**Eye of Nye: Cloning Video Questions**

1. What is a clone?
2. The word clone comes from which Greek word?
3. If an organism is said to reproduce asexually, how would the offspring resemble the parent organism?
4. Can humans reproduce asexually?
5. Clones are genetically identical which means they look exactly the same, but why will they not necessarily have the same personality/actions?
6. During sexual reproduction, what percent of each parent’s genetic information does the offspring receive?
7. Cells inside an organism’s body that are not classified as sex cells (sperm and egg) are known as what type of cell?
8. How many cloning tries did it take to produce Dolly the cloned lamb?
9. What determines what an organism will finally look like? (Hint: Think specifically about the comparison of the sea squirt vs. humans)
10. What is the controversy associated with human cloning?
11. What are the two types of cloning?
12. What is an undifferentiated cell?

During the course of the video, Bill Nye asks a couple of open-ended questions. Please read each question carefully, think about how you feel regarding the situation, and jot down evidences and reasoning that support your thinking while watching the video/after the video.

|  |  |  |
| --- | --- | --- |
| Should we pursue cloning? | Are we really ready to try cloning with humans? | Would you say you are in favor of therapeutic genetic cloning? |
|  |  |  |

**Eye of Nye: Cloning Video Questions**

**KEY**

Answers:

1. Genetically Identical

3. Twig

4. Same DNA, look the same

5. No

6. Because of environmental factors

7. 50% mom and 50% dad

8. Somatic cells

9. 277 tries

10. The way the genes are turned on and off determines what an organism will finally look like. Transcription factors

11. Where do you get the human egg (source)?

12. Sexual cloning and therapeutic cloning

13. Stem cells that do not have a decided direction regarding what type of cell they will be.

14-16. Opinion based questions that should be answered fully using complete sentences with explanations for the individual’s stance.