

## Adult Branch Numeracy Examination for Year 2

1. Convert 360micrograms to milligrams.

$$\div 1000$$

$$0.360$$

2. Calcium resonium 15grams is prescribed. Convert this to milligrams.  $\times 1000$

$$15000\text{mg}$$

3. If 5 mL Simple Linctus contains 0.01mL of concentrated anise water.  
How much concentrated anise water would be in one litre?

$$\begin{array}{r} 200 \\ 5 \overline{)1000} \end{array}$$

$$200 \times 0.01 = 2\text{ mL}$$

( $\times 2$  then move d.p. 2 places to right)

4. A patient is prescribed 40mg prednisolone. How many 5mg tablets should be given?

$$\frac{40}{5} = 8$$

5. You need to give 1.5gram of robaxin. How many 500mg tablets should be given?

$$\frac{1500}{500} = 3$$

6. Amoxicillin 1500mg is to be given per day in 3 equally divided doses. Capsules are 250mg. How many capsules should be given at each dose?

$$\frac{1500}{3} = 500\text{mg per dose} \quad \frac{500}{250} = 2\text{ capsules}$$

7. If digoxin syrup is supplied as 50 micrograms per 1mL and the patient is prescribed 125 micrograms, what volume of syrup should be given?

$$\frac{125}{50} = \frac{25}{10} = 2.5\text{mL}$$

8. Carbamazepine suspension 200mg is prescribed. It is available as 100 mg in 5 mL. What volume should be administered?

$$\frac{200}{100} \times \frac{5}{1} = 10\text{mL}$$

9. Syrup contains penicillin 125mg/5mL. How many mg of penicillin are in 15 mL?

$$\frac{15}{5} \times 125 = \frac{125 \times 3}{1} = 375\text{mg}$$

(or)

$$5\text{mL} = 125\text{mg}$$

$$10\text{mL} = 250\text{mg}$$

$$15\text{mL} = 375\text{mg}$$

10. A patient is prescribed 1mg of bumetanide. If the syrup contains 200micrograms/mL, what volume should be given?

$$\frac{1000}{200} = 5 \text{ mL}$$

11. A patient is prescribed 3mg of dexamethasone for injection. If the drug is available as 4mg per 1mL, what volume should be administered?

$$\frac{3}{4} = 0.75 \text{ mL} \quad 4 \overline{) 3.00} \quad 0.75$$

12. A patient is prescribed 750microgram benzatropine IM and ward stock contains benzatropine 1mg/mL. How much will you administer?

$$\frac{750}{1000} = 0.75 \text{ mL} \quad (\text{move 2 d.p. to left})$$

13. Naloxone HCl 100 microgram for opioid reversal is prescribed. It is available as 0.4 mg per mL. What volume should be administered?

$$\frac{100}{400} = 0.25 \text{ mL}$$

14. Heparin is available as 25000units in 1mL and the patient requires 20000units. What volume is required?

$$\frac{20000}{25000} = \frac{4}{5} = 0.8 \text{ mL}$$

15. A patient is prescribed Dalteparin (a Low Molecular Weight Heparin - LMWH) 200units / kg for treatment of a DVT. The patient weighs 84 kg. What dose is required for this patient?

$$\begin{array}{r} 200 \\ \times 84 \\ \hline \end{array} \quad \begin{array}{r} 200 \\ \times 84 \\ \hline 8000 \\ 16000 \\ \hline 16800 \end{array} \quad 16800 \text{ units}$$

16. A patient is to receive 1000mL of normal saline IV over 6 hours. Calculate the rate in mL/hour.

$$6 \overline{) 1000.00} \quad 167 \text{ mL/hr}$$

- ~~17. 1000mL is to be infused over 12 hours. If the giving set delivers 20 drops per mL, calculate the drip rate.~~

- ~~18. A patient is to receive 1unit of packed cells over 4 hours and the giving set for blood transfusions delivers 15 drops/mL. If 1 unit contains 250mL, calculate the drip rate.~~