Examples of calculation questions

1. Ibuprofen 10%w/w gel has been prescribed for a patient with back pain. An original pack contains 50g. What is the quantity of Ibuprofen, in milligrams, in a 50g pack?
   
   A. 2.5mg  
   B. 10mg  
   C. 50mg  
   D. 500mg  
   E. 5000mg

2. A child weighs 3 stones and is prescribed ranitidine 150mg/10ml oral solution. The dose prescribed is 4mg/kg twice daily. Calculate the quantity in mls that is required on a daily basis to one decimal place.
   
   1 stone = 6.35kg
   
   A. 5.1mls  
   B. 10.2mls  
   C. 14.3mls  
   D. 19.1mls  
   E. 20.2mls

3. Calculate amount of solid (in grams) required to produce 250ml of a 1 in 10 solution.
   
   A. 2g  
   B. 2.5g  
   C. 50g  
   D. 200g  
   E. 250g

4. A patient has been prescribed prednisolone 40mg once daily for 10 days. They are on a reducing dose of 10mg each week until discontinuation. How many prednisolone 5mg tablets are required for this treatment?
   
   A. 112  
   B. 128  
   C. 134  
   D. 156  
   E. 164