Open up the video: https://www.youtube.com/watch?v=a5SB9t7m0Vs

During Viewing

- > START the video.
- ➤ **PAUSE** the video at 3:13 minutes, after Dr. Levy discusses the method used for testing embryos for genetic disorders.

Answer the following questions IN YOUR OWN WORDS on a piece of lined paper, you must write the question for full credit:

- 1. Do you think testing embryos for genetic conditions is a good idea?"
- 2. What are some examples of conditions or disorders an embryo might carry?
- 3. Are all conditions equally severe? Are some conditions more severe than others?
- 4. What do you think are some genetic conditions that are very severe? ...less severe?
- 5. What choices are available if the embryo has a genetic condition?
- > **RESUME** the video.
- > PAUSE the video (6:50 minutes into the video) after the segment with Dr. Fukuyama

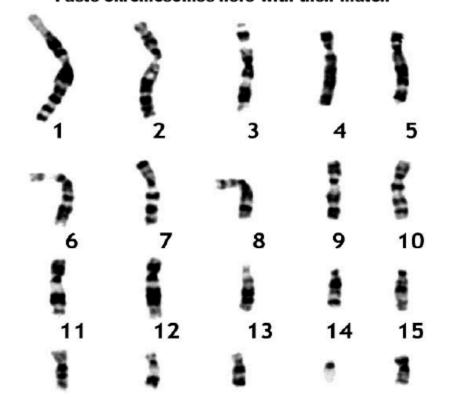
Answer the following questions:

- 6. Do you think sex selection is an acceptable reason for selecting an embryo?
- 7. Do you think there should be guidelines for making these and other decisions about the selection or termination of embryos?
- 8. What kind of guidelines might distinguish between selections for 'good' reasons versus 'bad' reasons?
- 9. Who decides what the 'good' and 'bad' reasons are?
- > RESUME the video and play to the end.

After Viewing

- 10. Explain that one way Dr. Levy's lab can tell if an embryo has a genetic disorder is to examine the pairs of chromosomes from one of the embryo's cells through a process called *karyotyping*. Tell your students that today they are going to observe chromosomes and pair them up, just as a geneticist would, to determine if an embryo has the expected number of chromosomes.
- 11. Complete a karyotype. The karyotypes needs to be cut out and glued next to the matching chromosome.

Paste chromosomes here with their match



Cut out chromosomes here

