## Crafting survey questions

- Length(reasonable number of questions)
- Layout(begin with personal details for profiling:start with closed questions,end with open-ended questions)
- Language(simple and clear, avoid jargon)
- Question type(Mixture of questions for best results: Yes/No, Likert scale, multiple selection,open-ended,etc.)
- Questions to avoid(double barreled questions, overly sensitive questions, questions that are difficult to answer in a short period of time, leading questions)
  Examples of bad survey questions:

*Do you think that game consoles and mobile phones should be banned from school?*(Yes/No qn)

^ double-barreled, respondent might feel that game consoles should be banned but not mobile phones, or vice versa. This will cause them to be unable to give a truthful answer *How much do you earn per year?(open-ended)* 

^overly personal question. If need to ask these type of questions, use ranges (eg. \$1000-\$2000) etc.

## Sampling

Why is sampling necessary?

-Too many people

-Still have a representative sample

Type of sampling	Systematic	Random
How it works	Refers to collecting data at regular intervals(eg.from every 2m away or every 5th person)	Randomly selected person from the population(eg.drawing lots or using table of random numbers)
Advantage	Ensures that the population will be evenly sampled	Ensures that every member of the population has an equal chance of being selected.
Disadvantage	Might inadvertently pick up some underlying regularity and miss out on possible irregularities	May produce unrepresentative results if sample size is small

#### Data

Type of data	Primary Data	Secondary Data
How to obtain	Surveys, taking photographs	Online research, library research
Advantages	Surveys: Data will be up-to date and are not available from secondary sources Surveys can be conducted quickly and easily using electronic means <u>Photographs</u> Multiple photographs can be taken to capture a feature at different angles or to allow selection of the most suitable photograph	Do not need to come up with survey questions or go down to the field site,can be done from the comfort of one's home Factual information is unlikely to be biased
Disadvantages	<u>Surveys:</u> Survey results may not be accurate as respondents may not give truthful answers Surveys may be insufficient in gathering certain kinds of information(eg.feelings) <u>Photographs:</u> One photograph can't show motion and changes over time. Might capture unnecessary details.	Information might not be credible Information might not be up to date Information might not match the requirements of the project

# Latitude and Longitude

Latitude-North or South Longitude-east or west Format is  $x \circ N/S y \circ E/W$ , where x and y are numbers Example:  $12 \circ S 4 \circ E$ (the circle is a degree sign)

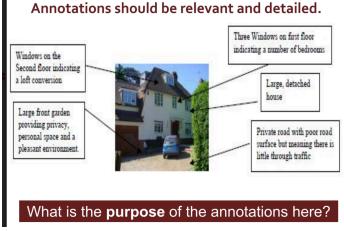
## **Photograph Annotation**

For photograph annotation, divide the picture into 9 parts like this



(sorry venti, i main him but yeah)

-Read the question carefully and annotate relevant features -Answer to the question and not write irrelevant information



^ taken from 2020 y1 powerpoint slides

So basically, you need to label the picture like you would label a biological drawing.