# Ministry of Education, Skills, Youth & Information

# Primary Exit Profile (PEP 5)

# June 2025

# Performance Task - Mathematics

**Time: 1 hour 30 minutes**

**Write your name and the name of your school below:**

Name of Student

Name of School

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**General Instructions:**

**This task has four parts: Part 1, Part 2, Part 3 and Part 4.**

**Part 1 has Questions 1A, 1B and 1C.**
**Part 2 has Questions 2A, 2B and 2C.**
**Part 3 has Questions 3A, 3B, 4A and 4B.**
**Part 4 has Question 5.**

**Instructions to Begin:**

**Read the information in each part carefully. Use the information provided to answer ALL questions in each part.**

## Introduction to Task

### The Parking Lot

Mr. Morgan, the principal from New Hampshire Primary, is concerned about the limited parking space for teachers and visitors at the school. The current parking lot on the inside of the school can only hold **30 vehicles**. The rest of the vehicles have to park on the outside of the school. Mr. Morgan wants to use a section of the football field to build a new parking lot. He will need to present his plans to the School Board.

Help Mr. Morgan to:

1. determine the total number of vehicles that are being parked at school each day
2. select the parking design that works better for the new parking lot
3. calculate the area for the new parking lot
4. calculate the number of concrete slabs for the new parking lot
5. make a conclusion about the new parking lot

## Part 1: Number of Vehicles

New Hampshire Primary has visitors at the school daily. On average, about 20 vehicles have to park on the outside of the school. The **pictograph** below shows the **total number** of vehicles parked **INSIDE** and **OUTSIDE** of the school each day in a given week.

The image of each **CAR** represents **10 vehicles**.

**Pictograph Showing the Number of Vehicles Parked at the School Each Day**

| Days of the Week | Number of Vehicles |
|---|---|
| **Monday** |  |
| **Tuesday** |  |
| **Wednesday** |  |
| **Thursday** |  |
| **Friday** |  |
| **Key:**  **= 10 Vehicles** | |

## Question 1

**Table 1** shows the total number of vehicles parked at the school, inside and outside, each day in a given week.

**1A.** Complete **Table 1** using the pictograph on page 4.

**Table 1**

| Days of the Week | Number of Vehicles Parked at the School Each Day |
|---|---|
| Monday | 60 |
| Tuesday | _____ |
| Wednesday | 40 |
| Thursday | _____ |
| Friday | 50 |

**1B.** On which day is the **LEAST** number of vehicles parked at the school?
*Write **the day** in the space provided below.*

**1C.** Which **DAY** has 10 vehicles **more than** the number of vehicles on Tuesday?
*Put a tick* ( ✓ ) in the box *beside **the day** that you have selected.*

- ☐ Monday
- ☐ Tuesday
- ☐ Wednesday
- ☐ Thursday
- ☐ Friday

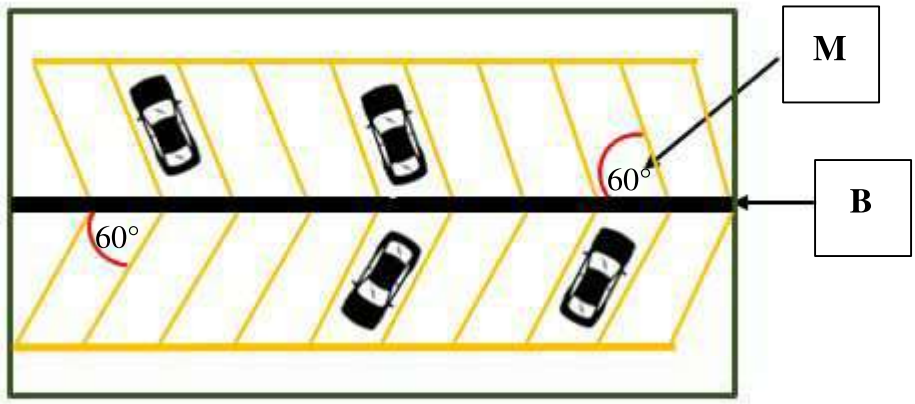
## Part 2: Parking Lot Design

### Question 2

Mr. Morgan wants to use a section of the football field to create the new parking lot. After doing some research, Mr. Morgan found two designs that could be used for the new parking lot.

## Design 1

**Design 1** has slant parking. The lines of each parking space in the parking lot form an angle of 60° (labelled M) with the **BORDER** (labelled B).



