Ayer (A., hereafter), as the first paragraph makes clear, has little respect for "the traditional disputes of philosophers." He proposes to end these disputes by establishing "what should be the purpose and method of a philosophical enquiry." In your reading of the book, determine what he takes to be the proper purpose and method of philosophical enquiry.

What is the first "metaphysical thesis" which he wants to criticize (p. 33)? What does he say about his first thesis (pp. 33-34)? (Hint: Note, in particular, what he says on the upper half of p. 34. "Literally significant" = "capable of asserting a fact.")

For our purposes, you may omit his comments concerning Kant on the lower half of p. 34.

How does he propose to establish the truth of his charge? What does he say in defense of setting a criterion to test the genuineness of sentences? What is the "criterion of verifiability" (frequently referred to also as "the verifiability criterion of meaning" or "the verification principle.")?

Technically, a "sentence" is not the same as a "proposition". The sentence is the means by which the proposition is expressed. Put differently, the proposition is what is meant by the sentence. Thus, more than one sentence can express the same proposition. E.g. "Tomorrow, I go home" and "I go home, tomorrow" are different sentences although they express the same proposition. (A problem: Are the terms "true" and "false" associated with sentences or with propositions A. associates the terms with propositions on p. 35) For our purposes, you need not worry about the distinction between sentences and propositions, however.

What is a "pseudo-proposition" (p. 35), according to A.? Tautologies are propositions which are always true because of their form (structure). E.g. "A rose is a rose" and "Either it is raining or it is not raining."

Near the bottom of p. 35, A. says, "The sentence expressing it may be emotionally significant to him; but it is not literally significant." Explain what A. means.

**Explain A.'s distinction between "practical verifiability" and "verifiability in principle" (p. 36). Give some examples of each. How does A. relate the distinction to the "criterion of verifiability"?

**Explain A.'s distinction between the "strong" and "weak" sense of the term verifiable" (pp. 37-38). Give some examples of each. A. associates his criterion of verifiability with the "weak" sense. Why?

If someone insists upon using only the "strong" sense of "verifiable", what problem arises with respect to "general propositions" and "propositions about the remote past"(p. 37)? (A "general" proposition asserts something about a whole class of objects--e.g. "All men are mortal.")

According to A., "A hypothesis cannot be conclusively confuted any more than it can be conclusively verified" (p. 38). What does he mean? How does he justify the statement? Why does he bother to bring up the statement in this paragraph?

At the bottom of p. 38, A. begins his restatement of the criterion of verifiability by speaking of the "mark of a genuine factual proposition." Explain his restatement in your own words. (Note first the definition of an "experiential proposition." Then note that an argument in logic consists of justifying propositions (the
premises) and a justified proposition (the conclusion). Finally, note that a genuine factual proposition is not to be the conclusion of an argument whose premises are all non-experiential propositions... "without being deducible from those other premises alone.")

** pp. 39-45 **

On pp. 39-40, A. applies his criterion to three problems: the claim that sense experience is unreal, the controversy between monists and pluralists, and the controversy between realists and idealists. Explain what each problem is and explain A's treatment of each problem in terms of his criterion.

What does A. say about "the validity of the verification principle" (middle paragraph, p. 41)? In your reading, consider whether or not he successfully establishes its validity. You may ignore what A. says about a priori propositions on p. 41, for our purposes.

On pp. 42-43, A. considers how metaphysical entities come to be talked about. What does he say concerning "substance" "Being", and "unicorns are fictitious"?

Note that he says in the bottom paragraph of p. 43, since it summarizes his rejection of metaphysical entities.

Why is the metaphysician not even a "misplaced poet," according to A. (pp. 44-45)?

Chapter II - The Function of Philosophy

** pp. 46-48 **

How does A. try to eliminate development of a speculative, deductive system as a function of philosophy? Note his rejection of developing such a system based upon natural laws, the immediately given, or a priori truths.

His discussion of Descartes is interesting in terms of his analysis of "I think." What does he say?

Toward the bottom of p. 47, A. discusses the meanings of a philosophy dealing with "reality as a whole" distinguishing acceptable and unacceptable meanings. What does he say? Why must the acceptable meaning exclude philosophy functioning as speculative knowledge in association with, but beyond, empirical sciences?

