Skills for Health

Numeracy Initial Assessment

Marking Scheme and Guide

Version 1 January 2010

Introduction

This is the paper-based version of the *Skills for Health* Initial Assessment Numeracy tool.

It has been developed as an alternative to the on-screen version of the tool for situations where, for various reasons, it is not possible to use the on-screen version and should therefore be used as an alternative only when necessary. The questions in this version are based on those in the on-screen version and have been designed with the needs of users in the health sector in mind.

More information and support for these tools can be found on the Skills for Health website at www.skillsforhealth.org.uk/IAhelp.

How to use this tool

The paper-based tool consists of a User Booklet and this Guidance and Marking Scheme. The user booklet contains 25 questions, 5 at each level from Entry Level 1 to Level 2[1]. The questions become progressively harder as users work through them.

Initial assessments are not tests and are not timed. Users should be encouraged to finish in their own time and not to rush. However, 50–60 minutes should prove adequate in most cases. Many users will require far less time than this; a few may need a little more time. Users are encouraged to stop if they are finding the questions too difficult and you should look out for users who appear to be having problems.

Users should not use calculators but can, of course, use paper to help them with calculations.

Setting the right environment

Getting the right balance between an environment which is supportive to the user but which does not appear like an examination is difficult.

However, you can help by:

- Ensuring users are clear on the context in which they might be undertaking an IA.
- Making sure the users understand that this is not a test or examination; that there is no time limit and no pass/fail.
- Telling users that the results are confidential.

[1] Based on the Levels used in England. A chart for cross-referencing the level descriptors used in England, Wales, Scotland, Northern Ireland and the Republic of Ireland can be found on the website.

- Making sure users understand how to answer the questions: the question are answered by:
    - Circling the correct answer
    - Writing the answer in a box
    - Choosing A, B, C or D as the correct answer
- Ensuring that users understand how you will be able to help them when the IA is completed.
- Knowing the background of the users and, for example, being certain that the IA is suitable for them.
- Finding somewhere quiet for the IA to be completed but not replicating an "exam hall" type of environment.

Providing support and feedback

This IA has not been designed specifically for users who have English as a second language (ESOL) or who may have other difficulties accessing the questions. However, this IA is designed to provide the user with a general understanding of their Numeracy skills. If you think it would help indivdual users to demonstrate their skills by reading some of the questions to them or helping them to write down their answers, then please do so.

After the IA is complete, use this Marking Scheme to mark the questions. All the questions are worth 1 mark.

Use this table to determine the level at which the user is working:

	Marks
Entry 1	3-8
Entry 2	9-13
Entry 3	14-18
Level 1	19-22
Level 2	23-25

Users with 2 marks or fewer are judged to be working towards Entry level.

All users should be given feedback on their performance. As a minimum, they should be told the level they have attained. The Adult Core Curriculum[2] reference for each question is included is given in the following table so that you can provide more detailed feedback, if required.

[2] A mapping document between the Adult Core Curriculum references used in England and Wales and the corresponding references in Scotland and Northern Ireland can be found on the Skills for Health website.

It is important that feedback is treated with complete confidentiality and considerable sensitivity, and that users are clear that the initial assessment is simply a stepping stone to more thorough diagnostic assessment.

Question	Curriculum Ref	Question	Curriculum Ref
1	N1/E1.3	14	N1/E3.6
2	N1/E1.2	15	HD1/E3.2
3	MSS1/E1.1	16	MSS1/L1.10
4	MSS1/E1.1	17	N2/L1.11
5	HD1/E1.1	18	HD1/L1.3
6	N1/E2.5	19	HD1/L1.1
7	HD1/E2.1	20	N2/L1.2
8	N1/E2.3	21	N2/L2.3
9	MSS1/E2.3	22	N2/L2.8
10	N2/E2.2	23	HD1/L2.1
11	N1/E3.4	24	MSS1/L2.6
12	MSS1/E3.1	25	N1/L2.3
13	MSS1/E3.4		

Next steps

The user should, if appropriate, be referred to a suitable provider who can offer further IAG support.

