Choose one of the following topics for a research project. A few guiding questions have been provided for you, but you should add more questions that you want to investigate. Present your research in a format of your own choice, giving careful consideration to the information you are presenting.

1. Discovery of penicillin

   The discovery of penicillin was considered an important factor behind the outcome of World War II. Soldiers who were injured on the battlefield could be mended, given a shot of penicillin, and returned to the battlefield again instead of having limbs amputated. Write a newspaper article describing the importance of this major discovery.

2. Stem cells

   Stem cells are cells in multicellular organisms that haven’t become specialised yet – they’re like blank canvases. Find out what scientists have learnt about stem cells, where they find them and what they hope to be able to do with them.

3. Plant cells

   Plants do not have lungs to breathe. Instead they have small pores called stomata, which allow air to pass in and out of the plant. These stomata are made up of two guard cells that can change their shape. Find out how stomata open and close in response to changing environmental conditions. Under what type of conditions are the stomata likely to open? What are the triggers for the stomata to close? How does the shape of the guard cells assist the opening and closing of the pore?