Is That Divisible?

A game to practice divisibility rules for 2,3,4,5,6,8,9 and 10

Grade 5-8

Teacher-Author: Krystal Mills

This is a simple game for students to play and practice their divisibility rules. I've included 2 versions - one more suitable for grades 7 and 8 and the other for grades 5 and 6.

All that is required to play: A paper clip and a pencil to spin AND dice (either 2 or 3) for each group playing the game. You can also add dice if you want to increase difficulty for a higher grade/skill level.

2-5 students can play with one game board.

Included is a colorful printable game board for students (which also includes the directions) and an optional recording sheet - although students could also use their scribblers or scrap paper.

Print each game board on to cardstock and laminate.

This would be a great game to add to your stash and is perfect to leave for a guest teacher, as it is fun for students, easy to play and builds on important skills all at the same time!

As a BONUS: I've also included a colorful reference poster for your classroom containing the divisibility rules for 2,3,4,5,6,8,9 and 10. I've included a black and white printable of this poster, that can go into your students' notebooks as well.

Is That Divisible?
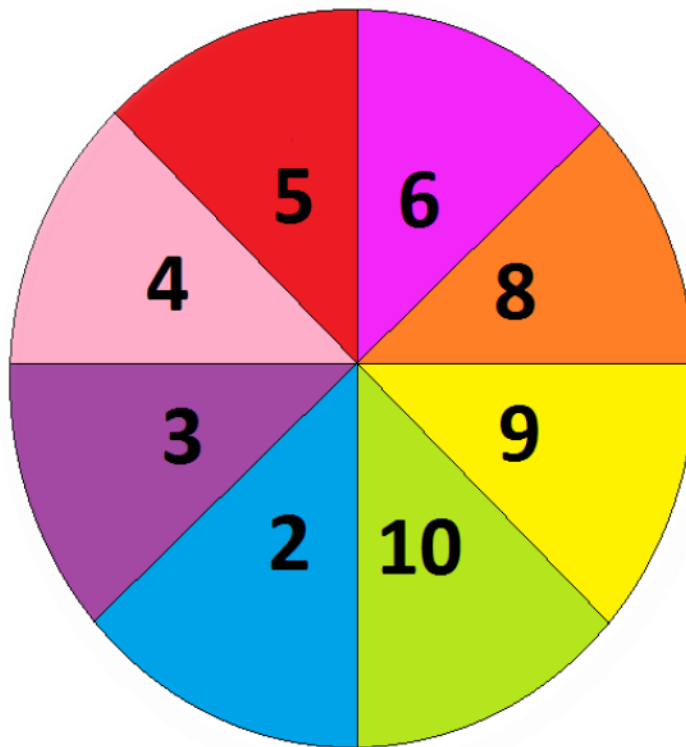
Highest roller begins the game.

Player One rolls 3 dice and spins the spinner.

If the digits on the three dice can be arranged to form a number that is divisible by the number that was spun, Player One receives the sum of the digits that were rolled on the dice. If not, the player receives 0 for the round and the next player rolls. The first player to reach 100 points wins!

Example: If you roll: 2,3,6 AND spin: 4

You could make: 236, 263, 326, 362, 623, 632...

Use your divisibility rules to see if you can find a number that is divisible by the number spun. So, for example, 236 is divisible by four, so you would receive the sum of the points rolled: 2 + 3 + 6 = 11

Recording Sheet

Numbers Rolled	Possible 3 digit numbers	Points Scored

Is That Divisible?

Highest roller begins the game.

Player One rolls 2 dice and spins the spinner.

If the digits on the dice can be arranged to form a number that is divisible by the number that was spun, Player One receives the sum of the digits that were rolled on the dice. If not, the player receives 0 for the round and the next player rolls. The first player to reach 50 points wins!

Example: If you roll: 2,3 AND spin: 4

You could make: 23 or 32

Use your divisibility rules to see if you can find a number that is divisible by the number spun. So, for example, 32 is divisible by four, so you would receive the sum of the points rolled: 2 + 3 = 5
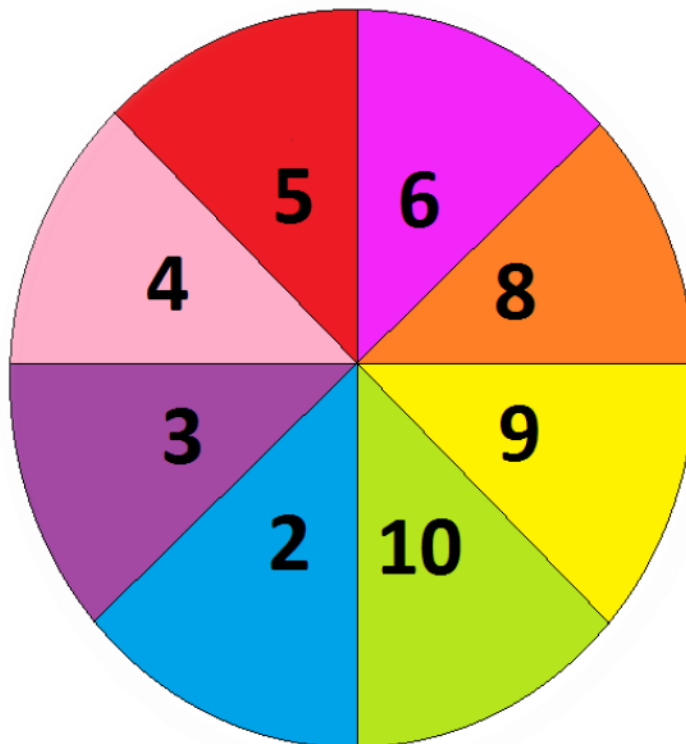
Recording Sheet

Numbers Rolled	Possible 2 digit numbers	Points Scored

Divisibility Rules

A number is divisible by:

2	If it ends in a 0, 2, 4, 6 or 8
3	If the sum of the digits is divisible by 3
4	If the last 2 digits are divisible by 4
5	If the number ends in 0 or 5
6	If the number is divisible by 2 and 3
8	If the last three digits are divisible by 8
9	If the sum of the digits is divisible by 9
10	If the number ends in 0

Divisibility Rules

A number is divisible by:

2	If it ends in a 0, 2, 4, 6 or 8
3	If the sum of the digits is divisible by 3
4	If the last 2 digits are divisible by 4
5	If the number ends in 0 or 5
6	If the number is divisible by 2 and 3
8	If the last three digits are divisible by 8
9	If the sum of the digits is divisible by 9
10	If the number ends in 0