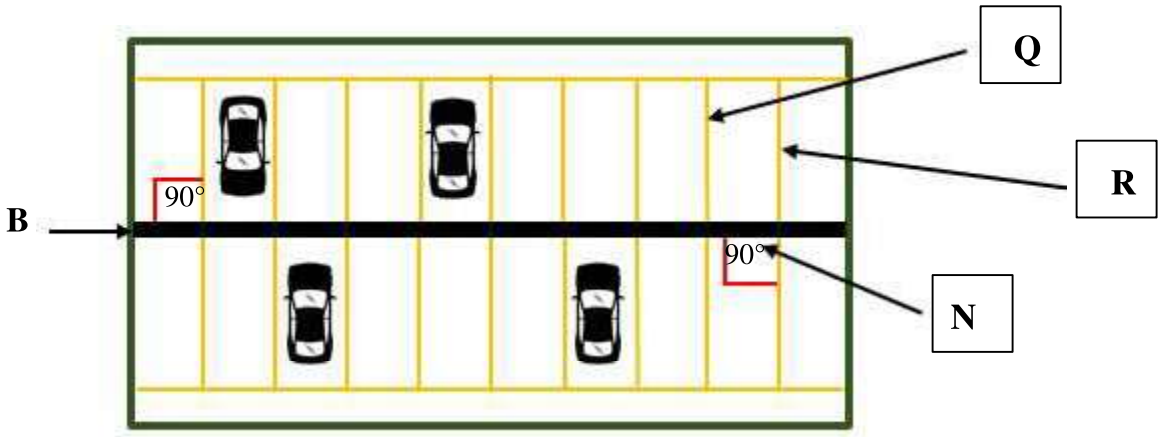

**2A.** For the parts labelled M and B in **Design 1**, select the best word which describes each part. Put a tick ( ✓ ) in the box to show your selection.

| | | | |
|---|---|---|---|
| **M** | Acute Angle ☐ | Right Angle ☐ | Obtuse Angle ☐ |

| | | | |
|---|---|---|---|
| **B** | Perpendicular Lines ☐ | Horizontal Line ☐ | Parallel Lines ☐ |

## Design 2

**Design 2** has straight parking. The lines of each parking space in the new parking lot form an angle of **90°** (labelled N) with the **BORDER** (labelled B).




**2B.** For the parts labelled N, and Q & R in **Design 2**, select the best word which describes each part. Put a tick ( ✓) in the box to show your selection.

| | | | |
|---|---|---|---|
| **N** | Acute Angle ☐ | Right Angle ☐ | Obtuse Angle ☐ |

| | | | |
|---|---|---|---|
| **Q & R** | Perpendicular Lines ☐ | Intersecting Lines ☐ | Parallel Lines ☐ |

**2C.** Which **DESIGN** would use up the space better for the new parking lot?
*Put a tick ( ✓) in the box beside **the design** you have selected.*