Details of suitable providers and how to access them can be found in the IA support pages on the *Skills for Health* website.

1 **9 people work in this team.**

How many are missing?

Answer 4

2 **A door entry code is: seven, three, five, nine.**

Write the code in numbers in the correct order in the boxes.

7	3	5	9

3 A dentist appointment is for Thursday.
The surgery rings the day before.

On which day will the surgery ring?

Tick the correct box.

Thursday	Tuesday	Wednesday	Friday

4 A patient asks when breakfast will be served.

Which of these times would be sensible?

Write A, B, C or D in the answer box.

A 8 am

B 12 noon

C 4 pm

D 8 pm

Answer A

5 **This is a list of telephone numbers in an office.**

Benita McDonald	Human Resources	2540
John Hawksley	Finance	2554
Mita Patel	Occupational Health	2539
Whitney Franklin	Works	2569

What is Mita Patel's number?

Write the number in the box.

Answer 2539

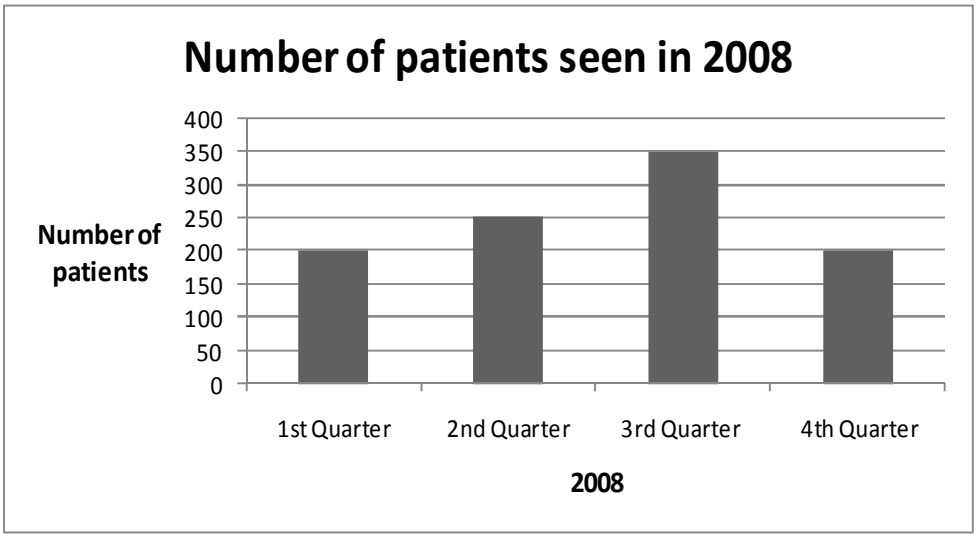
6 **A doctor has told a patient to take 2 tablets, 4 times a day.**

How many tablets will the patient take in 3 days?

Write your answer in the box.

Answer 24

7 **The chart shows how many patients a community nurse saw in each quarter of 2008.**



In which quarter did the community nurse see the most patients?

Tick the correct box.

1st	2nd	3rd	4th

8 **The stock sheet shows the number of sterile gowns used on Monday, Tuesday and Wednesday.**

Daily Sterile Gowns Sheet			
	Monday	Tuesday	Wednesday
Large:	18	15	13
Small:	22	27	21
Total:	**40**	**32**	**34**

Which daily total is wrong?

Tick the correct box.

