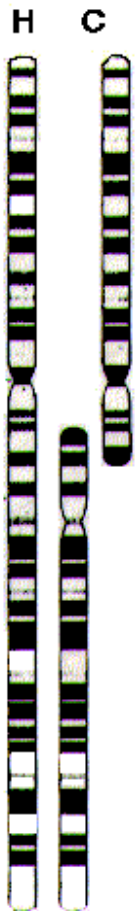




# MAKE A CONNECTION

## Human Chromosome #2

CER- Claim Evidence, Reasoning  
Slide show by Kelly Riedell/Brookings Biology





# CER- Claim Evidence, Reasoning

## MAKE AN CONNECTION

Examination of chimp and human karyotypes shows that chimps have 2 smaller chromosome pairs not found in humans; and humans have one larger chromosome pair (#2) not found in chimps.



It has been suggested that human chromosome # 2 was formed by the end-to-end fusion of the two chimp chromosomes at some point in the past. If this is true, there should be some evidence that can be observed to support this idea.

Use what you know about the STRUCTURE OF EUKARYOTIC CHROMOSOMES to MAKE THREE (3) PREDICTIONS about the structure of human chromosome #2 that would suggest "relatedness" between these chromosomes.  
COLOR OR ADD LABELS TO THIS DIAGRAM.



# CER- Claim Evidence, Reasoning



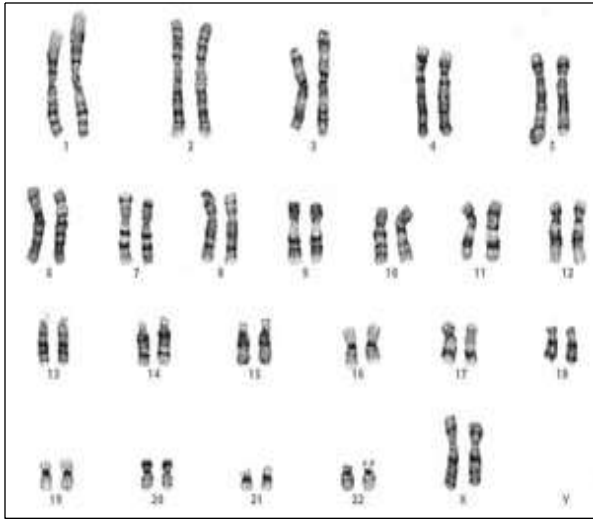
CLAIM:

Human chromosome # 2 was formed by the end-to-end fusion of the two chimp chromosomes at some point in the past.

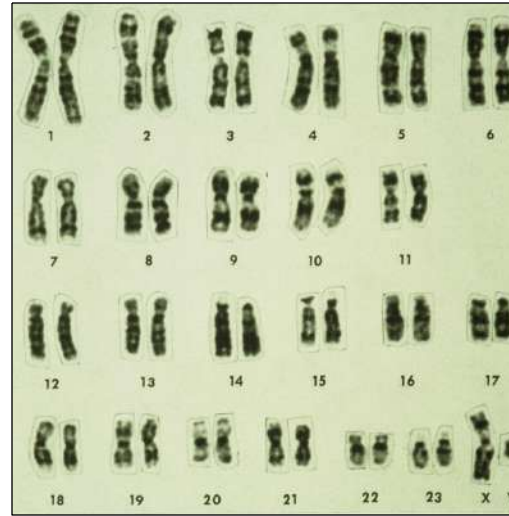
EVIDENCE:

REASONING:

COLOR OR ADD LABELS TO THIS DIAGRAM.



Human- 46 chromosomes



Chimpanzee- 48 chromosomes

## Even differences show relatedness

Chimpanzees have 2 smaller chromosome pairs we don't have  
Humans have 1 larger chromosome pair (#2) they don't have.

