

Case 1: Student Organizer

Use this sheet to record your work and findings from Case #1.

**Playground**

1. In the table below:
  - a. Record the symbol for male and female drakes.
  - b. Describe differences you notice between male and female drakes.

	<b>Male</b>	<b>Female</b>
<b>Symbol</b>		
<b>Differences between male and female drakes</b>		

2. One trait at a time, starting with the metallic trait at the top of the chromosomes, list the possible allele combinations you can make with its two pull-down menus. In the last column, give the appearance of the drake for each combination you list. Use the table below to organize your thinking. An example is done for you.

<b>Trait</b>	<b>Possible Allele Combinations</b>	<b>Appearance of Drake</b>
<b>Metallic</b>	<i>Metallic - Metallic</i>	<i>Drake is Steel (metallic)</i>
<b>Wings</b>		
<b>Forelimbs</b>		
<b>Hind limbs</b>		

## Case 1: Student Organizer

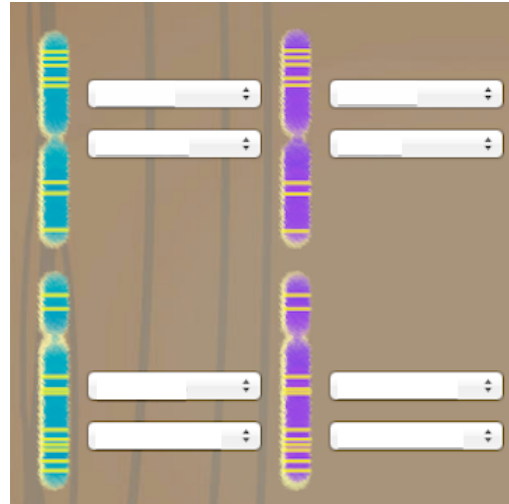
### **Challenge 1: [Title]**

You have been given a target drake that you have to match by changing the pull-down menus and possibly the sex. Refer to the table on page one to help solve this challenge.

1. Check the traits the target drake has on the left:

Trait	Yes	No
Is metallic		
Has wings		
Has forelimbs		
Has hind limbs		

2. Write in the alleles as they were set on the right side.



3. Describe what you did to match the target.

### **Challenge 2: [Title]**

Now you will need to match a series of three target drakes. Use this space to describe how well you did, what worked and what didn't work. Refer to the table on page one to help solve this challenge.