**Test of Competence 2021:**

**Practice Paper 1 (Numeracy)**

**Adult Nursing**

**EU Aptitude Test**

**Part 1: Measuring the correct dose**

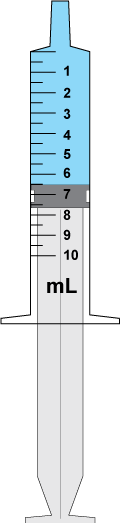


Figure - Syringe

**Q1.** What is the volume that has been drawn up into the syringe?

Answer = \_\_\_\_\_\_\_\_\_\_

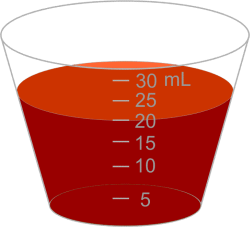


Figure - medicine cup for oral medication

**Q2.** What is the volume that has been dispensed?

Answer = \_\_\_\_\_\_\_\_\_\_\_

**Part 2: Metric units**

**Q3.** A patient has been prescribed 2 L of 0.9% sodium chloride.

What is the volume in mL?

Answer = \_\_\_\_\_\_\_\_\_\_\_ **mL**

**Q4.** A patient has been prescribed 0.6 g of ibuprofen.

What is the dose in mg?

Answer = \_\_\_\_\_\_\_\_\_\_\_ **mg**

**Part 3: Oral medications**

**Q5.** A patient has been prescribed 300 mg of phenytoin.

How many tablets should be administered?

\_\_\_\_\_\_ **tablet(s)**

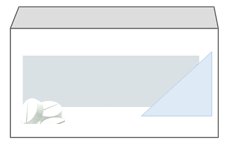


Figure box of tablets.

Phenytoin

100 mg tablets

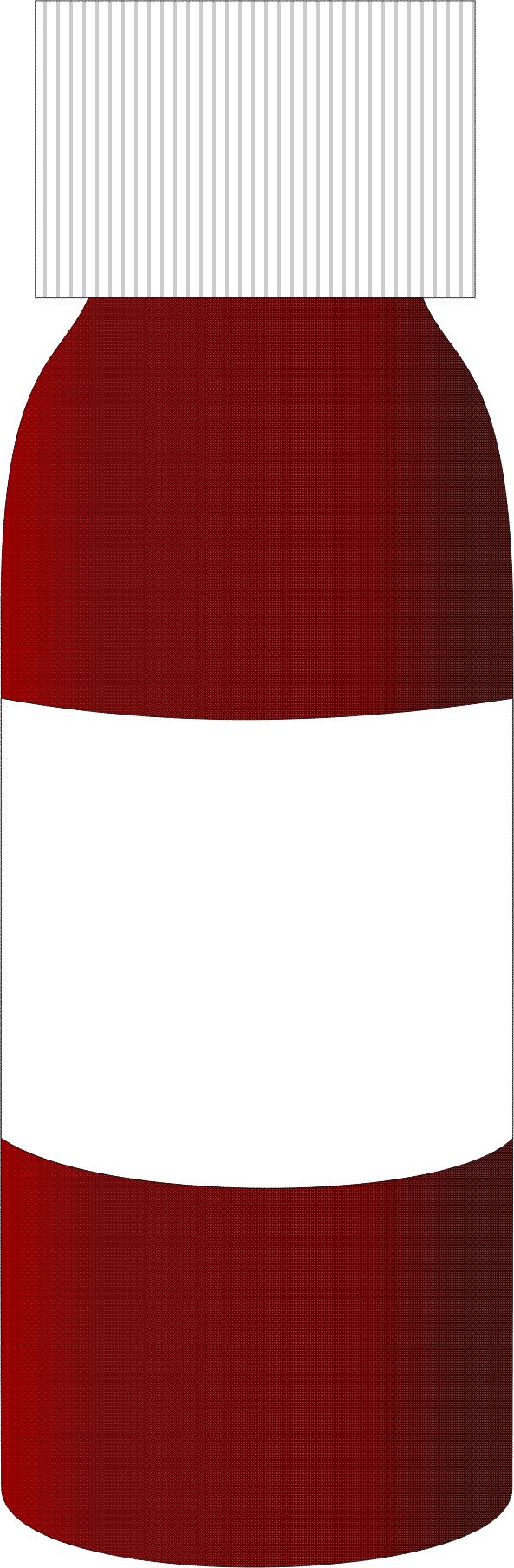


Figure - Medicine bottle for liquids.

