**OCN NI Level 1 Certificate in Essential Skills**

|  |  |
| --- | --- |
| **OCN NI Use Only** | |
| **Q** | **Mark** |
| 1a |  |
| 1b |  |
| 1c |  |
| 1d |  |
| 1e |  |
| 1f |  |
| 2a |  |
| 2b |  |
| 2c |  |
| 2d |  |
| 2e |  |
| 2f |  |
| 2g |  |
| 3a |  |
| 3b |  |
| 3c |  |
| 3d |  |
| 3e |  |
| 3f |  |
| **Total** |  |

**Application of Number**

**Buying a Puppy**

**Learner name (Block Capitals)**

**Learner signature**

**Centre**

**Assessment date**

Pass Mark %

Candidate Mark %

**Instructions to candidates:**

**You should have the following for this assessment:**

* Pen with black or blue ink
* Pencil and eraser
* 30 cm ruler
* Calculator
* Protractor

**General Instructions:**

* There are 3 tasks to complete
* You should attempt all tasks
* Each task is worth 15 marks
* Read through each task carefully
* Show your working out; you may get marks for it
* Write all your working out and answers in this booklet
* Check your calculations
* Remember to put units on your answers
* Total marks available: **45**
* You have **1½ hours** to finish the assessment.

**Buying a puppy**

**Task 1 – Getting ready**

Kate has been saving £27.50 per month to buy a puppy.

**1a** How much has Kate saved in a year?

**(1 mark)**

Show your working out **and** answerbelow:

|  |
| --- |
| **1a**  Kate has saved: £\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

The puppy will cost £440.

**1b** How many more months must Kate save to have enough money to buy the puppy?

**(2 marks)**

Show your working out **and** answerbelow:

|  |
| --- |
| **1b**  Months: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Kate’s dad, Joe, makes a dog run in the garden.

A diagram of the dog run is shown below:

*Not drawn to scale*

3m

1m *wide gap for the gate*

1m

1m

Joe fences the dog run, leaving a **1m gap** for the gate.

Fencing panels are 1m wide.

**1c** How many panels does Joe need to fence the perimeter of the dog run?

**(3 marks)**

Show your working out **and** answerbelow:

|  |
| --- |
| **1c**  Number of panels needed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Joe paves part of the floor of the dog run with concrete slabs.

Concrete slabs are 500mm × 500mm.

3m

1m

**1d** How many concrete slabs will Joe need to pave the area shown above?

**(4 marks)**

Show your working out **and** answerbelow:

|  |
| --- |
| **1d**  Number of concrete slabs: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Kate paints the dog kennel**.**

A tin of paint costs **£16.20**

**Shop A**

**Shop B**

**30% discount**

**¼ off the price of paint**

**Wood Paint**

* Shop A offers 30% discount
* Shop B offers ¼ off the price of paint

**1e** What is the difference in price?

**(3 marks)**

You **must** show calculations to justify your answer:

|  |
| --- |
| **1e**  Difference in price: £ \_\_\_\_\_\_­­­­­­­­­­­­­­­­­­­­­­­­­­ |

Kate uses the map below to work out how far away a vet is from her home.

The scale on the map is **1cm : 2.5km**.

The map is drawn to scale.

.

**Vet**

**Kate’s  
house**

**1f** How far is it from Kate’s house to the vet?

**(2 marks)**

Use your ruler to measure to the nearest cm.

Give your answer in km.

Show your calculations **and** answer below:

|  |
| --- |
| **1f**  Distance to the vet: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_km |

**Task 2 – The dog breeder**

Clare is a dog breeder.

In 2017 Clare sold **60** puppies.

The pie chart below shows the different breeds that were sold.

**2a** Clare says she sold **30** Cockapoos in 2017

**(2 marks)**

Show that she is correct.

Use your protractor to measure to the nearest degree.

You **must** show calculations to justify your answer:

|  |
| --- |
| **2a**  Is Clare correct? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Clare sold **ten** poodles in 2017

**2b** Calculate the fraction of all puppies sold, that were **collies.**

**(3 marks)**

You must give your answer in its simplest form.

Show your working out **and** answer below:

|  |
| --- |
| **2b**  Fraction that were **collies**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Clare feeds the puppies **three** times each day.

