

Name \_\_\_\_\_

Date \_\_\_\_\_ Per. \_\_\_\_\_

### CHROMOSOME CONNECTION: Worksheet for Responses to Activity Questions

Check Questions:

1. \_\_\_\_\_ Reason: \_\_\_\_\_

2. \_\_\_\_\_ Reason: \_\_\_\_\_

Part 1: Bullet B matches scratch pattern on bullet # \_\_\_\_\_. What does this indicate?

\_\_\_\_\_

Part 2: Human chromosome #3 perfectly matches \_\_\_\_\_. This belongs to what animal? \_\_\_\_\_  
What does this indicate?

\_\_\_\_\_

Part 3: What clearly happened in the ancestral human chromosome #4 to produce the chimp chromosome #IV?

\_\_\_\_\_

What kind of inversion was this? Why is it called that?

\_\_\_\_\_

Part 4: When chimp chromosomes 2p and 2q are touching end to end, with their centromeres close and their extreme tip ends aligned, how close a match to our #2 do they make? \_\_\_\_\_

What does this indicate probably happened?

\_\_\_\_\_

What does this suggest (regarding ancestry of humans and chimps)?

\_\_\_\_\_

Part 5: Chromosome comparisons:

1. In which sets are the O chromosomes very different from the other three? \_\_\_\_\_

2. In which sets are the G chromosomes very different from the other three? \_\_\_\_\_

3. In which sets are the C chromosomes very different from the other three? \_\_\_\_\_

The H chromosomes are \_\_\_\_\_, the C chromosomes are \_\_\_\_\_

The G chromosomes are \_\_\_\_\_, the O chromosomes are \_\_\_\_\_

Check Questions: 3. \_\_\_\_\_ 4. \_\_\_\_\_ 5. \_\_\_\_\_

Why did you answer as you did for #5?

Given the results of recent studies, and based on those "MILEs," apes truly are \_\_\_\_\_