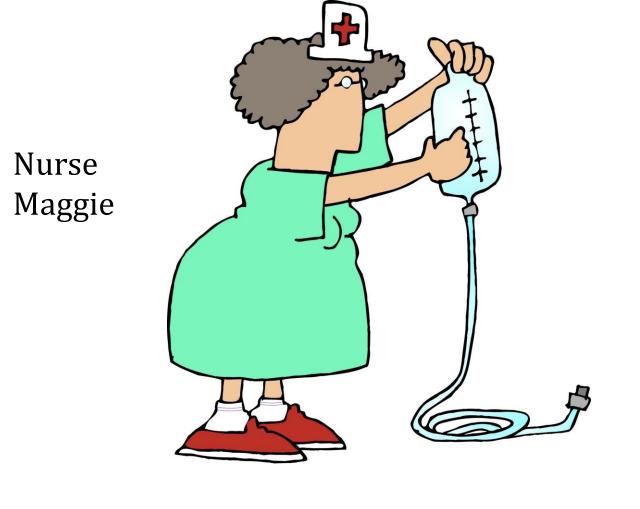
Торіс	Hypertonic, hypotonic and isotonic solutions	Level	GCSE (or any course for students aged 11-16)
Outcomes	Be able to describe and explain the effect of hypotonic, hypertonic and isotonic solutions on animal cells.		
Information for teachers	• This activity could be used to consolidate understanding around osmosis and the effects of hypotonic and hypertonic solutions on cells.		

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Frank is dehydrated and in hospital.

Maggie the nurse is here to help. She has got two intravenous drips. One drip contains sterile water only. The other drip contains a sterile saline solution (0.9% NaCl). Explain, with reference to osmosis, why Maggie should **not** administer the sterile water!

In your answer explain:

- 1. what would happen to Frank's cells if water was used
- 2. why drips contain NaCl (0.9%)
- 3. why drips don't contain more than 1% NaCl

Include and explain the terms *hypertonic, isotonic and hypotonic*.