Resource 16 – Building a sewerage system[1]

In this activity you are going to design and build a model sewerage system that can move a litre of water from one point to another as quickly as possible without spilling any of the water.

Your teacher will set up an 'environment' using bricks that consists of a high starting point (a container where you will pour in the litre of water) and a lower end point (another container).

What you will need

- Stands.
- Funnels.
- Clips.
- Rubber tubing.
- Containers.
- Three children's plastic hand pumps.

What to do

1. Brainstorm with your partner possible sewerage designs.
2. Draw your model.
3. Explain the major features of your design.
4. Measure how long it takes to move one litre of water from the trunk sewer (starting point) to the treatment plant (end point).
5. If you wanted to make your sewerage system work faster, what would you change, the tubing or the pumps? Why?

Further research

Find out how long it takes for sewage to get from your house to the treatment plant for your suburb.

[1] Based on an activity from Flushing Dunnies by Keith McTaggart and Paul Saddler (Melbourne Water and STAV, 1993)