**Q6.** A patient has been prescribed 1 g of carbocisteine solution.

What volume should be administered?

\_\_\_\_\_\_\_\_\_\_\_\_

Carbocisteine solution

200 mg/5 mL

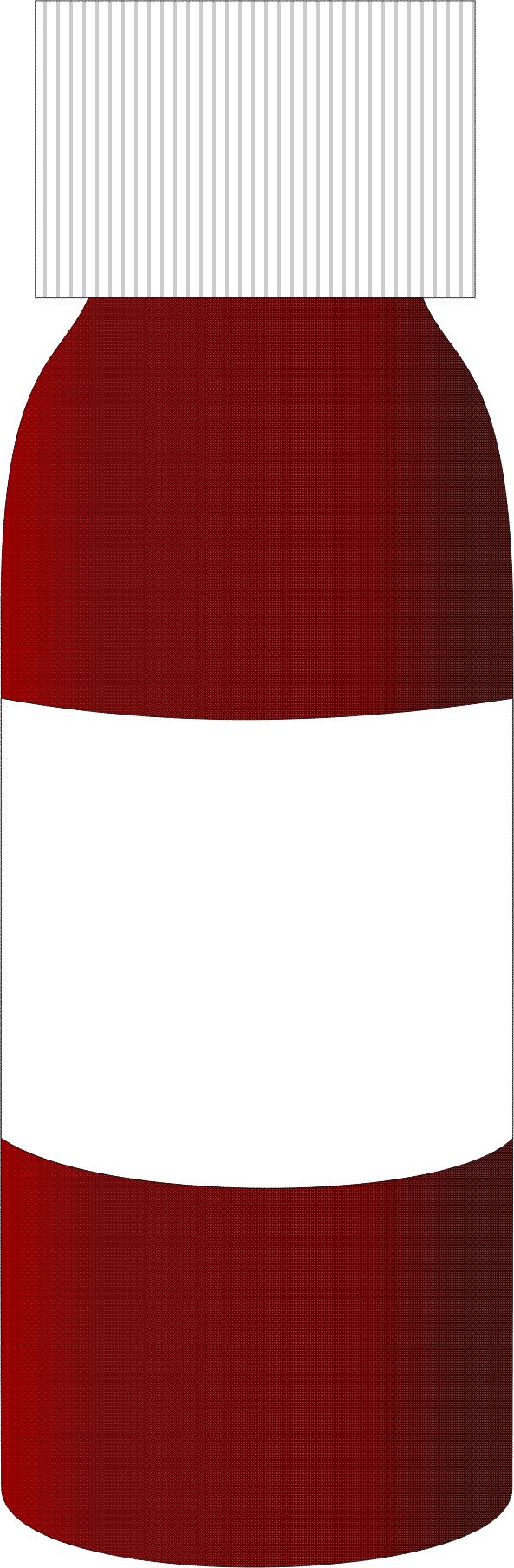


Figure 4 - Medicine bottle for liquids

**Q7.** A patient has been prescribed 100 mg of phenytoin suspension.

What volume should be administered?

