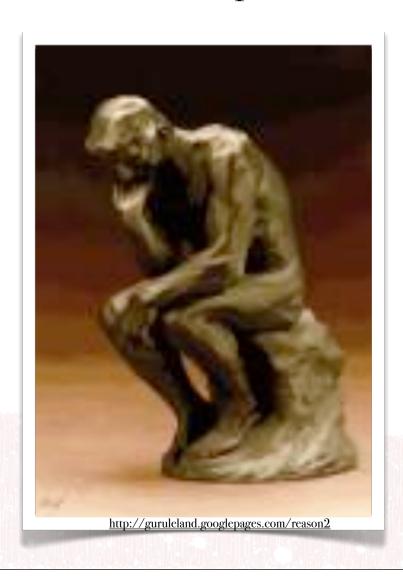
# Logic and Reason

What to expect...

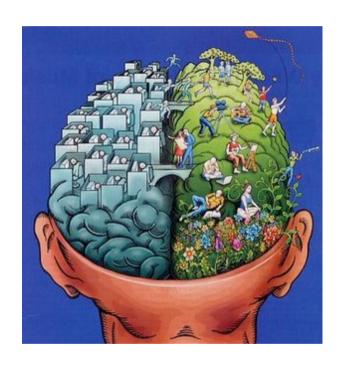


## Significant concepts What are the potential knowledge issues? What are the potential knowledge claims?

- \* What is reason? What is logic?
- \* What does it mean for someone to be reasonable?
- \* What is the role of reason in the creation and recognition of patterns in nature and in social life?
- \* Is reason purely objective and universal, or does it vary across cultures?
- \* Does all knowledge require some kind of rational basis?
- \* If knowledge claims cannot be rationally defended, should they be renounced? Is the answer to this question dependent on the area of knowledge of the claim?
- \* What constitutes a good argument?
- \* Why might some people think that reason is superior, and what consequences does holding this position have for the knowledge pursued and the methods considered appropriate in the pursuit?

## Perspectives What is the knower's perspective? What other perspectives do we

need evaluate? What methods of gaining knowledge?



 $\frac{\text{http://creationtheory.files.wordpress.com/2009/07/left-brain-right-brain.jpg}}{\text{brain.jpg}}$ 

- What are the strengths and weaknesses with reason?
- Is it really possible to study the logic of an issue independent of its content, and how beneficial is it to do so?

  Does the answer to this question depend upon the subject matter under consideration? Does it depend on the area of knowledge to which the subject matter belongs?

#### **Perspectives**

What is the knower's perspective? What other perspectives do we need evaluate? What methods of gaining knowledge?

- \* What is the relationship between reason as a way of knowing and logic in its different forms (inductive, deductive, intuitive, natural)?
- \* How does the commonsense use of "it's logical", meaning "it makes sense to me", differ from its technical meaning of "it has a valid argument form"?

#### Links to WOK

- \* Should we trust reason rather than perception?
- \* Can emotion be rational?
- \* How can vague language lead to bad reasoning?



http://www.psychologytoday.com/files/u109/Zachary-Quinto-Spock-star-trek-2597267-2560-1921.jpg

#### Links to AOK

- \* Can Mathematics be reduced to logic?
- \* Is there a logic of scientific discovery?
- \* Are human beings rational animals?
- \* What kinds of *bad* reasoning can typically be found in history?
- \* What is the relation between creativity and rationality?
- \* How important is consistency in moral reasoning?
- \* Is faith rational or irrational?

#### http://media.townhall.com/Townhall/Car/b/10-3-09polanskRGB20091003102946.jpg



### At the conclusion of this unit you will know:

- \* The different types of logic: inductive and deductive (logical syllogisms), informal reasoning
- \* Recognize logical fallacies
- \* The difference between being rational and a rationalization



Can we let a shrimp like this run our great country?

#### At the conclusion of this unit you will be able to:

- \* Critically analyze and reflect on the knowledge issue under discussion such as:
  - \* How does the role of reason compare with the roles of the other ways of knowing?
- \* Generate their own questions and implications such as:
  - \* What possibilities for knowledge are created by reason? What are the advantages of being able to reason about something rather than, say, feeling something, dreaming about something, wishing something to be the case?