

## Chromosome Analysis

## 2. Interspecific Karyotyping

Name: \_\_\_\_\_

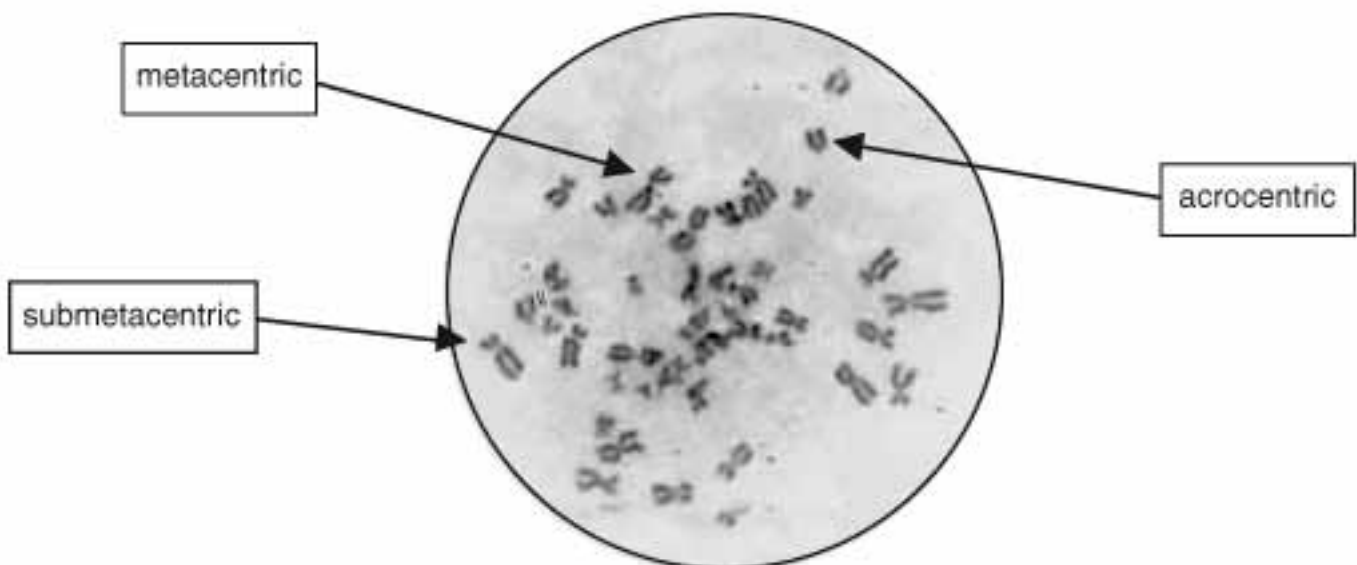
### What species is it?

Go to: <http://www.xy-zoo.com/003c.htm> or open the files on your Zoo Genetics CD.

1. Click on the first “CLICK HERE” at the top, then click on the picture number that was assigned to you.
2. Your teacher will assign you a chromosome spread to analyze and may have already printed them out for you. If not, you should right mouse-click on the picture and, after it opens, click “PRINT.”
3. When the print window opens, click “CURRENT PAGE” to print only your chromosomes. Repeat this procedure for each picture you need to print.
4. Go to the printer and make sure you get the correct chromosome spread by checking the Web address on the paper and comparing it to what is on the computer. Write the number you were given in the box at the top.
5. Cut out chromosomes and pair them as you did with the human example. Metacentric chromosomes should be arranged on the top line, submetacentric on the middle line, and acrocentric on the bottom line. See the picture at bottom for examples of each. Do not affix them to the paper until you have completed the steps below.

Go back to: <http://www.xy-zoo.com/003c.htm> or open the files on your Zoo Genetics CD.

6. Click the second “CLICK HERE” link.
7. Page down to find a completed karyotype that resembles yours. Arrange your chromosomes in this way so that it matches.
8. Put the sex chromosome pair in the box at the bottom of your yellow sheet.
9. Write the species name after you’ve found the karyotype that matches your chromosomes.
10. Fill out all other information on the sheet and turn in the sheet once you’ve fixed your chromosomes to the yellow form.



### Species Karyotype Analysis

Karyotype # _____
-------------------

Affix the chromosomes in their homologous pairs, centering them on the following lines like the sample on the front page of this lab activity. Be sure to put the chromosomes in the correct order as they appear in the examples. Place the sex chromosome pair in the box at bottom.

---

---

---

---

---

---

---

---

---

---

What is this organism's diploid number? _____
What is this organism's haploid number? _____
What is the sex of this individual?      Male      Female (Note: Remember that bird females are heterogametic (ZW)!)
<b>To what species does this karyotype belong?</b> _____

Sex Chromosome Pair
---------------------

Sex Chromosome Pair