**Key Stage 4 –**

**Stem cell therapy**

**Class research task**

Answer this question in your notes (not on this page): What is a stem cell?

<http://www.bbc.co.uk/education/guides/z9t4jxs/revision> **Quick link:** goo.gl/jeFD7p

Got it? If not then watch this

<http://learn.genetics.utah.edu/content/stemcells/scintro/> **Quick link:** goo.gl/Oem2DA

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|  | **Research question** |
| 1 | **What are embryonic stem cells? Quick link:** goo.gl/yFsz2q  <http://www.abpischools.org.uk/page/modules/stemcellnew/stemcell3a.cfm> |
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| 2 | **What are adult stem cells? Quick link:** goo.gl/WbflZo  <http://www.abpischools.org.uk/page/modules/stemcellnew/stemcell3b.cfm?coSiteNavigation_allTopic=1> |
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| 3 | **What are induced pluripotent stem cells? Quick link:** goo.gl/Pyo2Jc  <http://learn.genetics.utah.edu/content/stemcells/ips/> |
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| 4 | **What could stem cells be used for? Quick link:** goo.gl/TQgJXr  <http://www.bbc.co.uk/schools/gcsebitesize/science/add_edexcel/cells/cloningrev4.shtml>  **More information on this poster Quick link:** goo.gl/73N1fM  <http://www.abpischools.org.uk/lib/liPoster/412/stem%20cell.pdf?CFID=20681154&CFTOKEN=88925542> |
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| 5 | **What is therapeutic cloning? Quick link:** goo.gl/TP6Gyp  <http://www.bbc.co.uk/schools/gcsebitesize/science/add_edexcel/cells/cloningrev4.shtml> |
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| 6 | **Why, at the moment, are embryonic stem cells considered the most useful for therapy?**  <http://www.bbc.co.uk/news/health-11518539> **Quick link:** goo.gl/CuJGLc |
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| 7 | **What are the ethical considerations when using embryonic stem cells?**  <http://www.bbc.co.uk/news/health-11518539> **Quick link:** goo.gl/CuJGLc  **More detailed information here:** **Quick link:** goo.gl/Vm1TBh  <http://www.eurostemcell.org/factsheet/embyronic-stem-cell-research-ethical-dilemma> |
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| 8 | **How are new neurons grown in your brain? Quick link:** goo.gl/p3r4WM  Play the game at <http://learn.genetics.utah.edu/content/stemcells/sctypes/> |
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| 9 | **What is the function of the spinal cord? Quick link:** goo.gl/kEkjO8  Read through <http://www.uiortho.com/index.php/how-does-the-spinal-cord-work.html>  **or, if you prefer video, watch chapter 2 at** **Quick link:** goo.gl/o8HWEq  <http://www.spinalinjury101.org/> |
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| 10 | **What is spinal cord injury and how does it affect a person?** <http://www.spinalinjury101.org/> - Watch the first few minutes of Chapter 3  **Quick link:** goo.gl/o8HWEq |
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