- [ ] Monday
- [x] Tuesday
- [ ] Wednesday

9 **A bottle of medicine has a "use by" date of 6/11/13.**

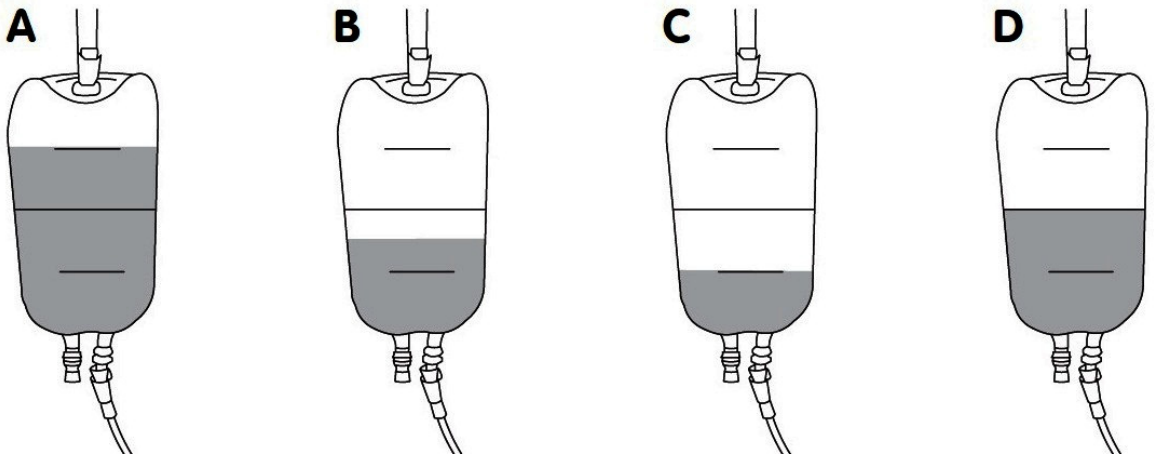
Which date should the medicine be used by?

Tick the correct box.

- [ ] 11th June 2013
- [ ] 13th June 2011
- [x] 6th November 2013
- [ ] 13th November 2006

10 **Four plastic bags of fluid are shown below.**

Which bag is a ¼ full?



Write A, B, C or D in the answer box.

Answer C

11 **A hospital volunteer visits 5 wards with the book trolley. Each ward has 16 patients.**

How many patients are visited?

Write your answer in the box.

Answer 80

12 **Your wages are £328.50 but tax and National Insurance totalling £59.73 have to be taken out.**

How much will you receive?

Tick the correct box.

£279.87	£268.77	£331.23	£368.77

13 **This is an alphabetical list of clinics and their distance from a hospital entrance.**

A & E : 230 metres
Burns : 142 metres
Cardiology : 260 metres
Dermatology : 245 metres
ENT : 323 metres

Which clinic is nearest the entrance? Burns

Which clinic is furthest from the entrance? ENT

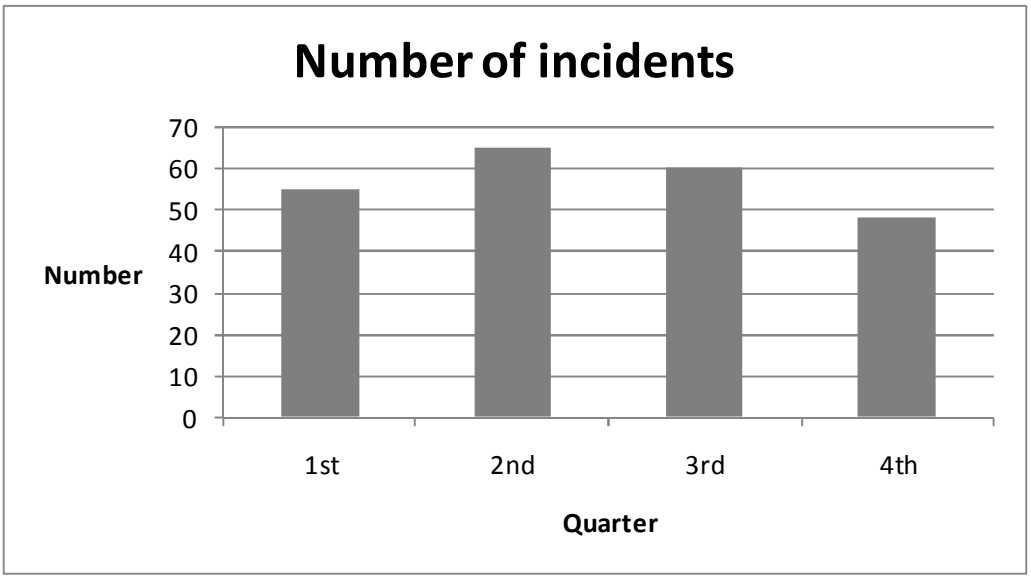
14 On an outing from a day centre 3 coaches are ordered for 75 people.

