Stem cells: Reading the newspapers – 11 to 14 year olds
February 2010, updated Jan 11

Objective: Understand what a stem cell is
(Scottish curriculum: S1-3, Biological Systems SCN 4-13c)

Stem cells in the news

Our bodies are made of millions of cells that work together to help you think, talk, laugh, run around and stay healthy. Stem cells are one of the most amazing types of cell in your body because they can (1) make copies of themselves and (2) make other types of cells like skin cells, nerve cells or blood cells.

1. Read the article.

In the UK around 120,000 people have Parkinson’s disease. Most patients get the disease when they are over 50, but sometimes young people also get it.

2. What happens to patients with Parkinson’s? Give two symptoms.
   i. __________________________
   ii. __________________________

3. Why does this happen?
4. Read the text before question 1 again. What’s so special about stem cells?

   Stem cells are special because they can (1) ________________________________
   and (2) ________________________________

Dr Tilo Kunath is going to use patients’ cells to make stem cells.

5. What can he do with these stem cells to understand the disease better?

   ____________________________________________________________________________
   ____________________________________________________________________________

6. Scientists hope that in the future stem cells can be used to help the patients. How?

   i. ____________________________________________________________________________
   ____________________________________________________________________________
   ii. ____________________________________________________________________________
   ____________________________________________________________________________

Extension

In 2006, scientists discovered a new technique. They can now take a cell from a body, for example a skin cell, and turn it into a cell that behaves like stem cells from an embryo.

7. What are these special types of stem cells called?

   ____________________________________________________________________________

8. Scientists are very excited about this new technique. Why do you think that is?

   ____________________________________________________________________________
   ____________________________________________________________________________
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