**Reading Guide – Prologue: The Story of Psychology**

**WHAT IS PSYCHOLOGY? (2-6)**

**Psychological Science Is Born**

1: *When and how did psychological science begin?*
Describe Wilhelm Wundt’s experimental apparatus and experiment. Where was it conducted? What was he attempting to study? Why was this experiment so important?

**Thinking about the Mind’s Structure**
Which of Wundt’s students introduced structuralism and what is it?

What is introspection? What does it have to do with structuralism? What were the problems with introspection? Are you someone who spends a lot of time introspecting? Either way, introspect for a moment (😊) and describe why or why not?

How is structuralism like trying to understand how a car works?

**Thinking about the Mind’s Functions**

By what other theory was Williams James influenced? How would James, a "functionalist" explain the fact that humans have the ability to perceive depth in space (depth perception)?

In 1905, who became the first female president of the American Psychological Association?

What book did William James write? It was the first ever psychology textbook...

**Psychological Science Develops**

2: *How did psychology continue to develop from the 1920s through today?*

John B. Watson and B.F. Skinner were known as behaviorists, redefining psychology as "the science of __________ ____________.”

What is the difference between behavior and mental processes? Why do we include both in the definition of psychology?

**CONTEMPORARY PSYCHOLOGY (6-11)**

**Psychology’s Biggest Question**

3: *What is psychology’s historic big issue?*

What is psychology’s major issue?

On which side were Plato and Socrates? Aristotle? YOU, if you had to pick? Give 1 anecdotal piece of evidence for your position.
How could sexual preference be explained by both sides of the issue? Which is more correct based on your opinion/previous knowledge?

Evolutionist Charles Darwin introduced the idea of natural selection. What is this and how is it different from the earlier philosophers' perspectives?

**Psychology's Three Main Levels of Analysis**

4: What are psychology's levels of analysis and related perspectives?

Create a unique question (not the one in the book, but something similar) that each perspective might consider). I have done a couple for you.

- Neuroscience: How are different parts of the brain responsible for different functions?
- Evolutionary:
- Behavior Genetics:
- Psychodynamic:
- Behavioral:
- Cognitive: What is amnesia and what causes it?
- Social-cultural:

**Psychology's Subfields**

5: What are psychology's main subfields?

What is the difference between basic research and applied research?

If you were interested in increasing productivity and positive employee relations, what type of psychologist would be the most effective?

If diagnosed with a psychological disorder, the patient would visit a ____________ psychologist.

Psychiatry provides patients with what two types of treatment to help treat psychological disorders?

What is the biopsychosocial approach?

**Tips for Studying Psychology**

6: How can psychological principles help you as a student?

List and describe the five study tips (besides the SQ3R) to boost your learning in AP Psychology:
THE NEED FOR PSYCHOLOGICAL SCIENCE (15-20)

1: Why are the answers that flow from the scientific approach more reliable than those based on intuition and common sense?

Why did you sign up for “psychology?” When you first heard about the field of psychology / this class, what did you think psychology was exactly?

Did we Know it All Along? The Hindsight Bias

Explain the hindsight bias. Give a unique example of it not found in the book.

Describe Slovic and Fischhoff’s (1977) study.

(This is an example of what to do for future questions worded in this way)

Purpose: Show the limits of intuition/common sense; demonstrate the hindsight bias

Design: 2 groups given opposite psychological findings...concerning attraction

Group A: Out of sight, out of mind
Group B: Separation strengthens romantic attraction

Results: Both groups provide explanation of reasons why what they heard was true

Conclusion: Just because things seem to be common sense does not mean they are true; 1 of the goals of psychology is to put “common sense” things to the test through the scientific method and determine if they actually true (or under what conditions, etc.)

Overconfidence

What is it? Give at least 1 book and 1 unique example of somebody showing overconfidence.

The Scientific Attitude

2: What are the three main components of the scientific attitude?

What did Thomas Jefferson say about the idea for the origin of meteorites? Why?

How is religious knowledge (arrived at through belief) different than the knowledge we acquire through the scientific method? Why must psychology rely on the latter? Skepticism is required in science, but carries the danger of turning into what?

Critical Thinking

Critical thinking examines _______________, discerns ______________, evaluates ______________, and assesses ______________.

Which of the first 5 points concerning surprising findings in psychology is most surprising to you? Why?
HOW DO PSYCHOLOGISTS ASK AND ANSWER QUESTIONS? (21-33)

The Scientific Method

3: How do theories advance psychological science?

Explain the difference between hypothesis and theory. Give an example of each concerning the topic of “suicide”. (Obviously, an experiment concerning suicide would not be ethical... nonetheless, develop a hypothesis concerning suicide for the sake of argument)

Suppose we wanted to study the effects of good smells on interpersonal attraction. What might be an operational definition of interpersonal attraction? (Look up the definition of operational definition - use alleydog.com)

Why is “replication” important in psychology?