How many people will there be in each coach?

Answer **25**

15 The chart shows the number of Health & Safety incidents at a hospital in 2008.

How many more incidents were there in the 2nd quarter than in the 3rd quarter?



Tick the correct box.

- 2
- **5**
- 55
- 60

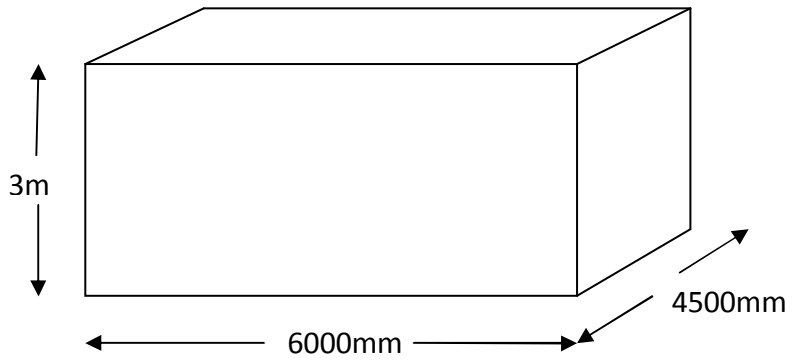
How are you doing?

Happy to go on?

If not, tell the person administering the Initial Assessment.

16 An electrician needs to know the volume of a day room so that he can fit the correct size of extractor.

The dimensions of the day room are shown on the diagram.



Work out the volume of the day room using the formula:

volume = height x width x depth

Tick the correct box.

$27m^3$	$81m^3$	$8100m^3$

17 **The table shows the amount of overtime that a receptionist has worked in a week.**

Overtime	
Monday	10 minutes
Tuesday	5 minutes
Wednesday	25 minutes
Thursday	35 minutes
Friday	None

How much overtime has been worked in total?

Give your answer in hours to 2 decimal places. 1.25hrs

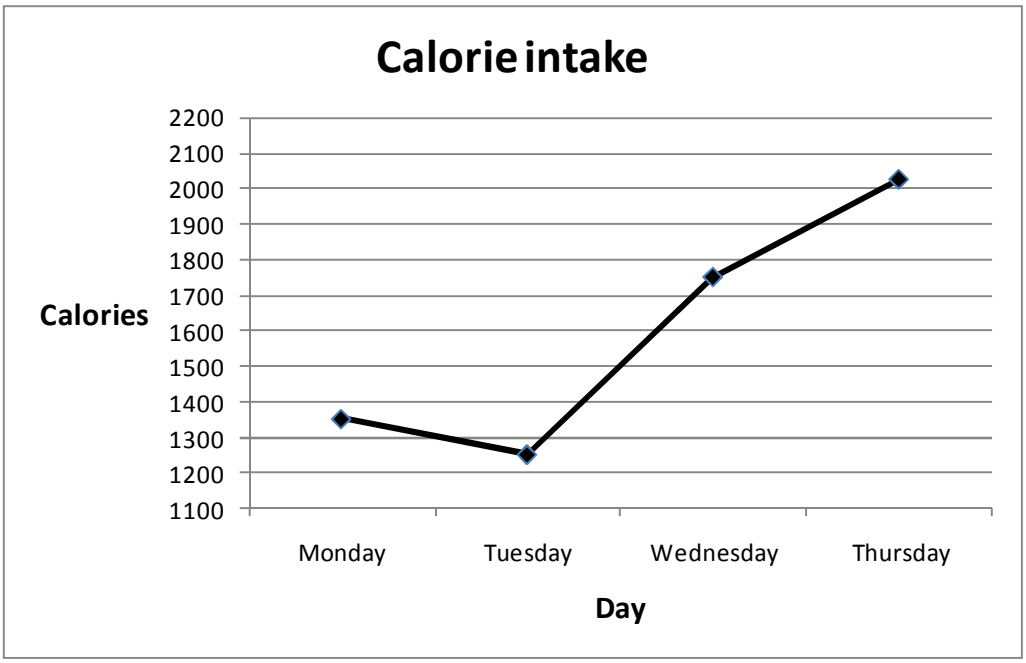
18 **The fluid output from a patient is measured for six days.**

