

Twelve Days of Christmas Maths Investigation Spreadsheet.

The spreadsheet below shows graphically how to calculate the number of presents received, in total, throughout the twelve days

The rows at the bottom extend the investigation, giving the number of legs, eyes, fingers and toes, living things, beaks and rings.

There is good maths also, in looking at the pattern of totals (row 25) and the numerical progression in column Q.

Extension work could include finding the algebraic formulas for the totals in column Q etc.

	PARTRIDGE	DOVES	HENS	BIRDS	RINGS	GEESE	SWANS	MAIDS	LADIES	LORDS	PIPERS	DRUMMERS	
DAY													
1	1												1
2	1	2											3
3	1	2	3										6
4	1	2	3	4									10
5	1	2	3	4	5								15
6	1	2	3	4	5	6							21
7	1	2	3	4	5	6	7						28
8	1	2	3	4	5	6	7	8					36
9	1	2	3	4	5	6	7	8	9				45
10	1	2	3	4	5	6	7	8	9	10			55
11	1	2	3	4	5	6	7	8	9	10	11		66
12	1	2	3	4	5	6	7	8	9	10	11	12	78
TOTALS	12	22	30	36	40	42	42	40	36	30	22	12	364
LEGS	24	44	60	72	0	84	84	*240	72	60	44	24	568
EYES	24	44	60	72	0	84	84	160	72	60	44	24	728
FINGERS	Birds have claws not fingers or toes!							800	720	600	440	240	2800
LIVING	24	22	30	36	0	42	42	80	36	30	22	12	376
BEAKS	12	22	30	36	0	42	42	0	0	0	0	0	184
RINGS	0	0	0	0	*40	0	*42	0	*36	*30	0	0	0

* Don't forget the cows' legs!

* Swans are ringed, Lords and Ladies would most probably wear rings (this is flexible!!!)

If you enjoy this activity and have any additions to it, please let me know.

This activity will be permanently posted at the ICTeachers Ltd Website.