## Chapter 2

1. Knowledge that is evaluative, value laden, and concerned with prescribing what ought to be is known
as knowledge.
*a. Normative
b. Nonnormative
c. Probabilistic
d. Nonprobabilistic
Learning objective number: 2.1 Identify eight characteristics of empiricism.
Cognitive domain: Knowledge
Answer location: Elements of Empiricism
Question type: MC
2. Most political scientists, like scientists in other disciplines, accept, in which it is not
necessary to explain or predict a phenomenon with 100% accuracy.
a. Approximate explanation
b. Nonapproximate explanation
*c. Probabilistic explanation
d. Nonprobabilistic explanation
Learning objective number: 2.1 Identify eight characteristics of empiricism
Cognitive domain: Comprehension
Answer location: Elements of Empiricism
Question type: MC
2. A sign had a spectrum and that a continue by a will does of and a well in whom a many
3. A is a body of statements that systematize knowledge of, and explain, phenomena.
a. Research statement
b. Hypothesis
c. Null hypothesis
*d. Theory
Learning objective number: 2.2 Discuss the importance of theory in empiricism  Cognitive domain: Knowledge
Answer location: Elements of Empiricism
Question type: MC
4. A valid argument is one in which, if the premises are true, the conclusion must necessarily
be true as well.
*a. Deductive
b. Inductive
c. Productive
d. Reductive
Learning objective number: 2.1 Identify eight characteristics of empiricism
Cognitive domain: Comprehension
Answer location: Elements of Empiricism
Question type: MC
5 refers to the process of drawing an inference from a set of premises and observations.
a. Deductive reasoning or deduction
*b. Inductive reasoning or induction
c. Reductive reasoning or reduction
d. Productive reasoning or production
Learning objective number: 2.1 Identify eight characteristics of empiricism
Loaning objective number. 2.1 Identity eight characteristics of emphreism

Cognitive domain: Comprehension Answer location: Elements of Empiricism Question type: MC
6. Practitioners of believe that a proper goal of social science is to critique and improve society (by making it more just and humane) rather than merely understand or explain what is going on. a. Empiricism b. The scientific method *c. Critical theory d. Deduction Learning objective number: 2.5 Summarize competing perspectives Cognitive domain: Comprehension Answer location: Competing Points of View Question type: MC
7. Proponents of alternatives to the scientific methods may be labeled as *a. Nonempiricists b. Empiricists c. Deductionists d. Inductionists Learning objective number: 2.5 Summarize competing perspectives Cognitive domain: Comprehension Answer location: Introduction Question type: MC
8. One of the following is a crucial aspect of empirical theory: a. It meets the tenets of critical theory b. It deemphasizes parsimony c. It is not cumulative *d. It leads to specific testable predictions Learning objective number: 2.3 Explain the five steps in the empirical research process Cognitive domain: Comprehension Answer location: The Importance of Theory Question type: MC
9 dictates that when given a choice between two compelling explanations, the explanation that relies on fewer explanatory factors is the better choice.  a. Falsifiability *b. Parsimony c. Induction d. Verification  Learning objective number: 2.1 Identify eight characteristics of empiricism  Cognitive domain: Comprehension  Answer location: Elements of Empiricism  Question type: MC
10. Modern political science relies heavily on one kind of knowledge, knowledge obtained through  a. Normative thought *b. Objective observation

c. Critical theory d. Constructivism Learning objective number: 2.1 Identify eight characteristics of empiricism Cognitive domain: Comprehension Answer location: Elements of Empiricism Question type: MC
11 theories claim to describe and account for an entire body of human behavior.  *a. Global b. Narrow c. Mid-range d. Societal Learning objective number: 2.2 Discuss the importance of theory in empiricism Cognitive domain: Comprehension Answer location: The Importance of Theory Question type: MC
12 is an approach to knowledge that asserts humans actually construct—through their social interactions and cultural and historical practices—many of the facts they take for granted as having an independent, objective, or material reality.  a. Empiricism  b. The scientific method  c. Critical theory  *d. Constructionism  Learning objective number: 2.5 Summarize competing perspectives  Cognitive domain: Comprehension  Answer location: Competing Points of View  Question type: MC
13. When statements or hypotheses can in principle be rejected in the face of contravening empirical evidence we can say that they are  a. Falsifiable  Learning objective number: 2.1 Identify eight characteristics of empiricism  Cognitive domain: Comprehension  Answer location: Elements of Empiricism  Question type: FIB
14. Knowledge that is concerned not with evaluation or prescription but with factual or objective determinations is known as  a. Nonnormative knowledge  Learning objective number: 2.1 Identify eight characteristics of empiricism  Cognitive domain: Knowledge  Answer location: Elements of Empiricism  Question type: FIB
15. Scientific knowledge is in that both the substantive findings and research techniques are built upon the results of prior studies. a. Cumulative Learning objective number: 2.1 Identify eight characteristics of empiricism

Cognitive domain: Comprehension Answer location: Elements of Empiricism

Question type: FIB

16. An \_\_\_\_\_ summarizes relationships between individual facts.

a. Empirical generalization

Learning objective number: 2.1 Identify eight characteristics of empiricism

Cognitive domain: Knowledge

Answer location: Elements of Empiricism

Question type: FIB

17. \_\_\_\_\_\_ is important because it can be predictive by offering systematic, reasoned anticipation of future events.

a. Explanatory knowledge

Learning objective number: 2.1 Identify eight characteristics of empiricism

Cognitive domain: Comprehension Answer location: Elements of Empiricism

Question type: FIB

- 18. Please explain the difference between normative and nonnormative knowledge.
- a. Knowledge that is evaluative, value laden, and concerned with prescribing what ought to be is known as normative knowledge. Knowledge that is concerned not with evaluation or prescription but with factual or objective determinations is known as nonnormative knowledge. Most scientists would agree that science is (or should attempt to be) a nonnormative enterprise.

