Probability Games
with Geo Spinners!!

Teachers should give students the opportunity to investigate the concept of probability by means of hands-on tasks.
Probability activities are entertaining for students and foster a concrete approach to exploring the concept of fairness.
A discussion should first be held to decide what fairness means and to think of real-life situations in which it plays a role.

GAME # 1

One 0-9 or 1-10 Spinner per pair

Follow these rules to play the game:

-Decide who will play first
-Player A spins. If the pointer lands on an even number, he gets 1 point.
If it lands on an odd number, player B gets 1 point instead.
-Then player B spins and points are awarded following the same rules.
-Play six rounds. Record the points for each round on the chart here below.
-The player with the most points at the end of six rounds is the winner.

	1st spin	2nd spin	3rd spin	4th spin	5th spin	6th spin	7th spin	8th spin	9th spin	10th spin	11th spin	12th spin
A	.	.	.	.	.	.	.	.	.	.	.	.
B	.	.	.	.	.	.	.	.	.	.	.	.

Which player was the winner? Did each player have an equal chance of winning?
Was the game fair? Explain.
Play the game a few more times. Do these additional scores help you to decide if the game is fair?
How could the game be changed so that one of your two had a better chance of winning than the other?

GAME # 2

One1-10 Spinner per pair

Follow these rules to play the game:

-Decide who will play first

-Player A spins the spinner twice and multiplies the numbers obtained. If the product is even, player A gets 2 points.
If it is odd, player B gets 2 points.
-Then player B spins and follows the same scoring rules.
-Record the points for each of the ten rounds on the chart here below.
-The winner is the player who has the most points after ten rounds.

First spin result											
		1	2	3	4	5	6	7	8	9	10
S e c o n d s p i n r.	1										
	2										
	3										
	4										
	5										
	6										
	7										
	8										
	9										
	10										

Is this game fair? Explain.
Play the game again. This time also record the points in the chart below.
When finished with ten rounds, you should have ten products recorded in the chart,
possibly with more than one in a given location.
Do these latest scores now change your decision about the fairness of the game?
Can you modify the game so as to obtain different results concerning its fairness? How?