

**Malicious 999 calls. It's time to do some detective work!!!**



Imagine you're working for the Police force and you've been assigned to a project that aims to save lives by looking at people using the fire and rescue services inappropriately. The Inspector wants to know which area to send you to first. Plus she will want to know your suggestions as to why the number of malicious calls maybe high in that area.

Below is a table of all the malicious and inappropriate calls made in a given time span. At the moment it just looks like a table. It will be your task to look at the data to find out if there are any relationships. Detective work is more than forensics and you need to use your investigation skills.

**Task 1**

**Look at the data and complete the sentences below:**

The area with the highest total number of malicious calls is ..... of which .....% were attended. This equals ..... attended malicious calls in the area. This area has a population of ..... which is also the highest/lowest (delete the wrong answer) of all the given areas.

The area with the lowest total number of malicious calls is ..... of which .....% were attended. This equals ..... attended malicious calls in the area.

County	No. of calls 2007/08			% calls attended	Population 2007 ('000)	Payphones 2007 (number)	Total calls per '000 population	Attended per '000 population	Payphones per '000 population
	Total (number)	Not attended	Attended						
Avon	813	223	590	73%	1,056	1,074	0.77	0.56	0.98
Cornwall	226	147	79	35%	530	1,187	0.43	0.15	0.45
Devon & Somerset	884	530	354	40%	1,658	3,442	0.53	0.21	0.48
Dorset	365	180	185	51%	708	1,247	0.52	0.26	0.57
Gloucestershire	358	298	60	17%	583	1,104	0.61	0.10	0.53
Hereford & Worcester	427	230	197	46%	734	1,123	0.58	0.27	0.65
Oxfordshire	221	100	121	55%	636	1,283	0.35	0.19	0.50
Warwickshire	252	114	138	55%	527	1,045	0.48	0.26	0.50
West Midlands	2,222	64	2,158	97%	2,604	2,839	0.85	0.83	0.92
Wiltshire	316	214	102	32%	642	1,197	0.49	0.16	0.54

## Task 2

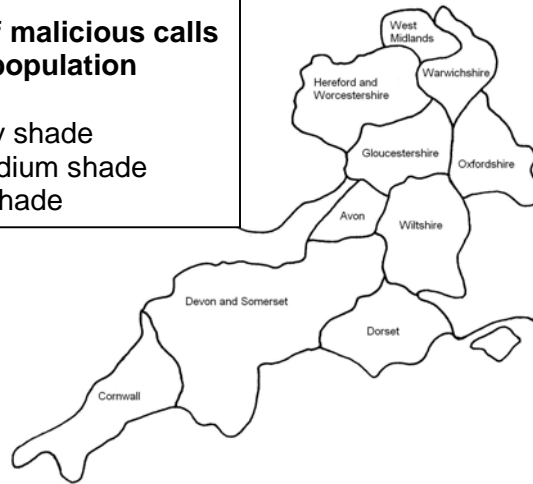
Below are 3 maps of the regions outlined. You are going to produce a series of 3 choropleth maps to present the data. You need to choose **ONE** colour and shade the different areas accordingly.

### Map 1

**Total number of malicious calls per '000 of the population**

Key:

- 0.0-0.50 lightly shade
- 0.51- 0.70 medium shade
- 0.71+ heavy shade

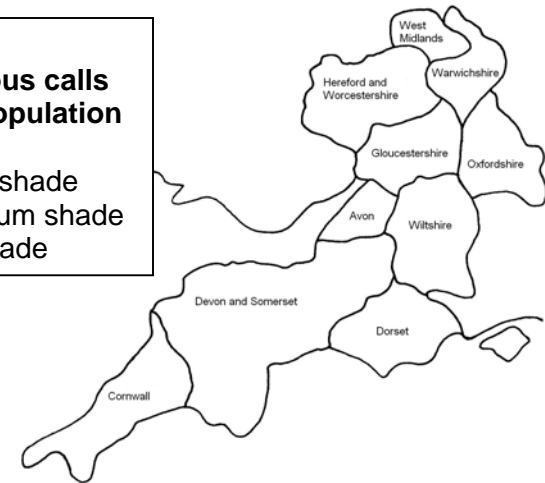


### Map 2

**Attended malicious calls per '000 of the population**

Key:

- 0.0-0.35 lightly shade
- 0.36-0.65 medium shade
- 0.66+ heavy shade

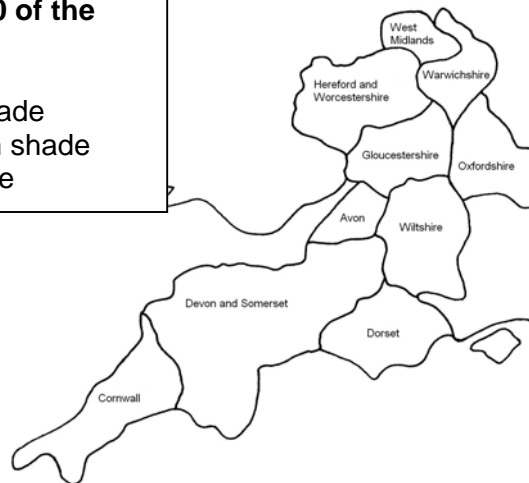


### Map 3

**Payphones per '000 of the population**

Key:

- 0.0-0.50 lightly shade
- 0.51-0.75 medium shade
- 0.76+ heavy shade



**Task 3**

You report back to the Inspector with the findings. Which area are you going to recommend that you start with? Give her a reason as to why you think the number of malicious 999 calls maybe high in that area.

<p><b>Report submitted to Detective Inspector Richards</b></p> <p>Having carried out my investigations I would suggest that we start with:</p> <p>..... (name of area).</p> <p>I suspect the number of malicious 999 calls maybe high in that area due to:</p> <p>.....</p> <p>.....</p> <p>.....</p>
---

**Extension**

It's your task now to go out and help reduce the number of malicious 999 calls. Create a spider diagram with as many possible ways you could do this.