The amount of puppy food **per day** depends on the age and size of the dog:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Amount of puppy food **per day** | | |
| *Age* | Size of dog | | |
| *Small* | *Medium* | *Large* |
| Less than 11 weeks | 75g | 100g | 160g |
| 3 to 4 months | 95g | 150g | 235g |
| 5 to 7 months | 150g | 200g | 320g |
| 8 to 12 months | 195g | 240g | 445g |

Cockapoo dogs are considered a small breed.

**2c** How much puppy food should a ten-week-old cockapoo puppy be served at each meal?

**(2 marks)**

Show your working out **and** answer below:

|  |
| --- |
| **2c**  Puppy food: \_\_\_\_\_\_\_\_\_\_\_ g |

**2d** Use the table, to work out the ratio of food for a small dog to a medium dog at 6 months old.

**(3 marks)**

You must give your answer in its simplest form.

Show your working out **and** answer below:

|  |
| --- |
| **2d**  Ratio \_\_\_\_\_\_\_\_\_\_ : ­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_ |

The puppy food should be stored at a temperature between -5oC and 24oC.

Clare stores the puppy food in a barn.

One evening the temperature in the barn was -6oC.

**2e** Clare thinks she should move the puppy food to a warmer location.

Is she right?

**(1 mark)**

Give a reason for your answer:

|  |
| --- |
| **2e**  Is Clare right? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**2f** What is the difference in temperature between -5oC and 24oC?

**(1 mark)**

Give your answer below:

|  |
| --- |
| **2f**  Difference in temperature: \_\_\_\_\_\_\_\_\_\_\_ oC |

Clare keeps a record of customers who phone her to find out about buying a puppy.

Last week she recorded the number of phone calls in the bar chart below:

**2g** Calculate the average (mean) number of calls per day she received.

**(3 marks)**

Show your working out **and** answer below:

|  |
| --- |
| **2g**  Average number of calls per day: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**Task 3 – Bringing the puppy home**

The dog breeder closes for business at 5pm.

Customers **must** arrive at least 35 minutes before that time to collect their puppy.

**3a** What is the latest time that a customer can arrive?

**(2 marks)**

Give your answer in the 24 hour clock format.

Show your working out **and** answer below:

|  |
| --- |
| **3a**  Latest arrival time: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Kate and her dad travel to the dog breeder.

The journey takes 1hour 30minutes.

They set off at 14:50

**3b** Using your answer to **3a**, do they arrive in time?

**(2 marks)**

Give a **reason** for your answer.

You **must** show calculations to justify your answer:

|  |
| --- |
| **3b**  Do they arrive in time? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**3c** Provide a check for your answer to **3b.**

**(1 mark)**

Show your working out **and** answer below:

|  |
| --- |
| **3c** |

The distance from Kate’s house to the dog breeder is 102 kilometres.

The journey takes 1hour 30minutes.

**3d** Use the formula below to work out the average speed of the journey.

**(3 marks)**

Give your answer in **km/h**

**AVERAGE SPEED = DISTANCE ÷ TIME**

Show your working out **and** answer below:

|  |
| --- |
| **3d**  Average speed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ km/h |

Kate buys a cockapoo puppy.

She works out her total spending.

**3e** Complete the table below to calculate her total spending.

**(5 marks)**

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Price per item (£) | Number of items bought | Cost (£) |
| Puppy | 450.00 | 1 | 450.00 |
| Collar | 2.10 | 1 |  |
| Lead | 5.50 |  | 5.50 |
| Dog bowls | 3.25 | 2 |  |
| Dog food | 7.99 | 3 |  |
| Basket |  | 1 | 16.65 |
| ***Total before discount*** | | |  |
| ***Less 10% discount*** | | |  |
| **Total spending** | | |  |

Use the space below for your working out:

|  |
| --- |
| **3e** |

Kate wants to take her puppy to a dog training school.

She looks at the reviews of five schools.

The diagram below shows the number of good reviews for each school:

|  |  |
| --- | --- |
| ***Dog training school*** | ***Number of good reviews*** |
| Good Doggy Club |  |
| Pet Wise |  |
| Happy Puppy School |  |
| Walkies |  |
| Sure Start for Dogs |  |
| **Key:** equals 10 good reviews | |

**3f** Calculate the range of the number of good reviews.

**(2 marks)**

Show your working out **and** answer below:

|  |
| --- |
| **3f**  Range: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |