



Problem solving with water - 1

**1 litre of clean water from your tap = 0.25 pence
(Approximately), that's 4 litres for a penny.**

- 1 A large bucket holds 10 litres of water. If Rhys uses 1 bucket of soapy water and 4 buckets of clean water, how many litres of water does he use altogether to clean his car?
- 2 A running hosepipe uses 9 litres of water a minute. Sam is washing his car using 1 bucket of soapy water (10 litres) and a hosepipe. He cannot be bothered to turn it off when he is not using it and so it is running down his drive. He takes 20 minutes to wash his car, how much water has he used?
- 3 Look at your answers from questions 1 and 2. How much more water has Sam used compared with Rhys?
- 4 A bath uses about 80 litres of water. If Megan has a bath every day, how much water does she use in one week?
- 5 Joe has a shower every day. A 5 minute shower uses about 35 litres of water. How many litres does Joe use in one week?
- 6 Look at your answers from questions 4 and 5. How much more water does Megan use compared with Joe?
- 7 One cycle in Vikki's washing machine uses 80 litres. If the washing machine is used twice on Saturday and once on each other day of the week, how many litres of water are used?
- 8 A water meter records that a family of four has used 600 litres of water in one day. How much water would be used for one week?
- 9 Laura leaves the tap running when she brushes her teeth. As the tap is running quite slowly she doesn't think it will waste much water. The tap is using 6 litres per minute and she brushes her teeth for two minutes. How much water will she waste if she brushes her teeth morning and night?
EXTENSION:
Can you work out how much she would waste over the whole week?
- 10 Emily has a 5 minute shower that uses about 7 litres of water per minute.
 - a. How many litres will she use for 1 shower?
 - b. How many litres would she use if she had a shower every day?
 - c. If she had a shower every day that was only 4 minutes long, how much water would she use in the shower for a whole week?