** pp. 48-51 **

Having decided that critical, not speculative, activity is the proper function of philosophy, he sets limits to any relation between philosophy and science. What does he say?

Note his comparison of atoms and electrons with chairs and tables (p. 49). What is his point?

What is the problem of induction, according to A.? Why is it a fictitious problem for philosophers and how does he propose to deal with the problem of induction?

** pp. 51-59 **

The most important paragraphs for understanding what A. takes to be the proper function of philosophy are the middle paragraph on p. 51 and the three paragraphs beginning in the middle of p. 57. Summarize what A. says in these paragraphs.

For our purposes, you do not need to follow his accounts of Locke, Berkeley, and Hume.

Chapter III - The Nature of Philosophical Analysis
If you are interested in a difficult challenge in an analytic analysis of the meaning of a term, consider what A. says about the definition of "a material thing," beginning in the last paragraph of p. 63 and runs though most of p. 68. For our purposes though, you may omit this chapter. (And I am not eager to work through A.'s analysis.-RY)

Chapter IV - The A Priori

Note the title of the chapter. In your reading, find out what "a priori" means.

*For our purposes, You may begin the chapter with the following assertion (middle, p. 75): "The best way to substantiate our assertion that the truths of formal logic and pure mathematics are necessarily true is to examine cases in which they might seem to be confuted." What does "necessarily true" mean here? How does A. try to substantiate the assertion by examining "cases in which they might seem to be confuted"? (Hint: Read the four successive paragraphs on pp. 75-77, starting with the paragraph which begins with the assertion given above. The third paragraph is the hardest to follow; but it is also the least important for our purposes; so don't worry about it too much. In reading the first paragraph, you may find it helpful to recognize the distinction between "l + 1 = 2" and "l apple + 1 apple = 2 apples." Give particular attention to the last two sentences of the second paragraph and the last four sentences of the fourth paragraph.)

In a proposition, the predication of a thing or property, viz. the predicate, to another thing, viz. the subject, is asserted or denied. E.g. In "all human beings are rational animals," the predicate "rational animals" is predicated of the subject "human beings". In "No human beings are angels," the predication of the predicate "angels" to the subject "human beings" is denied. Thus, we can find a subject and a predicate in every proposition. (Note that the "predicate" is not a verb as in ordinary English grammar.) The subject-predicate distinction should be helpful in understanding Kant's treatment of analytic and synthetic propositions on p. 78.

What distinction does Kant make between analytic judgments (propositions) and synthetic judgments (propositions), on p. 77? What is A.'s objection to Kant's distinction?

***What distinction does Kant make between analytic judgments and synthetic propositions (p. 78, bottom)? Give an example of each. Are analytic and synthetic propositions related to facts, according to A.? Explain.

*How are analytic propositions different from metaphysical propositions (p. 79)?

*According to A., analytical propositions give new knowledge, in one sense; but they do not give new knowledge, in another sense (pp. 79-80). What does he mean?

The paragraph which begins near the bottom of p. 80 is important but probably too difficult for an elementary course. So, you should work through it only if you experience "philosophical compulsion."

*Someone might well ask why we insist upon the necessary truth of a particular proposition in logic or mathematics. For A.'s answer, see the paragraph on the lower half of p. 84. What does he say? Are other answers possible? Explain.

***What is mysterious at first sight is that these tautologies should on occasion be so surprising, that there should be in mathematics and logic the possibility of invention and discovery" (p. 85). How does A. explain the "mystery" (See the paragraph beginning at the bottom of p. 85.)

*What is the advantage of use of symbols, according to A.?
**Read the final paragraph of the chapter carefully. What does "a priori" mean?**

**Divide the following into two appropriate groups: empirical proposition, "a priori" proposition, factual proposition, analytic proposition, tautology, synthetic proposition. Give three examples of each group.**

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**Chapter V - Truth and Probability**

*What is the purpose of a "theory of truth," according to A.? How does he justify the claim (pp. 87-90)? In particular, note his objection to the common philosophical way of dealing with "truth".*

*A. says, 'Reverting to the analysis of truth, we find that in all sentences of the form 'p is true,' the phrase 'is true' is logically superfluous'. (last paragraph, p. 88). How does A. justify this claim?*

*What are "ostensive propositions" (Bottom, p. 90; top, p. 91)? Why does A. reject the claim that they are certain (pp. 91-93)?