Learning objective number: 2.1 Identify eight characteristics of empiricism

Cognitive domain: Application

Answer location: Elements of Empiricism

Question type: SA

- 19. How would you apply the concept of Ockham's Razor to work in political science? In your answer please provide an example.
- a. The answer should include an explanation of how scientists recognize that theories should be parsimonious. It should include an example of a complex theory and a simple theory with the acknowledgment that the simple theory is the better explanation.

Learning objective number: 2.1 Identify eight characteristics of empiricism

Cognitive domain: Application

Answer location: Elements of Empiricism

Question type: SA

- 20. Please explain why scientific knowledge must be transmissible.
- a. The methods used in making scientific discoveries must be made explicit so that others can analyze and replicate findings. The transmissibility of scientific knowledge suggests "science is a social activity in that it takes several scientists, analyzing and criticizing each other, to produce more reliable knowledge." To accept results, people must know what data were collected and how they were analyzed. A clear description of research procedures allows this independent evaluation. It also permits other scientists to collect the same information and test the original propositions themselves. If the original results are not replicated using the same procedures, they may be incorrect.

Learning objective number: 2.1 Identify eight characteristics of empiricism

Cognitive domain: Application

Answer location: Elements of Empiricism

## Question type: SA

21. Explanation is an important component of scientific knowledge. How does explanation lead to prediction?

a. An explanation gives scientific reasons or justifications—for why a certain outcome is to be expected. In fact, many scientists consider the ultimate test of an explanation to be its usefulness in prediction.

Learning objective number: 2.1 Identify eight characteristics of empiricism

Cognitive domain: Application

Answer location: Elements of Empiricism

Question type: SA

## 22. What is a theory?

a. A theory is a body of statements that systematize knowledge of, and explain, phenomena. Stated differently, theories help "organize, systematize, and coordinate existing knowledge" in a unified explanatory framework. Two crucial aspects of empirical theory are (1) that it leads to specific, testable predictions and (2) that the more observations there are to support these predictions, the more the theory is confirmed.

Learning objective number: 2.2 Discuss the importance of theory in empiricism

Cognitive domain: Application

Answer location: The importance of Theory

Question type: SA

23. Please summarize the debate over whether political science is really a science. In your answer please give arguments from both sides of the debate and indicate which side of the argument is correct.

a. Students should explain that those who think political science is a science point to the adherence to the scientific method. This position claims that the method is the most important part of defining a science. On the other side of the debate, there are both practical and philosophical objections to classifying political science a science. Practical objections include measurement problems, people may act in misleading ways on purpose to foil examination, data is hard to obtain, and that human behavior is too complex to predict. One philosophical objection is that humans do not simply discover knowledge of the real world through a neutral process like the scientific method but rather create it. Instead of knowing reality directly in its unvarnished or pure form, our perceptions, understandings, and beliefs about many "facts" stem largely, if not entirely, from human cultural and historical experiences and practices.

Learning objective number: 2.4 Describe practical obstacles that challenge the empirical approach

Learning objective number: 2.4 Describe practical obstacles that challenge the emp Cognitive domain: Analysis

Answer location: Competing Points of View

Question type: E

24. In this essay, please identify and discuss the central components of scientific knowledge in political science. In your answer please explain how each component contributes to the validity of the work.

a. Students should correctly identify and discuss the key terms in the chapter that make up scientific knowledge. These terms include empirical verification, falsifiability, nonnormative knowledge, transmissibility, the cumulative nature of science, empirical generalization, explanatory, replication, probabilistic explanation, and parsimony. Instructors can modify this question to be as specific or general as they want by indicating how many components they would like the students to include in the answer.

Learning objective number: 2.1 Identify eight characteristics of empiricism

Cognitive domain: Analysis

Answer location: Question type: E

- 25. Please explain the difference between deductive and inductive reasoning. In your answer, please define each term. Also, please provide an example of each.
- a. Induction refers to the process of drawing an inference from a set of premises and observations. This type of reasoning differs from deduction because the premises do not guarantee the conclusion but instead lend support to it. An inductive argument, in other words, does not rely on formal proof but rather gives us (more or less solid) reasons for believing in the conclusion's truthfulness. Students can include various examples. For instance, an example of inductive reasoning might be making a generalization from a sample while an example of deductive reasoning might be making a series of logical statements that, if true, would prove the conclusion correct. Instructors should note that by including the third sentence in the question they can make this into a longer question requiring an example of each form of reasoning, or exclude the sentence to make it a shorter question.

Learning objective number: 2.1 Identify eight characteristics of empiricism

Cognitive domain: Application

Answer location: Question type: E