Name: Quang Huynh Cloning 101

<https://www.youtube.com/watch?v=q0B9Bn1WW_4>

1. **What are clones?** Organisms that have identical genetic material.

2. Examples of cloning are cloning **Dolly the Sheep** and **cloning plants**.

3. The process of **differentiation** is when embryonic cells start to change into the different types of cells that an organism needs, including cells that form muscle, liver, blood, etc.

4. All of your body cells have **SAME** genetic material.

5. **Explain the process of cloning Dolly the Sheep:** Scientists would grow sheep udder cells under starvation conditions. An egg cell would be taken from another sheep. The nucleus is removed from the egg cell using a fine needle, and then using electric shock to fuse the starved udder cells with one nucleus-free egg cell.

6. Cloning is just an example of **ASEXUAL** reproduction.

7. What other animals have been cloned besides sheep? Mice, cows and pigs

REVIEW:

8. **What is vegetative propagation?** Asexual plant reproduction when plants produce genetically identical clones of themselves.

9. **How many parent(s) are involved in asexual reproduction?** Only one

10. **What organism reproduces asexually by the use of spores?** Plants and fungi.