Day	Fluid output in ml.
Monday	785
Tuesday	456
Wednesday	356
Thursday	257
Friday	990
Saturday	876

What is the arithmetic average (mean) value of the patient's fluid output for the six days?

Answer 620 ml

19 **A dietician plots the calorie intake of a patient from their food diary over four days.**



How much more was the patient's intake on Wednesday than it was on Tuesday?

Answer 500 calories

20 **A catering manager has a recipe for bread and butter pudding for 60 people.**

Reduce the quantities so that the recipe will be suitable for 30 people.

Write your answers in the right-hand column.

Recipe for Bread & Butter Pudding		
Ingredients	Quantities for 60 people	Quantities for 30 people
Thick white bread	60 slices	30 slices
Butter	800g	400 g
Raisins	300g	150 g
Sultanas	500g	250 g
Caster sugar	600g	300 g
Eggs	40	20
Full cream milk	3600ml	1800 ml

How are you doing?

Happy to go on?

If not, tell the person administering the Initial Assessment.

21 **An ambulance station serves four districts. The mileage covered in each district last year (to the nearest thousand miles) is shown in the table.**

District	Mileage (in thousands)
Central	48
North	8
West	12
East	4

What fraction of the total mileage was covered by the Central district? Give your answer in its simplest form.

Answer $^{2}/_{3}$

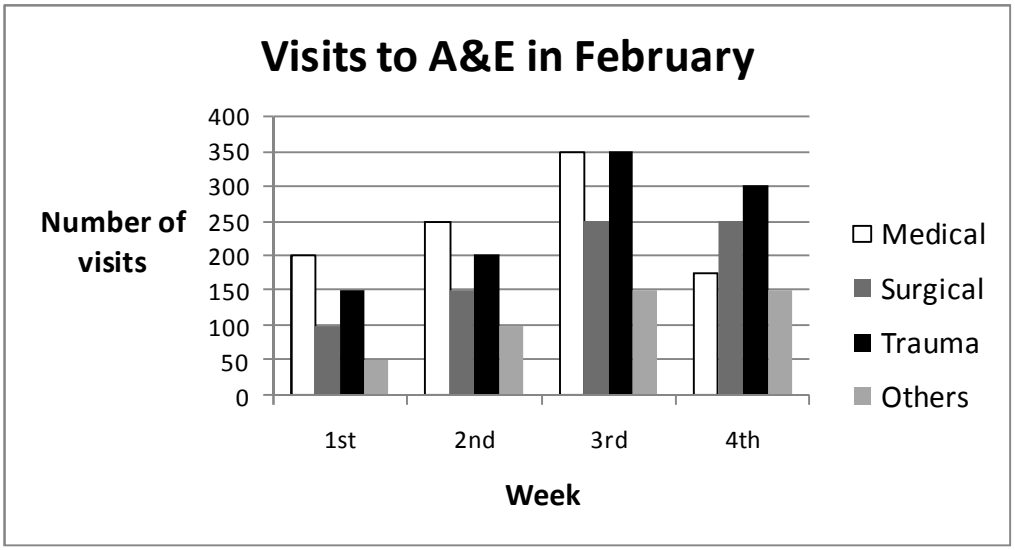
22 **A manager has a draft budget of £57,500.**

The finance department requests a reduction in this budget of 12½%.