\_\_\_\_\_\_\_\_\_\_

Phenytoin suspension

250 mg/5 mL

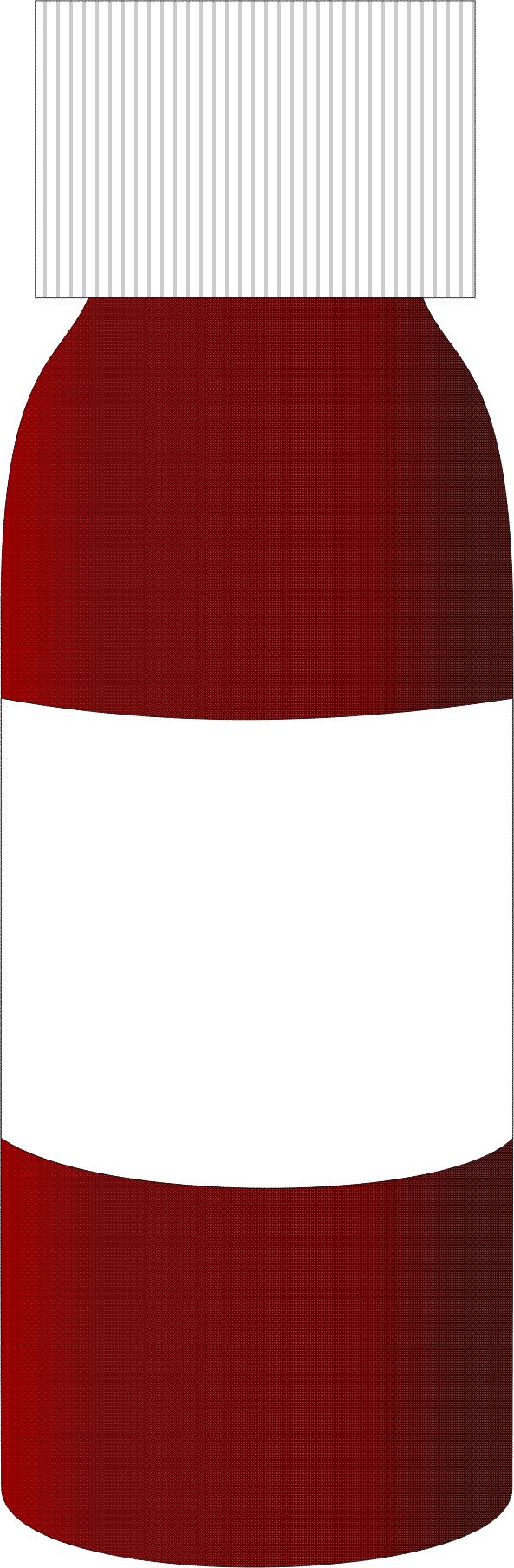


Figure Bottle of liquid medication

**Q8.** A patient has been prescribed levetiracetam suspension at a dose of 10 mg/kg. The patient weighs 70 kg.

What volume should be administered?

\_\_\_\_\_\_\_\_\_\_

Levetiracetam suspension

100 mg/1 mL

**Part 4: Injections**

Flupentixol decanoate20 mg in 1 mL

**Q9.** A patient has been prescribed

60 mg of flupentixol decanoate.

What volume should be drawn up for the injection?

\_\_\_\_\_\_\_\_\_

Figure 7 sample syringe and needle

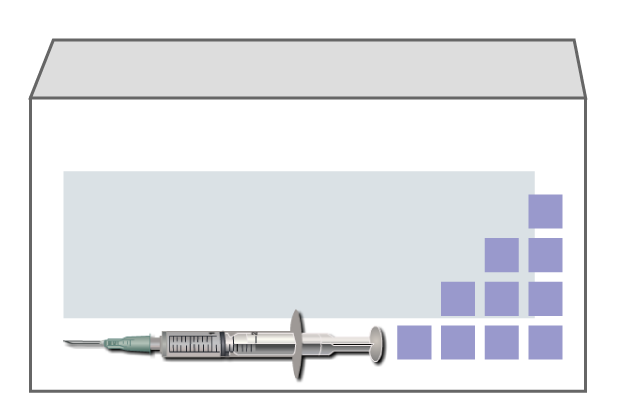


Figure sample syringe and needle

**Q10.** A patient has been prescribed 4 mg ofdiamorphine hydrochloride.

What volume should be drawn up for the injection?

\_\_\_\_\_\_\_\_\_\_

Diamorphine hydrochloride   
5 mg in 1 mL

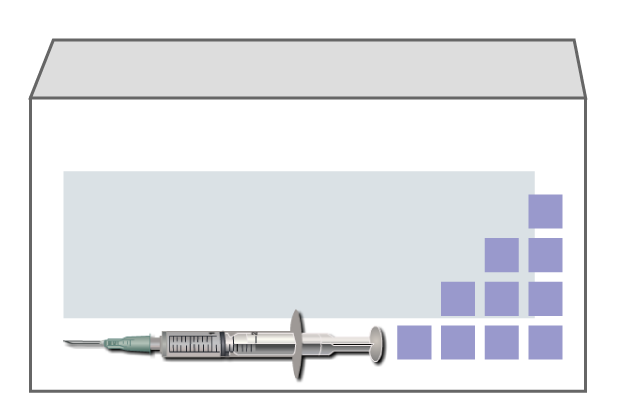


Figure syringe and needle

**Q11.** A patient has been prescribed pethidine hydrochloride at a dose of 0.5 mg/kg. Your patient weighs 90 kg.

What volume should be drawn up for the injection?

