

# Microbe Magic Experiments

<http://microbemagic.ucc.ie>

## Explore your body – How much does your skin weigh?

Did you know that your skin makes up about 12% of your total body weight? You can find out how much that is and what it feels like by doing the following experiment:

### **What you will need:**

- A weigh scales (the one from your bathroom is fine)
- A calculator
- Pencil
- Paper
- A large container
- A pillowcase (not a good one – ask a parent or guardian!)
- Bags of sugar or tins from the cupboard (like beans or sweetcorn, it doesn't matter what is in them) or piles of sand.

### **What to do:**

- Make sure the weigh scales needle is pointing to zero.
- Weigh yourself using the weigh scales.
- Write down the number.
- Using a calculator, find out what 12% of this is
  - e.g. if you weigh 18 kilograms, 18 divided by 100 equals 0.18 kilograms. 0.18 kilograms multiplied by 12 equals 2.16 kilograms. This is 12% of your weight and equals the amount your skin weighs!
- Put the pillowcase into the large container.
- Put the large container onto the weigh scales.
- Make sure the weigh scales needle is pointing to zero.
- Put bags of sugar, tins or piles of sand into the pillowcase until the needle goes to the number you calculated (in the example above this was 2.16 kilograms).
- Lift out the pillowcase and feel how heavy it is.
- This is same as the weight of your skin!