Create a new workbook, and import the following tables into a new PowerPivot data model:

☑	tblCentre	dbo	Centre
☑	tblCentreType	dbo	CentreType
☐	tblEnvironment	dbo	
☑	tblFamily	dbo	Family
☐	tblHabitat	dbo	
☑	tblProduct	dbo	Product
☑	tblPurchase	dbo	Purchase

As ever, give your tables friendly names too.

Create a pivot table based on this model, showing total quantity sold by family and centre type:

Sum of Quantity	Column Labels						
Row Labels	**Amphibian**	**Bird**	**Fish**	**Insect**	**Mammal**	**Reptile**	**Grand Total**
Factory Outlet	16	155	21	8	835	552	1587
Retail Park	220	1173	153	25	5150	2936	9657
Shopping Centre	1302	5937	1042	226	33404	18665	60576
Shopping Park	65	273	42	13	1482	720	2595
Grand Total	**1603**	**7538**	**1258**	**272**	**40871**	**22873**	**74415**

A vanilla pivot table!

Create a measure to show in each cell total sales for that centre type and that family, divided by total sales for that centre type for all families. The numerator can just show total sales:

```
=SUM ( [Quantity] )
```

The denominator will be more complicated:

```
=SUM( [Quantity] ) / CALCULATE ( SUM ( [Quantity] ), ALL ( ... ) )
```

The resulting pivot table should look like this:

% family							
	Amphibian	**Bird**	**Fish**	**Insect**	**Mammal**	**Reptile**	**Grand Total**
Factory Outlet	1.01%	9.77%	1.32%	0.50%	52.61%	34.78%	100.00%
Retail Park	2.28%	12.15%	1.58%	0.26%	53.33%	30.40%	100.00%
Shopping Centre	2.15%	9.80%	1.72%	0.37%	55.14%	30.81%	100.00%
Shopping Park	2.50%	10.52%	1.62%	0.50%	57.11%	27.75%	100.00%
Grand Total	**2.15%**	**10.13%**	**1.69%**	**0.37%**	**54.92%**	**30.74%**	**100.00%**

You can actually do this in normal Excel pivot tables too, although PowerPivot will let you create much more complicated measures than this.

Feeling flushed with success? Try creating and showing another measure, this time to show sales as a percentage of all centre types:

% centre type	Amphibian	Bird	Fish	Insect	Mammal	Reptile	Grand Total
Factory Outlet	1.00%	2.06%	1.67%	2.94%	2.04%	2.41%	2.13%
Retail Park	13.72%	15.56%	12.16%	9.19%	12.60%	12.84%	12.98%
Shopping Centre	81.22%	78.76%	82.83%	83.09%	81.73%	81.60%	81.40%
Shopping Park	4.05%	3.62%	3.34%	4.78%	3.63%	3.15%	3.49%
Grand Total	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**

This time it's the bottom total which shows 100% for each cell.

Save this workbook as **Fair shares**, then close it down.