9.3 Tropisms - Will the cress find a way to the light?

Instructions:

- Set up the cress growing at the bottom of a box with a convoluted way to get to the light. Will it make it?
- Observe the cress over the week and take a series of photos to show its progress
- Create a diagram showing how auxin affected the cell elongation to help the cress find its way to the light

Hints:

- Natural light should be enough but if you have a desk lamp you can set it up
- Some information to get you started:
  - Tropisms
  - Video

Research:
What are phototropisms?
What is the purpose of phototropisms for plants?
What other tropisms are there?
What are their purposes?
What is auxin?
What role does auxin play in plant growth of shoots and roots?

Method:

- *Using a cardboard box or plastic food storage box (must be completely opaque). Cut a hole at the top and insert walls to achieve the set up in the diagram below (or this one). Ideally there is a front that can be removed so the cress can be observed.*
- *Place your bean seedling at the bottom of the set up (see diagram)*
- *Ensure the bean plant stays moist for the duration of the lab.*

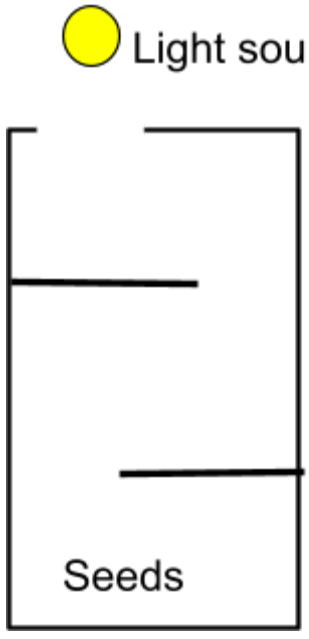

Photo evidence (you can set this up as a photo diary of your beans growth):
Diagram illustrating how auxin affected the cresses growth (think an extended version of this).