Part D [10 points] N.B. 1 point for each underline in formulas.

The table on the left shows a few of over 4000 rows of earthquake data.
Depth, **Magnitude** & **Intensity** are raw data. **Rating** is assigned by a formula.

The table on the right provides the bin ranges for the **Rating** column and provides a small statistical summary: the **Number** of quakes in each **Group,** and their mean **Depth** and **Magnitude**.

Depth	Rating	Magnitude	Intensity
20	Shallow	6.7	X
33	Shallow	6	8
33	Shallow	6.5	9
22	Shallow	6.6	X
33	Shallow	6.3	9
20	Shallow	6	7
50	Medium	6.2	7
100	Deep	6.3	8
20	Shallow	6	7
15	Shallow	6.7	9
36	Shallow	6.5	7
33	Shallow	6.5	8
10	Surface	6.2	X
13	Surface	6.2	X
33	Shallow	6	7

km	Group	Number	Average Depth	Average Magnitude
0	Surface	1428	7.71	3.53
15	Shallow	1586	28.43	2.72
40	Medium	1275	62.20	1.19
100	Deep	368	152.14	1.87

Write a LOOKUP formula that assigns the **Rating** to each row. [3]
=LOOKUP(Depth, km, Group)

Write the formula that produces the **Average Depth**. [5]
=SUMIF(Rating, Group, Depth) /Number

Write a formula for B2 which can be copied to produce the sequence of values shown.[2]

	A	B	C	D	E	F	G	H
1	1	2	4	8	16	32	64	128

=A1 *2

Part D2