Research Methods

Y13 Psychology PW Booklet

Name:

Instructions for completing your Research Methods prep work booklet:

- Each week (on the date set by your teacher) you must have completed the relevant task in your PW booklet and come into class ready to add to your knowledge. These will be stamped by your teacher and either taken in or assessed in class.
- The videos are found here: https://www.youtube.com/@MackayPsychology/videos
- The video # corresponds to the title of the video, eg Task 1 is called '14 Reporting a Psychological Investigation'

COMPLETE THE FOLLOWING TABLE TO TRACK PROGRESS:

TASK	VIDEO #	HOMEWORK TOPIC	DUE DATE	COMPLETED
1	14	Reporting Psychological Investigations (p. 2)332		
2	15	Reliability (pp. 3- 4)		
3	16	Validity (pp. 5-7)		
4	17	Correlations (pp. 8-9)		
5	18	Content Analysis, Thematic Analysis and Case Studies (pp. 10-12)		

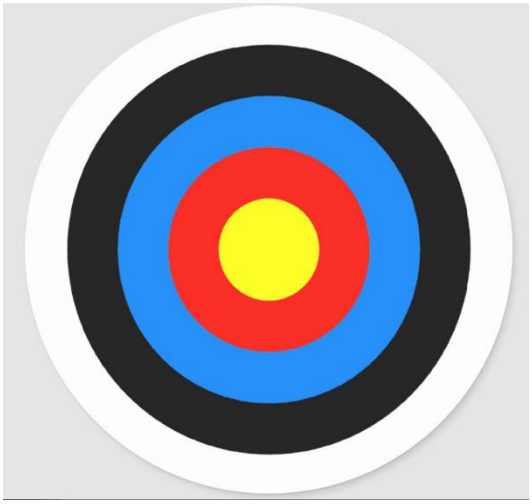
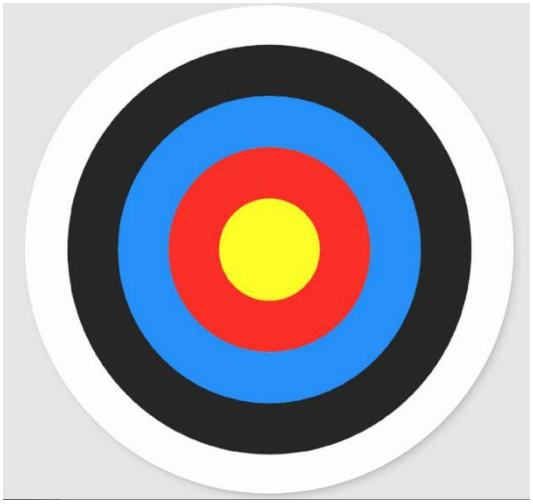
Your homework will be a term-long research project. More information will be given to you in lesson.

Task 1: **Reporting Psychological Investigations**

Explain in detail what is contained in each section.	
Title	
Abstract	
Introduction	
Method	
Results	
Discussion	
References	
Appendices	

Task 2:

Reliability

Draw arrows on the target to illustrate the concept of a reliable test that is also valid.	Draw arrows on the target to illustrate the concept of a reliable test that is not valid.
	
Explain in your own words:	Explain in your own words:

What is inter-observer reliability?

What are some of the possible causes of low inter-observer reliability?

What is test-retest reliability?

What type of graph is used to assess reliability?
What type of statistic is used to assess reliability?

Explain why these techniques will improve reliability:

Operationalising variables / behavioural categories
Reduce extraneous variables
Standardising procedures
Increasing the number of observers
Training the observers
Make interviews / questionnaires more structured

Task 3:

Validity

Describe these ideas in your own words.

Validity: Whether an observed effect is genuine.
Validity depends on reliability.
Internal validity is whether the observed effect is actually due to a change in the IV.

Explain how these factors can affect internal validity.

Extraneous and confounding variables.
Demand characteristics
Social desirability
Investigator effects

Mundane realism

External validity is the extent to which the outcome of an investigation can be generalised.

Describe these forms of external validity in your own words.

Ecological validity is about generalisability to other settings.
Population validity is generalisability to other groups of people.
Temporal validity is generalisability to other times.

Describe these ways of assessing validity in your own words.

Face validity: an intuitive assessment of whether the test actually measures what it sets out to measure.
Concurrent validity: whether or not a test correlates with a previously validated test.

Describe in your own words how and why these measures improve experimental validity, and what may be the problems with them.

Standardised procedures
Single- or double-blind procedures
Deception
Covert observation

Describe in your own words a lie scale as a way of checking the validity of a questionnaire.

Lie scale

Describe in your own words interpretive validity as a way of checking qualitative research.

Interpretive validity

Task 4:

Correlations

Write the mathematical inequality that defines the possible values of r.

Sketch scattergrams that illustrate the following correlations.

Strong positive correlation	Weak positive correlation
Strong negative correlation	Weak negative correlation

Zero correlation

EXT: Why can correlation coefficients only be applied to linear relationships?

A psychology student conducts an investigation in a primary school class of 30 children.

Each child throws a dice and obtains a score out of 6.

Each child also does a maths test and obtains core out of 100.

The psychology student calculates that the correlation between these two covariables is:

r = +0.13

The students says, “That shows a positive correlation, so children who are better at throwing the dice are also better at maths.”

Explain why the student is wrong.

Task 5:

Content Analysis, Thematic Analysis and Case Studies

What is a content analysis?

Explain the decisions that you have to make prior to conducting a content analysis.

Sampling
Coding
How to represent data

Explain these strengths and weaknesses of content analyses.

Strengths	**Weaknesses**
High ecological validity	Investigator bias
Replicable	Culture bias
Few ethical issues	

A content analysis generates quantitative / qualitative data (highlight one).

How is a thematic analysis similar to a content analysis?	How is a thematic analysis different from a content analysis?
What is a thematic analysis?	

Explain these strengths and weaknesses of thematic analyses.

Strengths	**Weaknesses**
Flexibility	Can't use statistics
Allows researchers' own perspective	Subjectivity
Few ethical issues	

A thematic analysis generates quantitative / qualitative data (highlight one).

What is a case study?

What makes a good case study?

Explain these strengths and weaknesses of case studies.

Strengths	Weaknesses
Rich detailed data	Generalisability
Converging evidence	Confidentiality and informed consent
Investigate rare or unusual behaviours	