Weighing and measuring

This is a simple activity to give students some practice at weighing and measuring.

Equipment needed

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| --- | --- |
| Weigh boats | Access to balance (2dp) |
| spatula | Flour, salt and water (coloured) |
| 1 x 250 cm3 beaker | 1x 100 cm3 measuring cylinder |
| 1 x 100 cm3 volumetric flask |  |

To do

1. Weigh out 15g of salt and transfer to a universal\*
2. Weigh out 7.25g of flour and transfer to a universal\*
3. Weigh out 0.25g of flour and transfer to a bijou\*

*\* At SSERC we tend to use disposable plastic containers (Universals hold 30 cm3 and bijoux 7 cm3). You can use any container you find suitable.*

*The following activities are designed to show the relative accuracy of measuring liquid volume using the marking os a beaker, a measuring cylinder and a volumetric flask.*

*The best way to do this is to collect the class results as some individuals may fluke an accurate reading with the beaker – but overall this will be less consistent.*

* 1. Weigh a beaker (dry) and record the mass
  2. Fill with coloured water as exactly as possible to the 100 cm3 line.
  3. Weight the beaker again and record the mass
  4. Subtract the mass in a. from the mass in c.

Record your result

* 1. Weigh the measuring cylinder (dry) and record the mass
  2. Fill with coloured water as exactly as possible to the 100 cm3 line.
  3. Weight the measuring cylinder again and record the mass
  4. Subtract the mass in a. from the mass in c.

Record your result

* 1. Weigh the volumetric flask (dry) and record the mass
  2. Fill with coloured water as exactly as possible to the 100 cm3 line.
  3. Weight the volumetric flask again and record the mass
  4. Subtract the mass in a. from the mass in c.

Record your result