

# ABSORBENCY OF PAPER TOWELS

## 4. Measuring the Absorbency

Before we will carry out the experiment, it is necessary to specify how the absorbency will be measured. In this section we will demonstrate how the basic measurement in our experiment will be taken.

If the experiment is carried out in a team, one team member needs to keep track of time, while the other does the following:

1. Select a paper towel and fold it twice, to one-fourth its original size.
2. Put the dry paper towel in the dry bowl, put the bowl on the balance, and record the total weight. The combined weight of the bowl and the dry sheet will be called the **dry weight**.
3. Holding the sheet in the tongs, immerse the sheet completely in the bucket of water for 3, 5, or 10 seconds depending on which time level is used.
4. With the tongs, hold the wet sheet above the water, letting it drip for 20 seconds. While doing this, remove the bowl from the balance and reset the balance.
5. Place the wet sheet back in the bowl, place the bowl and sheet again on the balance, and record the total weight. The combined weight of the bowl and the wet towel will be called the **wet weight**.
6. Discard the wet sheet and dry the bowl with an extra paper towel.

The weight of the water absorbed by the paper towel is the wet weight minus the dry weight. Before you start measuring the absorbency for the selected sheets, you should try obtaining this measurement on a sheet or two for practice.