Investigating Seed Germination

Depending on the investigation you are conducting, you may fill the reservoir with either water or an appropriate solution. For example, to investigate germination in acid rain, you may use solutions of varying pH.

Safety: Take appropriate precautions depending on the solution used.

1. You will be given a plastic bottle adapted to create a reservoir for Petri dishes lying on their sides.
2. Your teacher will give you a copy of a grid on an acetate sheet. Carefully cut around the grids. Cut a circle of filter paper to the same size as the grid.
3. Put your grid in the lid of a Petri dish. Put your paper circle on top of the grid. Add a few drops of water until the paper is wet all over. Make sure there are no air pockets between the paper and the grid.
4. Put a row of seeds along a line on a grid.
5. Put the base of the Petri dish in place. Label the lid of the Petri dish. Leave the Petri dish flat for a few minutes to allow the seeds to stick to the damp filter paper.
6. The bottle will be filled with water, or another solution, to a depth of about 2cm. Gently place the Petri dishes vertically in the cut bottle. Examine them at suitable intervals. Replace any seeds which fall off.

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