

Dr. Jeff's Blog on the Universe <http://blogontheuniverse.org>

Solution to Weekly Challenge 3: What Can You Do with A Humongous Piece of Xerox Paper?

Assumption: The table below assumes that a ream of 500 sheets of xerox paper is 2-inches thick, which is what I found when I measured a standard ream (Dr. Jeff).

If you start with a humongous sheet of xerox paper, then:

After fold number:	The thickness is:	Units	
1	2	sheets	
2	4	sheets	
3	8	sheets	
4	16	sheets	
5	32	sheets	
6	64	sheets	
7	128	sheets	
8	256	sheets	
9	512	sheets	= about 1 ream (500 sheets) = 2.048 inches
10	4.1	inches	
11	8.2	inches	
12	16.4	inches	
13	32.8	inches	
14	65.5	inches	Now as thick as HEIGHT OF HUMAN BEING (5 feet 5 inches)
15	131.1	inches	
16	262.1	inches	
17	524.3	inches	
18	1,048.6	inches	
19	2,097.2	inches	
20	4,194.3	inches	Now thicker than HEIGHT OF STATUE OF LIBERTY (305 ft = 3,660 in)
21	8,388.6	inches	
22	16,777.2	inches	Now about as thick as HEIGHT OF EMPIRE STATE BLDG (1,472 ft = 17,664 in)
23	33,554.4	inches	
24	67,108.9	inches	= about 1 mile (1.059 miles)
25	2.1	miles	
26	4.2	miles	
27	8.5	miles	Now thicker than HEIGHT OF MOUNT EVEREST (29,029 ft = 5.5 miles)
28	16.9	miles	
29	33.9	miles	
30	67.8	miles	
31	135.6	miles	
32	271.1	miles	
33	542.3	miles	
34	1,085	miles	
35	2,169	miles	
36	4,338	miles	
37	8,677	miles	Now thicker than the DIAMETER OF EARTH
38	17,353	miles	which is 7,926 miles
39	34,707	miles	
40	69,414	miles	
41	138,827	miles	
42	277,654	miles	Now thicker than the distance FROM EARTH TO THE MOON
43	555,309	miles	which is 238,900 miles
44	1,110,618	miles	
45	2,221,236	miles	
46	4,442,471	miles	
47	8,884,942	miles	
48	17,769,885	miles	

After fold number:	The thickness is:	Units		
49	35,539,770	miles		
50	71,079,540	miles		
51	142,159,079	miles	Now thicker than the distance FROM EARTH TO THE SUN	
52	284,318,158	miles		which is 93,000,000 miles
53	568,636,317	miles		
54	1,137,272,633	miles		
55	2,274,545,266	miles		
56	4,549,090,533	miles		
57	9,098,181,065	miles		
58	18,196,362,131	miles		
59	36,392,724,262	miles		
60	72,785,448,523	miles		
61	145,570,897,046	miles		
62	291,141,794,093	miles		
63	582,283,588,185	miles		
64	1,164,567,176,371	miles		
65	2,329,134,352,741	miles		
66	4,658,268,705,482	miles		
67	9,316,537,410,964	miles = 1.6 Light Years	A Light Year is Distance Light Travels in 1 Yr (5.9 TRILLION Miles)	
68	3.2	Light Years		
69	6.3	Light Years	Now thicker than distance to NEAREST STAR, PROXIMA CENTAURI	
70	12.7	Light Years		which is 4.2 Light Years away
71	25.4	Light Years		
72	50.7	Light Years		
73	101.4	Light Years		
74	202.8	Light Years		
75	405.7	Light Years		
76	811.4	Light Years		
77	1,623	Light Years		
78	3,245	Light Years		
79	6,491	Light Years		
80	12,982	Light Years		
81	25,964	Light Years		
82	51,928	Light Years		
83	103,856	Light Years	Now thicker than the DIAMETER OF THE MILKY WAY GALAXY	
84	207,712	Light Years		which is 100,000 Light Years across
85	415,423	Light Years		
86	830,847	Light Years		
87	1,661,694	Light Years		
88	3,323,387	Light Years	Now thicker than distance to the ANDROMEDA GALAXY	
89	6,646,775	Light Years		which is 2.5 Million Light Years away
90	13,293,550	Light Years		
91	26,587,100	Light Years		
92	53,174,200	Light Years		
93	106,348,400	Light Years		
94	212,696,799	Light Years		
95	425,393,599	Light Years		
96	850,787,198	Light Years		
97	1,701,574,396	Light Years		
98	3,403,148,792	Light Years		
99	6,806,297,583	Light Years		
100	13,612,595,167	Light Years		
101	27,225,190,333	Light Years		
102	54,450,380,666	Light Years		
103	108,900,761,332	Light Years	Now thicker than distance to CURRENT EDGE OF OBSERVABLE UNIVERSE	
				which is 78 Billion Light Years Away