6	A number is divisible by 6 if it is divisible by BOTH _____ and _____.
8	A number is divisible by 8 if the last _____ digits form a number divisible by 8.
9	A number is divisible by 9 if the _____ of its digits is divisible by 9.
10	A number is divisible by 10 if it ends in _____.

True or False?

Circle TRUE or FALSE for each statement:

- | | |
|--|--------------|
| 1. 1,248 is divisible by 2. | TRUE / FALSE |
| 2. 3,465 is divisible by 5. | TRUE / FALSE |
| 3. 7,218 is divisible by 3. | TRUE / FALSE |
| 4. 5,624 is divisible by 4. | TRUE / FALSE |
| 5. 1,728 is divisible by 6. | TRUE / FALSE |
| 6. 4,816 is divisible by 8. | TRUE / FALSE |
| 7. 6,237 is divisible by 9. | TRUE / FALSE |
| 8. 9,870 is divisible by 10. | TRUE / FALSE |
| 9. A number divisible by 9 is always divisible by 3. | TRUE / FALSE |
| 10. A number divisible by 10 is always divisible by 5. | TRUE / FALSE |

Choose the correct answer (A, B, or C).

- Which of these numbers is divisible by 3?
A) 451
B) 624
C) 718
- Which number is divisible by both 4 and 6?
A) 132
B) 154
C) 170

3. A number ending in 5 is always divisible by:
- A) 2
 - B) 3
 - C) 5
4. To check divisibility by 8, you should look at:
- A) The first digit
 - B) The last digit
 - C) The last three digits
5. The number 2,376 is divisible by:
- A) 4 only
 - B) 4 and 6
 - C) 4, 6, and 9

Applying the Rules

1. Circle all the numbers divisible by:

a) 2: 341, 598, 2,104, 4,567, 8,990

b) 3: 723, 458, 1,263, 5,005, 8,874

c) 5: 435, 712, 2,340, 4,567, 8,905

d) 6: 144, 258, 434, 726, 1,000

e) 9: 657, 828, 1,111, 2,835, 4,563

2. Find the missing digit so that:

4_72 is divisible by 3 (Find two possibilities): _____ or _____

31_ is divisible by 4 (Find all possibilities): _____

5,6_0 is divisible by 8: _____

2,34_ is divisible by 9: _____

Problem Solving

1. Sarah is packing cupcakes for a party. She has 135 cupcakes and wants to put them into boxes.

If she uses boxes that hold 3 cupcakes, will they pack evenly? _____

If she uses boxes that hold 6 cupcakes, will they pack evenly? _____

2. A mystery number has 4 digits:

It is divisible by 2 and 5

It is NOT divisible by 3

The digits add up to 10

The last two digits form a number divisible by 4

Find two possible mystery numbers: _____ and _____

3. True or False with explanation:

"Every number divisible by 8 is also divisible by 4."

Circle: TRUE / FALSE

Explain: _____

4. Complete the pattern:

All numbers divisible by 10 are also divisible by _____ and _____.

All numbers divisible by 6 are also divisible by _____ and _____.

All numbers divisible by 9 are also divisible by _____.

Look at these numbers:

12 15 18 21 24 27 30

- (a) Write down all the numbers that are divisible by 3. _____
- (b) Write down all the numbers that are divisible by 5. _____
- (c) Write down all the numbers that are divisible by both 3 and 5. _____

Here is a two-digit number

4_____

- (a) Write a digit in the blank so that the number is divisible by 2. 4_____
- (b) Write a different digit in the blank so that the number is divisible by 5. 4_____
- (c) Write a different digit in the blank so that the number is divisible by 3. 4_____

Chen has 36 stickers.

He wants to share them equally between his friends.

- (a) Can he share them equally between 4 friends? Circle YES or NO.

YES/NO

- (b) Can he share them equally between 5 friends? Circle YES or NO.

YES/NO

- (c) Write down all the numbers between 2 and 10 that he can share the stickers between equally.

_____.

Complete the table:

Number	Divisible by 2	Divisible by 3	Divisible by 5
45			
72			
100			
123			

Write "Yes" or "No" in each box.

The number $1*6$ is a three-digit number.

The $*$ represents a missing digit.

(a) Find a digit for $*$ so that $1*6$ is divisible by 2.

1 _____ 6

(b) Find a digit for $*$ so that $1*6$ is divisible by 3.

1 _____ 6

(c) Find a digit for $*$ so that $1*6$ is divisible by 4.

1 _____ 6

(d) Is there a digit for $*$ so that $1*6$ is divisible by 5?

Explain your answer:

_____.