NCFE Level 2 Functional Skills Qualification in Mathematics (603/5060/X)

## Paper number: P001258 Section A: Non-calculator Test



Assessment window: Time allowed:

Monday 14 October 2019 - Friday 18 October 2019 30 minutes

## Learner instructions

- Answer all questions.
- Read each question carefully.
- Write your answers in the spaces provided.
- Show your working, as marks may be awarded for working.
- State units in your answers, where appropriate.
- Check your work.


## Learner information

- Section A contains Activity 1 only.
- The maximum mark for this section is 15.
- The marks available for each question are shown in brackets.


## Resources

You will need a:

- pen, with black or blue ink

| To be completed <br> by the examiner |  | Mark |
| :---: | :--- | :--- |
| A | Activity 1 | $/ 15$ |
| B | Activity 2 | $/ 15$ |
|  | Activity 3 | Activity 4 |

- pencil and eraser
- 30 cm ruler
- protractor.

If extra pages are used, please make sure your name and centre name are on them and they are securely fastened to this booklet.

Please complete the details below clearly and in BLOCK CAPITALS.

## Learner name

Centre name
Learner number $\square$ Centre number $\square$
Do not turn over until the invigilator tells you to do so.
All of the material in this publication is © NCFE.

Examiner use only

This page is intentionally left blank.

## Activity 1: Swimming

1 (a) Asha often goes swimming at Upton leisure centre.
She pays $£ 5.20$ each time she swims.
Next month the price will increase by $12.5 \%$

How much more will Asha need to pay for each swim?

Give your answer in pence.


1 (b) $£ 5.20$ is $30 \%$ more than the price at Downton leisure centre.
Calculate the price at Downton leisure centre.


1 (c) The pool where Asha swims is rectangular.
It is 2500 cm long and 1250 cm wide.

The four sides of the swimming pool are 150 cm deep.

They are covered with small square tiles of different colours.


Each small tile has an area of $1 \mathrm{~cm}^{2}$

Asha thinks,
"There must be over a million small tiles covering the sides of this pool!"
Is Asha correct?

Explain how you decide.

This page is intentionally left blank.
Please turn over for the next question.

1 (d) Asha reads that the women's Olympic record for swimming 100 m is 52.7 seconds.

This means that the record holder swam at an average speed of 1.9 metres per second.

A goldfish can swim at a speed of about 0.9 miles per hour.
Did the Olympic record holder swim faster than a goldfish?

Show how you decide.
This conversion graph will help you.


1 (e) Asha swims 1 km each time she goes to the pool.
She always records how long this takes her.
The table shows her data for 10 swims.

| Time taken to swim <br> $\mathbf{1} \mathbf{~ k m}$ (minutes) | Number of <br> swims |
| :---: | :---: |
| $25<$ time $\leq 26$ | 2 |
| $26<$ time $\leq 27$ | 4 |
| $27<$ time $\leq 28$ | 4 |

Estimate Asha's mean time to swim 1 km

$$
e^{\gamma^{5}} \cdot P^{P^{P^{e^{x}}}}
$$