\_\_\_\_\_\_\_\_\_\_\_

Pethidine hydrochloride   
50 mg in 1 mL

**Part 5: Intravenous infusions**

**Q12.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Prescription | | | | | | |
| Date | Route | Infusion fluid | Vol. (mL) | Duration | Time start | Prescriber’s signature |
| 26/03/20 | I.V. | 0.9% sodium chloride | 400 | 5 hours | 0800 | D. McCormick |

At what rate would you set the infusion pump to run? \_\_\_\_\_\_\_\_\_ **mL per hour**

**Q13.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Prescription | | | | | | |
| Date | Route | Infusion fluid | Vol. (mL) | Duration | Time start | Prescriber’s signature |
| 26/03/20 | I.V. | 5% glucose | 1000 | 6 hours | 0800 | D. McCormick |

At what rate would you set the infusion pump to run? \_\_\_\_\_\_\_\_\_\_ **mL per hour**

*Give your answer to the nearest whole number.*

**Q14.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Prescription | | | | | | |
| Date | Route | Infusion fluid | Vol. (mL) | Duration | Time start | Prescriber’s signature |
| 26/03/20 | I.V. | Whole blood | 800 | 5 hours | 0800 | D. McCormick |

At what rate would you set the infusion pump to run? \_\_\_\_\_\_\_\_\_\_ **mL per hour**

**Part 6: Fluid balance charts**

Complete the following fluid balance chart to calculate whether the patient has gained or lost fluid over a 24-hour period.

If the patient has gained fluid you should include ‘+’ before your balance answer, e.g. +100 mL. If the patient has lost fluid you should include ‘-’ before your balance answer, e.g. -100 mL.

**Q15.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Patient’s name: Jack Jones Hospital number: 3861050 Chart number: 1  IV Fluid type and rate: 500 mL 0.9% sodium chloride 125 mLs/hour Date: 26/03/20 Ward: G7 | | | | | | | |
| **Time** | **Input** | | | **Output** | | | |
| Oral  (mL) | Intravenous  infusion  (mL/hour) | Total (mL) | Urine  (mL) | Aspirate/ vomit (mL) | Other  \_\_\_\_\_\_  (mL)\_ | Total  (mL) |
| 0100 |  |  |  |  |  |  |  |
| 0200 |  |  |  |  |  |  |  |
| 0300 |  |  |  |  |  |  |  |
| 0400 |  |  |  |  |  |  |  |
| 0500 |  |  |  |  |  |  |  |
| 0600 |  | 125 |  |  |  |  |  |
| 0700 |  | 125 |  |  |  |  |  |
| 0800 | 100 | 125 |  | 140 |  |  |  |
| 0900 |  | 125 |  |  |  |  |  |
| 1000 |  |  |  |  |  |  |  |
| 1100 |  |  |  |  |  |  |  |
| 1200 | 100 |  |  |  |  |  |  |
| 1300 |  |  |  | 180 |  |  |  |
| 1400 |  |  |  |  | 80 |  |  |
| 1500 |  |  |  |  |  |  |  |
| 1600 | 150 |  |  |  |  |  |  |
| 1700 |  |  |  |  |  |  |  |
| 1800 |  | 125 |  | 200 |  |  |  |
| 1900 |  | 125 |  |  |  |  |  |
| 2000 |  |  |  |  |  |  |  |
| 2100 | 150 |  |  |  |  |  |  |
| 2200 |  |  |  | 310 |  |  |  |
| 2300 |  |  |  |  |  |  |  |
| 2400 |  |  |  |  |  |  |  |
|  | | | | | | | |
|  | | | | | | | |
| **Total input** | | |  | **Total output** | | |  |
|  | | | | | | | |
| **Balance** | | |  | |  | | |