In this lab, students start with a single sheet of paper and rip it in half.
Then, take the two sheets of paper and rip them into 4 sheets, and so on.
If you could rip the stack 20 times, how high would the stack be?
You'd be surprised! Use technology to make short work of the problem.

# of Tears	# of Sheets	Height of Stack (in.)	Height of Stack (ft.)
0	1	0	0
1	2	0	0
2	4	0	0
3	8	0	0
4	16	0	0
5	32	0	0
6	64	0	0
7	128	1	0
8	256	1	0
9	512	2	0
10	1,024	4	0
11	2,048	8	1
12	4,096	16	1
13	8,192	33	3
14	16,384	66	5
15	32,768	131	11
16	65,536	262	22
17	131,072	524	44
18	262,144	1,049	87
19	524,288	2,097	175
20	1,048,576	4,194	350

Key Information:
One sheet of paper is approx. .004 inches.

Add-Ons / Further Study:
Having them format the cells with rounding and with commas makes it easier
to look at that data. How high is 4194 inches? Have them add a column for feet.
How high is 350 feet? One story on a building is usually 10 feet, so that is
almost 35 stories high! If they don't believe it, show them a ream of paper
(500 sheets) and that is already 2 inches, we are talking about over a million
sheets of paper! Have students graph the data to see the exponential
growth pattern.