Calculate the revised budget to the nearest £10.

Answer £50,310

23 **Clinical audit is monitoring the different categories of patients visiting Accident & Emergency for their February report.**



Which category of patients made the most visits to A&E in February?

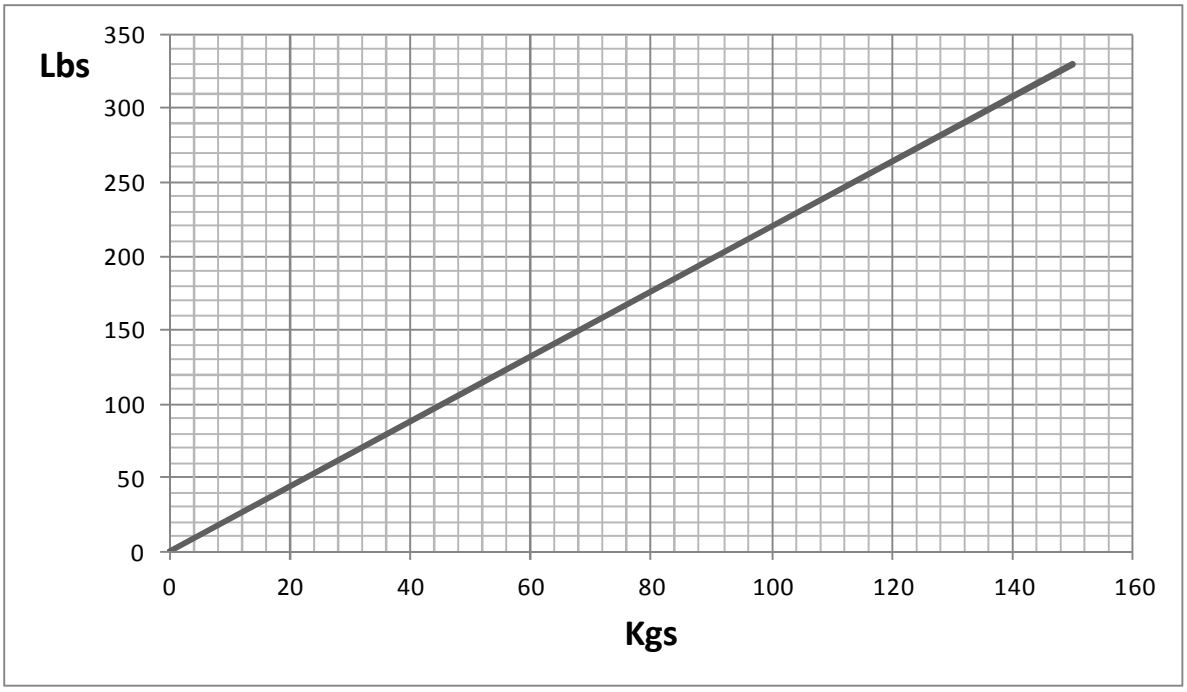
Tick the correct box.

Medical	Surgical	Trauma	Others

24 **A pharmacist has to calculate the weight of a person in kilograms (kgs) in order to dispense the correct dosage of a medicine.**

The patient states their weight is 9½ stones.

Using 1 stone = 14lbs and the lbs/kgs conversion chart below, what does the patient weigh in kilograms?



Answer Accept any answer from 59-61 kgs

25 **A 12 year old child is prescribed 500mg of paracetamol liquid to be repeated every four to six hours.**

The paracetamol liquid strength is 125mg per 5ml.

How many millilitres should the child take for one dose?

Answer 20 ml

Well done! You have finished.