Spreadsheet Tasks

Threatened Species

Skills Check	
Difficulty	2
Formatting	☑
Functions	☑
Charts	☑
Sorting	❑
Extrapolating	☑

The information in the table shows the number of threatened animal species in different countries.

Country	Mammals	Birds	Reptiles	Fish
Afghanistan	11	13	1	0
Albania	2	7	1	7
Algeria	15	82	1	1
Argentina	27	41	5	5
Australia	58	45	37	37
Austria	7	5	1	7
Belarus	4	4	0	0
Belgium	6	3	0	1
Belize	5	1	5	4
Bhutan	20	14	1	0
Bolivia	24	27	3	0
Bosnia	10	2	0	6
Botswana	5	7	0	0

Tasks

a. **Open** a new spreadsheet and copy the data.

b. **Add a column** to find the total species threatened in each country (use the fill down tool). [=SUM(B2:E2)]

c. Find the **average** Mammals, Birds, Reptiles and Fish threatened over all countries (for presentation purposes, leave an empty row before adding this calculation). [=AVERAGE(B2:B14)]

d. Find the **total** Mammals, Birds, Reptiles and Fish threatened in each country (take care not to include your averages from part c in the sums). [=SUM(B2:B14)]

e. It is thought that the total numbers of endangered species will **increase by 15%**. Calculate the 'Total + 15%' figure for each column (miss a row first to improve presentation). Call this new row 'Total + 15%'. [=B17+B17/100*15] or more simply [=B17*1.15].

f. Add a row displaying the **total number** of extra species endangered under this 15% increase. Call this row 'Extra'. [=B19-B17]

g. If the numbers actually **decreased by 5%**, give the new totals for each column. Call this row 'Total – 5%'.

h. **Format** all numbers to 0 decimal places. Bold all headings and totals. Align headings left or right over the data. Add a splash of colour. Adjust the column widths. Add a thin border around the data section and another around the calculations section.

i. Select the cells A1:E1 (headings) and A6:E6 (Australian data) together, then add a **pie chart** showing the threatened species in Australia. Display the data labels.

j. Add a **column chart** showing the numbers of threatened species now, and the effect of the 15% increase. Do this by selecting the first 5 cells in each of the headings row, the totals row and the 'Extra' row together and then selecting a 'Stacked Column' from the chart options.

k. **Save** your work as "Threatened Species".

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Final Spreadsheet

	A	B	C	D	E	F
1	**Country**	**Mammals**	**Birds**	**Reptiles**	**Fish**	**Total**
2	Afghanistan	11	13	1	0	**25**
3	Albania	2	7	1	7	**17**
4	Algeria	15	82	1	1	**99**
5	Argentina	27	41	5	5	**78**
6	Australia	58	45	37	37	**177**
7	Austria	7	5	1	7	**20**
8	Belarus	4	4	0	0	**8**
9	Belgium	6	3	0	1	**10**
10	Belize	5	1	5	4	**15**
11	Bhutan	20	14	1	0	**35**
12	Bolivia	24	27	3	0	**54**
13	Bosnia	10	2	0	6	**18**
14	Botswana	5	7	0	0	**12**
15						
16	Average	15	19	4	5	**44**
17	**Total**	**194**	**251**	**55**	**68**	**568**
18						
19	**Total + 15%**	**223**	**289**	**63**	**78**	**653**
20	Extra	29	38	8	10	**85**
21	**Total - 5%**	**184**	**238**	**52**	**65**	**540**
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