Some notes on terminology:

a) "Purely demonstrative symbols" - I can demonstrate something by merely pointing to it. Now, since a sentence consists of symbols (that is, letters in patterns), the question is: Can symbols, by themselves, point to or demonstrate anything? That is, Can there be "purely demonstrative symbols"?

b) Example of a "sense content": visual sensation (sense-observation) of a particular shade of red.

c) "Perceptual judgments" express relations among different sense-contents.

d) Example of a "material thing"; a chair.

How does A. analyze the proposition "This is white" (p. 92)?

*What is the significance of the difference between a "sensation" and "propositions which refer to our sensations," according to A. (middle, p. 93)?

**What is the relation between empirical propositions and hypotheses, according to A. (bottom, P. 93; top, P. 94)? What does A. say about the certainty of empirical propositions?**

*When one speaks of hypotheses being verified in experience, it is important to bear in mind that it is never just a single hypothesis which an observation confirms or discredits, but always a system of hypotheses" (middle, p. 94). What does A mean? (Hint: Consider the following example of a scientific law, "Water boils at 100 C." Now suppose that a particular quart of water boils at 95 C.)

**It appears, then, that the 'facts of experience' can never compel us to abandon a hypothesis" (middle, p. 95). Why? What important qualifications does A. Make?**

How can the proposition "All men are mortal" be necessarily true, according to A? What consequence follows, however?
In the longer paragraph on p. 97, A. says, "But, in fact, we do not disregard inconvenient observations. Their occurrence always causes us to make some alteration in our system of hypotheses in spite of our desire to keep it intact. Why is this so?" How does A. answer this question on pp. 97-99?

**How does A. answer the original question of the chapter (p. 99)? How is probability related to the answer?

**What does it mean to say that "an observation increases the probability of a hypothesis"? (Hint: There are two answers--a preliminary one and then a final one based upon the meaning of "rational," pp. 100-101)

*Explain in your words, what A. says in the paragraph on the lower part of p. 101.

Terminology again:

a) "singular proposition" – for example, "John Doe is six feet tall";
b) "particular proposition" - for example, "Some human beings are not parachutists";
c) "universal proposition" - for example, "All cows are mammals."

How does A. deal with the difficulty raised with respect to propositions about the past?

**Having read the chapter, how do you think that A. would define a "fact"?

Chapter VI - Critique of Ethics and Theology

**What does A. propose to show about "statements of value" (see bottom, p. 102)?

*The traditional content of ethics is divisible into four classes, according to A. (p. 103). What are they? What preliminary judgments does he make about each?

**"What we are interested in is the possibility of reducing the whole sphere of ethical terms to non-ethical terms. We are enquiring whether statements of ethical value can be translated into statements of empirical fact" (p. 104, upper portion). What does A. mean? How does he settle the issue on pp. 104-105 by considering the positions of subjectivists and utilitarians?

"That is, we reject utilitarianism and subjectivism, not as proposals to replace our existing ethical notions by new ones, but as analyses of our existing ethical notions " (p. 105). What does A. mean by this statement?

**How does A. distinguish "normative ethical symbols" from "descriptive ethical symbols" (pp. 105-106)? Which is he most interested in discussing? Why?

*What is "the absolutist' view of ethics," according to A. (p. 106)? Why does he reject it?

Subjectivism and utilitarianism are the "naturalistic" theories of ethics which he rejects.

**On pp. 107-108, A. states his own position with respect to normative ethical statements. Explain his position in some detail. (Note what he begins by admitting in the the first new paragraph of p. 107). Do you agree with him? Explain.

Note that ethical terms serve to arouse feeling as well as to express feeling (p. 108).
For our purposes, you may omit A.'s comments on pp. 109-110, except for the paragraph which begins at the bottom of p. 110.

**For we certainly do engage in disputes which are ordinarily regarded as disputes about questions of value**" (p. 110, bottom). How does A. explain this statement? (pp. 110-111)

*The middle paragraph on p. 112 summarizes A.'s position with respect to ethical statements.

