**Stem Cell Investigation**

Background:

Stem cells, as we have learned, have a significant potential to change and improve the medical profession by saving and improving lives. As there are numerous potential uses of stem cells, your task is to outline at least one use of stem cells in a creative product.

IB Standards:

* The capacity of stem cells to divide and differentiate along different pathways is necessary in embryonic development and also makes stem cells suitable for therapeutic uses
* Application: Use of stem cells to treat a disease and one other named condition.
* Application: Ethics of the therapeutic use of stem cells from specially created embryos, from the umbilical cord blood of a newborn baby and from an adult’s own tissues.

Product Options:

* Create an Infographic; Infographics are all the rage on the internet these days and can be made fairly quickly and easily
* [Easel.ly](http://www.google.com/url?q=http%3A%2F%2Fwww.easel.ly%2F&sa=D&sntz=1&usg=AFQjCNGP09eVPoXiEhTm-14Th5eOYmBYdQ) is a free easy to use infographic creator
* Create a Video: Videos need to be published and can be done so by uploading to our EHS science Youtube channel
* iMovie (if you make an iMovie, you need to upload it to YouTube so you can share a link of the video)
* [Go Animate](http://www.google.com/url?q=http%3A%2F%2Fgoanimate.com%2F&sa=D&sntz=1&usg=AFQjCNHwQQ422Dk1PGkVQJ7L5QUzCAL0uA)
* Create a Prezi: Prezi is a great, and more fun, alternative to Powerpoint
* [Prezi](http://www.google.com/url?q=http%3A%2F%2Fwww.prezi.com&sa=D&sntz=1&usg=AFQjCNEvM_HHlQ3cpFEJti-htheUfFNy1Q)

Products will be shared, presented, and posted to class website.  Sources for your product must be credible and need to be cited.  Citations for your information need to be included in your product as a slide or portion of the video.

* [How to correctly cite sources](http://www.google.com/url?q=http%3A%2F%2Fwww.mrrottbiology.com%2Fciting-sources.html&sa=D&sntz=1&usg=AFQjCNGCIV4tILr95d-mVOpshGQRtrB2mg)

Turn-In:

* Turn in your project using this [link](https://docs.google.com/spreadsheet/viewform?formkey=dFBSajF0aUctOU1oNE9YWkJpR2N6R1E6MQ).

Assessment:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Exceeds | Meets | Nearly Meets | Beginning |
| Stem Cell Standards | State that stem cells retain the capacity to divide and have the ability to differentiate along different pathwaysOutlines the use of stem cells  to treat a disease and one other named condition. | State that stem cells retain the capacity to divide and have the ability to differentiate along different pathwaysOutlines the use of stem cells  to treat a disease | State that stem cells retain the capacity to divide and have the ability to differentiate along different pathwaysUse of stem cells is not fully outlined | Does Not State that stem cells retain the capacity to divide and have the ability to differentiate along different pathwaysUse of stem cells is not fully outlined or missing |