

Name _____

Date _____

Web Quest: Chromosomes and Inheritance

Site 1 → <http://learn.genetics.utah.edu/content/chromosomes/>
(Genetic Science Learning Center)

Click on "How Do Scientists Read Chromosomes"

(Find the answers to the following questions in this area. Browse all sections)

1. What are the **three** (3) key features used to read chromosomes?

2. Sketch or describe: metacentric, submetacentric, acrocentric

Click the "Back/Return" button when you finished sketching.

3. Go to **MAKE A KARYOTYPE** - Try it yourself - Create your own karyotype - Turning on **hints** is okay.
Check this box when your karyotype is complete. **Have Dr Legaspi initial this activity:** _____

What did you find difficult about matching the chromosomes? _____

Click the "Back/Return" button when you finish this activity.

4. Go to **USING KARYOTYPES TO DIAGNOSE GENETIC DISORDERS**

What is trisomy?

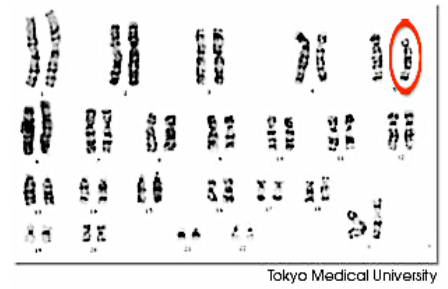
What is monosomy?

What is a terminal deletion?

5. For each of the **Disorders**, describe the genetic condition, how is the disorder transmitted, symptoms, diagnoses, treatment options and interesting facts. **(Type each into the SEARCH box at learn.genetics)**

A. Cri-Du-Chat:

a) **What is Cri-Du-Chat syndrome?** *(Describe the genetic condition)*



b) **How do people get Cri-Du-Chat syndrome?**

c) **What are its symptoms?**

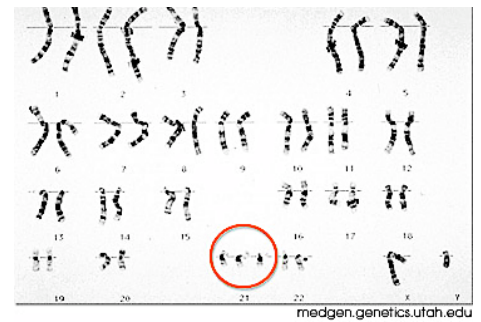
d) **How is it diagnosed?**

e) **What are the treatment options?**

f) **List 5 other interesting facts about Cri-Du-Chat.**

B. Down Syndrome:

a) What is Down syndrome? *(Describe the genetic condition)*



b) How do people get Down syndrome?

c) What are its symptoms?

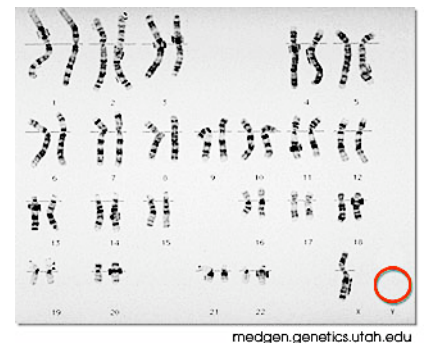
d) How is it diagnosed?

e) What are the treatment options?

f) List 5 other interesting facts about Down syndrome.

C. Turner Syndrome:

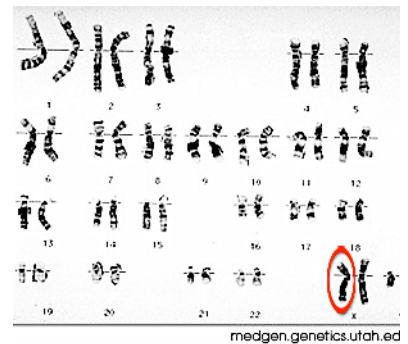
a) What is Turner syndrome? *(Describe the genetic condition)*



- b) How do people get Turner syndrome?
- c) What are its symptoms?
- d) How is it diagnosed?
- e) What are the treatment options?
- f) List 5 other interesting facts about Turner syndrome.

D. Klinefelter Syndrome:

- a) What is Klinefelter syndrome? *(Describe the genetic condition)*
- b) How do people get Klinefelter syndrome?



c) **What are its symptoms?**

d) **How is it diagnosed?**

e) **What are the treatment options?**

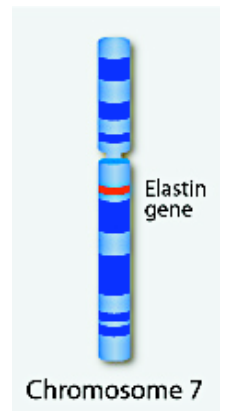
f) **List 5 other interesting facts about Klinefelter syndrome.**

E. Williams Syndrome:

a) **What is Williams syndrome?** *(Describe the genetic condition)*

b) **How do people get Williams syndrome?**

c) **What are its symptoms?**



d) How is it diagnosed?

e) What are the treatment options?

f) List 5 other interesting facts about Williams syndrome