What position does A. maintain with respect to aesthetics (p. 113)?

**pp. 114-120**

**Why can't a proposition about God's existence be demonstrably proved or even be made probable, according to A.? (pp. 114-115) Do you agree? Why or why not?**

*How does A. differentiate his own position from those of atheists and agnostics?

*What does A. say about the existence of the soul? (p. 117, top)

*What does A. say concerning possible conflict between religion and natural science? (p. 117) (There are at least two important-points to be made).

**An interesting feature of this conclusion is that it accords with what many theists are accustomed to say themselves" (p. 118, top). What does A. mean?

*How does A. reply to those who maintain that they are immediately acquainted with God in the same way that they are immediately acquainted with a sense-content? (p. 119)

Chapter VII - The Self and the Common World

pp. 120-122 (top) summarize A.'s position in the book.

pp. 122-125

**These pages deal with whether sense-contents are mental or physical. He begins (last full paragraph, p. 122) with rejection of the "realist analysis of sensations into subject, act, and object." Why? What point does he want to make?

What is the difference between asserting that a sense-content exists and that a material thing exists, according to A.?

**Explain A.'s resolution of the question whether sense-contents are mental or physical (the two long paragraphs beginning with the first new one on p. 123). Would you agree with him? Why or why not?

What does A. say about epistemological or causal connections between minds and material things?

pp. 125-128

**These pages lay out A.'s analysis of the self. How does he relate the self to sense-contents (sense experience) and reject its relation to a substantive ego? Does he make an adequate case? Why or why not?

**On p. 127, A. says, "For we have resolved Hume's problem by defining personal identity in terms of bodily identity, and bodily identity is to be defined in terms of the resemblance and continuity of sense-contents." How do you interpret this statement? In particular, does the statement imply a more basic
relationship between the physical and sense-contents as opposed to one between the mental and sense-contents?

**pp. 128-131**

*A. now turns to showing that his treatment of the self does not entrap him in solipsism. The key to understanding his position is his claim (p. 129, bottom) that other people's experiences are accessible to one's observations. And this claim depends upon defining "other people in terms of their empirical manifestations" (p. 130). Summarize his position.

**Note the comment about consciousness near the bottom of p. 130.**

**pp. 131-133**

*A. concludes the chapter by showing how people can communicate with each other and share a somewhat common world in terms of his empiricism. What does he say?

**Summarize what you take to be A.'s position on the mind in Ch. VII. Note in particular that he does not seem to object completely to terms like "consciousness," "mind," and "the mental." Finally, explain why you agree or disagree with him.

**Chapter VIII - Solutions of Outstanding Philosophical Disputes**

**pp. 133-153**

**On p. 133, A. says, "... the questions with which philosophy is concerned are purely logical questions; ..." Has he succeeded in showing this in Language, Truth, and Logic? Why or why not?

**The most important section in this chapter, I think, is Realism and Idealism, pp. 138-146. The key paragraphs in understanding A.'s position are the one beginning in the middle of p. 140, the beginning near the middle of p. 142, and the one beginning near the beginning of p. 145. Evaluate his arguments, giving justification.

**Beginning near the bottom of p. 151, A. discusses the relationship between philosophy and science, until the end of the chapter. Summarize his position.

**General Questions**

*Suppose someone objects that the statement of the criterion of verifiability is nonsensical because we cannot state which sense observations would determine whether the statement is true or false. What reply, if any, could Ayer make? Would you agree? Explain.

*Suppose someone argues that the statement "A non-physical entity is detectable through sense observation" is not contradictory and is subject to some sort of verification through sense experience (even though that verification may be unavailable at the present-time). What reply, if any, could Ayer make? Would you agree? Explain.

*Suppose someone argues that Ayer introduces so many qualifications of this criterion of verifiability that it is questionable whether there really are any pseudo-concepts or pseudo-propositions. What reply, if any, could Ayer make? Do you agree? Explain.

*Do you agree with Ayer that a factual statement is quite different from a value statement? Explain in same detail. (What is "a value"?)

What is the important point of agreement, if any, between yourself and Ayer? Explain. What is the most important point of disagreement, if any? Explain.