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

Relate your knowledge of the stages of **mitosis**, specifically metaphase and anaphase, to how gametes (sex cells) form via **meiosis**. Recall that a person can sometimes end up with extra chromosomes, like in Down syndrome (three copies of chromosome 21), or too few chromosomes, like in Turner syndrome (only one X chromosome).

1. Using the diagram to the right, describe what happens if Anaphase II does not occur normally during Meiosis II. Use the terms **chromosome, centromere,** and **spindle fibers** in your answer.
2. What is the name for this process when you produce gametes with too many or too few chromosomes?

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

Relate your knowledge of the stages of **mitosis**, specifically metaphase and anaphase, to how gametes (sex cells) form via **meiosis**. Recall that a person can sometimes end up with extra chromosomes, like in Down syndrome (three copies of chromosome 21), or too few chromosomes, like in Turner syndrome (only one X chromosome).

1. Using the diagram to the right, describe what happens if Anaphase II does not occur normally during Meiosis II. Use the terms **chromosome, centromere,** and **spindle fibers** in your answer.
2. What is the name for this process when you produce gametes with too many or too few chromosomes?