**Karyotypes and Chromosomal Abnormalities**

Research the following:

1. What is a karyotype?
2. What methods are used to collect the cells required for karyotyping?
3. Once the cells have been collected, how is a karyotype prepared?
4. Karyotyping is useful for identifying chromosomal abnormalities. What are chromosomal abnormalities?
5. Below is a list of six of the most common chromosomal abnormalities. The karyotypes for three of these disorders are listed on the back of this page. Match up the correct disorder with the karyotype in the table and then complete the rest of the information in the table.

* Down’s syndrome
* Patau’s syndrome
* Edward’s syndrome
* Klinefelter’s syndrome
* Turner’s syndrome
* XYY syndrome

For each karyotype (a, b & c) draw a circle around the location of the chromosomal abnormality. Then complete the required information in the table to the right of each karyotype.

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| --- | --- |
| (a)  patau.gif | Name of disorder:  Gender of individual:  Two symptoms of the disorder: |
|  |  |
| (b)  down.gif | Name of disorder:  Gender of individual:  Two symptoms of the disorder: |
|  |  |
| (c)  turners.gif | Name of disorder  Gender of individual  Two symptoms of the disorder |