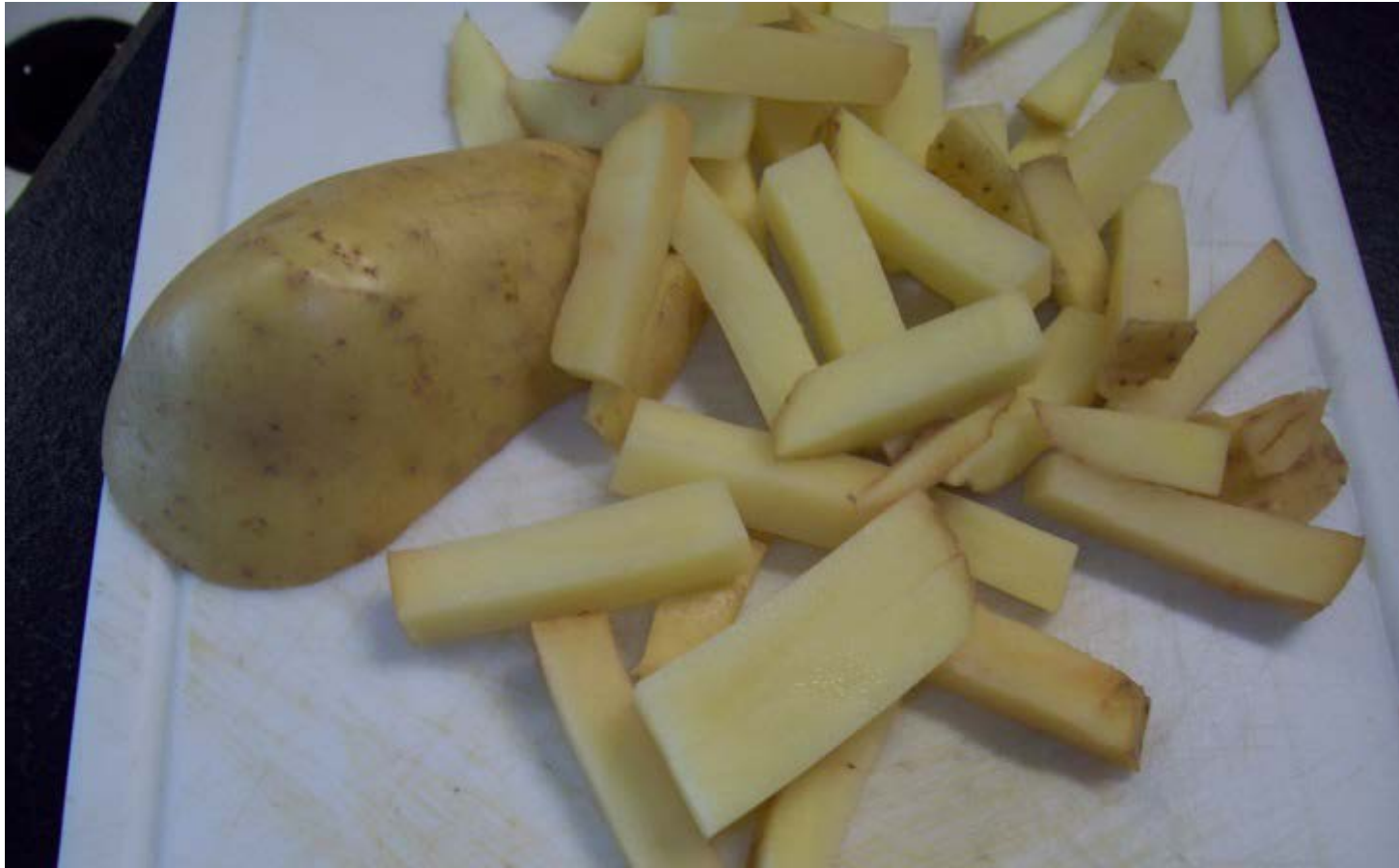


AS and A-level Biology practicals: Equipment set up

Practical 3: Production of a dilution series of a solute to produce a calibration curve with which to identify the water potential of plant tissue

Potato chips



Potato chips

- Chips cut with a potato cutter are of uniform width.
- The peel should be removed from each end and the potato chips cut to a uniform size (between 2 and 3 cm is a suitable length).

Measure the chips



Measure the chips

- Put the individual chips on a paper towel with the sucrose concentrations written on it.
- Weigh and measure the individual chips and record the mass and dimensions of each chip. A 2 or 3 decimal place balance should be used.

Chips in solution



Chips in solution

- Put the chips in the corresponding sucrose concentration as labelled on the boiling tube.
- Put the tubes in a water bath for 20 minutes.
- If students keep the labelled towel then the chips can be put in the same place after the heating in sucrose.
- The volume of sucrose in the boiling tube should cover the potato core.
- All cores should be blotted dry before weighing.