Useful theories do 2 things: 1) __________________ 2) __________________

Description

4: How do psychologists observe and describe behavior?

The Case Study

Which is the oldest research method? Describe why it is the appropriate type for studying parts of the brain.

The Survey

Wording Effects

Give a book example of how changing the wording of a survey question can lead to differing results.

Random Sampling

What is meant by “we generalize from vivid samples?” Give a unique example of when you have experienced this.

How are population and random sample related? Why are mail or internet surveys not good random samples of the entire population?

Naturalistic Observation

Naturalistic Observation is often used in what kind of setting?

What famous researcher (1998) used naturalistic observation of chimpanzees?
Correlation
5: What are positive and negative correlations, and why do they enable prediction but not cause-effect explanation?
The correlation coefficient reveals how well two factors co-vary and thus how well either one _________ the other one.

Correlation and Causation
Develop unique examples of the following (and draw each briefly).

A) Positive Correlation (closer to +1)
B) No relationship
C) Negative Correlation (closer to -1)

CORRELATION DOES NOT IMPLY CAUSATION...but, it does help predict!!!

What is the difference between the two?

Describe what we can predict about people who were abused as children. What kind of correlation is this?

Illusory Correlations
6: What are illusory correlations?
What is the belief that a relationship between two things exists where no relationship actually exists? Describe 1 book example of this. Name a unique example of illusory correlation.

What did Evelyn Marie Adams do that was so improbable? Statistically, though, why was it not exactly impossible?

Explain the phenomenon of "hot and cold streaks" in sports and why people believe in them.

When investing, why shouldn't you invest in mutual funds simply because they have been successful in the past?

Experimentation
7: How do experiments, powered by random assignment, clarify cause and effect?
What are the two factors of an experiment?

How did an “experiment” help solve the breast milk vs. formula debate? Describe the experiment.
What is the main difference between correlational studies and experiments?

**Random Assignment**
Why is the term "blind" appropriate considering its meaning in an experiment?

What is the term for an inert substance given to a participant that actually contains no drug?

A way to avoid bias for both the experimenter and the participant, researchers often use a __________-_________ procedure when administering a placebo.

What part of the experiment exposes participants to the treatment?

What part serves as a comparison for evaluating the effect of the treatment?

People unfamiliar with statistics and psychology often claim that effects in an experiment might be due to differences among the participants such as gender, intelligence, and so forth. How/why does "random assignment" fix this potential problem?

What is an independent variable and how is it different from a dependent variable?

Describe the Viagra study. How was it a "double blind" study? Are you surprised by the results of the control group (placebo pill)? Why isn't it 0%?

Experiments aim to __________ an ___________ variable, ____________ the ___________ variable, and __________ all other variables.

Use Table 1.3 for the following questions about descriptive, correlational, and experimental studies.
- Which allows us to demonstrate cause and effect?
- Which is the simplest and least intrusive?
- Which allows us to make predictions of one variable given another?

**STATISTICAL REASONING (33-38)**

**Describing Data**

8: How can we describe data with measures of central tendency and variation?

**Measures of Central Tendency**

0, 1, 3, 5, 6, 7, 9, 9  
Mean = ________  
Median = ________  
Mode = ________

What does it mean when a distribution is skewed?

**Measures of Variation**

What is standard deviation? What does it gauge?
Making Inferences

9: What principles can guide our making generalizations from samples and deciding whether differences are significant?

When is an Observed Difference Reliable?
1) No research involves the entire __________

2) _______________ observations are more reliable than those that are _____________. EXPLAIN WHY!

3) When visiting schools, why must you be careful not to generalize about the school from your encounters with students and professors?

When is a Difference Significant?
If the sample averages are reliable and the difference between them is large, they are said to have ____________ _____________. What does this mean in regular words?

Statistical Significance indicates the __________ that a result will happen, not the ___________ of the result.

FREQUENTLY ASKED QUESTIONS ABOUT PSYCHOLOGY (38-43)

10: Can laboratory experiments illuminate everyday life?
While specific findings are useful in psychological research, what is the more important result of psychological studies? WHY is this important to remember AND why is this true?

11: Does behavior depend on one’s culture and gender?
Before reading on, what is a “culture” in your own mind/words? How does this compare to the book’s definition?

List 3 areas of gender difference research.

12: Why do psychologists study animals, and is it ethical to experiment on animals?
How might ethics and complexity answer this question?

What do you think about Ulrich’s quote (1991)?

The 2 Big Issues:
1) Answer the question!

2) Answer the question!
13: Is it ethical to experiment on people?
Why is deception sometimes necessary?

4 Ethical Guidelines
1) 
2) 
3) 
4) Aka "debriefing"

14: Is psychology free of value judgments?
While psychology can help us explain human behavior and mental processes, it can’t...