

## Science 9: Why We Still Haven't Cloned Humans--It's Not Just Ethics

Name:

Date:

1. What has science been able to do for about seven years now? \_\_\_\_\_
2. Ethics are not the only things holding us back, for cloning can be \_\_\_\_\_, often \_\_\_\_\_ and most of all we \_\_\_\_\_ to do it.
3. Dolly was the first mammal successfully cloned from \_\_\_\_\_.
4. Dolly was born in the year \_\_\_\_\_. It took scientists \_\_\_\_\_ tries before
5. successfully getting one \_\_\_\_\_. Nowadays the success rate is about \_\_\_\_\_ percent, while in 1996 the success rate was \_\_\_\_\_ percent.
6. The problem with cloning and cloning humans is that some embryo's \_\_\_\_\_ before being implanted, others result in \_\_\_\_\_, others have died soon after birth or had severe \_\_\_\_\_. These are all risks that are arguably easier to take when experimenting with \_\_\_\_\_ than with \_\_\_\_\_. But arguable, the biggest reason we haven't cloned a human being is because there is not a good enough reason to.
7. Cloning someone would only create a \_\_\_\_\_, not a replica, since identical twins have the same \_\_\_\_\_, but not necessarily the same \_\_\_\_\_.
8. \_\_\_\_\_ cloning is almost identical to reproductive, except the cloned \_\_\_\_\_ is never implanted in a \_\_\_\_\_. Instead the cloned embryo is cloned for the sole purpose of extracting \_\_\_\_\_ cells. Stem cells have the incredible ability to turn into any other \_\_\_\_\_ in the human \_\_\_\_\_, means they are great for developing new treatments for \_\_\_\_\_ and have the potential to \_\_\_\_\_ or \_\_\_\_\_ tissues and organs.
9. The most substantial source for \_\_\_\_\_ stem cells are \_\_\_\_\_ day old embryos, cloned or otherwise. When someone else's stem cells are transplanted into a patient, the body will sometimes fight them off like a \_\_\_\_\_.
10. Cloned \_\_\_\_\_ since they share the patient's \_\_\_\_\_, would be less likely to be \_\_\_\_\_. But this use case is still in the research stage.
11. Pluripotent stem cells. They're basically \_\_\_\_\_ cells that have been \_\_\_\_\_ to be a different type of \_\_\_\_\_.
12. Cloning might actually have a bigger place in \_\_\_\_\_ than it does in \_\_\_\_\_ life, because the money just isn't there.
13. There was a claim of the cloned baby \_\_\_\_\_ who was born on December 26, \_\_\_\_\_. The course of this announcement is a company called \_\_\_\_\_, formed by a \_\_\_\_\_ cult who believes that humans were cloned by \_\_\_\_\_. There is no proof that the baby exists, but the company is alive and well.