“Humanness” - What are the features that make us “human”? How do our nearest relatives the chimps compare? Are we qualitatively or quantitative different from other animals? Is there some minimum number of features required to define “humanity”? When do each of these features first appear in the course of human evolution?

**modern humans** (*Homo sapiens*)

**Physical**
- bipedal
- large cranial capacity, ca. 1325 cc
- vocal tract with large phonetic range
- small canines (both sexes)
- thick tooth enamel
- long lumbar region (5 vertebrae)
- precision and power grips - both good
- relatively hairless
- loss of visible estrus signs
- menopause in older females
- slow maturation
- 46 chromosomes

**Behavioral**
- “abstract” intelligence (symbolic thought)
- complex symbolic language
- tool use and tool making - very complex (fire, clothing, composite tools, etc.)
- delayed food consumption - food sharing
- home bases and central place foraging
- division of labor
- long learning periods for offspring
- complex cultural behaviors

**modern chimps** (*Pan troglodytes*)

**Physical**
- quadrupedal
- small cranial capacity, ca. 425 cc
- vocal tract with limited phonetic range
- dimorphic canines - larger in males
- thin tooth enamel
- short lumbar region (3 vertebrae)
- precision (poorer), power grip (good)
- relatively hairy
- estrus cycle pronounced
- no menopause in older females
- more rapid maturation
- 48 chromosomes

**Behavioral**
- less “abstract” intelligence
- less complex communication system
- very simple tool use and tool making
- no delayed consumption, minimal sharing
- lack home bases, central place foraging
- lacks division of labor
- shorter learning periods for offspring
- simple cultural behaviors