



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).

1. Which of these numbers is divisible by 3?

A) 451

B) 624

C) 718

2. 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:

_____.