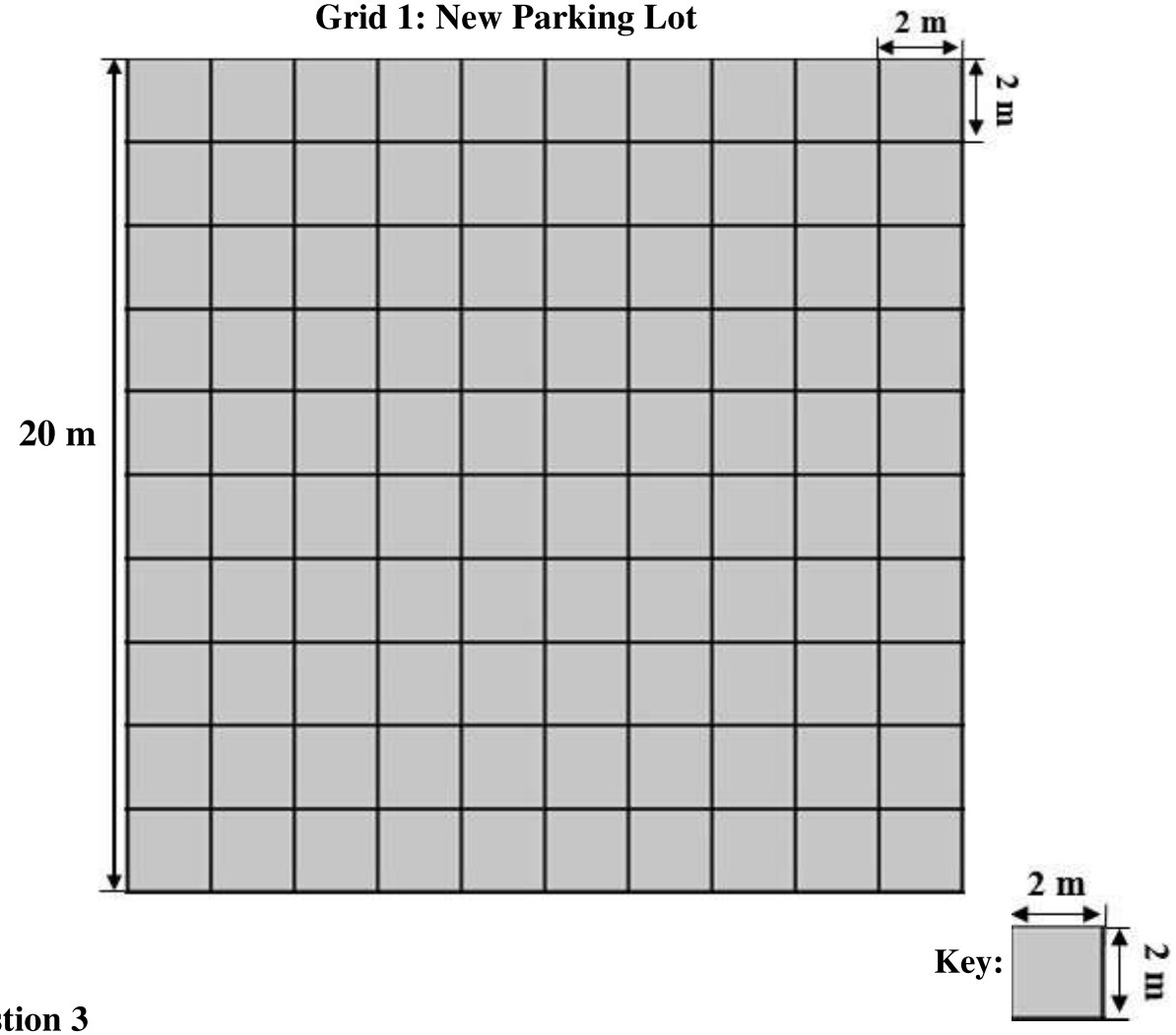
**Design 1** ☐ **Design 2** ☐

Explain the reason for your choice in the space provided below.

## Part 3: New Parking Lot

**Grid 1** (*not drawn to scale*) represents the part of the football field Mr. Morgan will use for **the new parking lot**.

**Grid 1: New Parking Lot**




**Question 3**

**3A.** **Using Grid 1** as a guide, calculate the **AREA** of the **new parking lot**.

*Show your work in the space provided below.*



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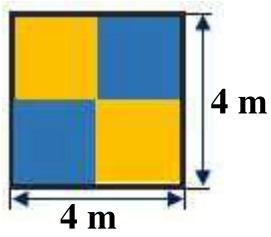
Mr. Morgan also wants to use **concrete slabs** on the surface so that vehicles do not skid, especially when it rains. **Diagram 1** *(not drawn to scale)* represents **ONE** of the **concrete slabs** Mr. Morgan will use to cover the new parking lot. **Concrete slabs** are designed to handle all kinds of weather.

**Diagram 1: One Concrete Slab**

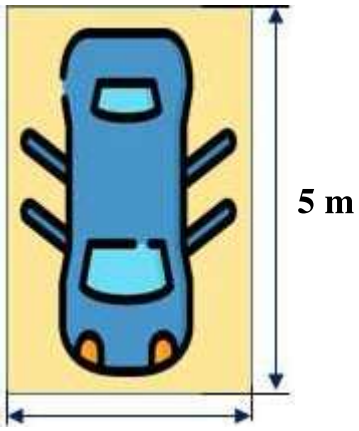



**3B.** How many **concrete slabs** will Mr. Morgan need in order to cover the new parking lot?
Use **Grid 1** to help you.
*Show your work in the space provided below.*

**Question 4**

To maximise the space in the new parking lot, Mr. Morgan needs to know the estimated area that one vehicle will occupy. **Diagram 2** *(not drawn to scale)* shows the **length** and **width** of the space that one vehicle will occupy when the doors are open.

**Diagram 2**




**4A.** What is the **estimated area** that one vehicle will occupy when the doors are open? *Show your work in the space provided.*

On average, about **20 vehicles** have to be parked on the outside of the school.

**4B.** What is the **total area** that **20 similar vehicles** will occupy when the doors are open?

**Use your answer to question 4A to help you**.

*Show your work in the space provided.*

## Part 4: Presentation to the School Board

Remember, the current parking lot on the inside of the school can *only hold* **30 vehicles**. The rest of the vehicles have to be parked on the outside of the school.

Mr. Morgan presented his plans for the new parking lot to the School Board. The Board was concerned that on Mondays the space would still not be enough. However, Mr. Morgan believes that there will be enough space for the additional vehicles on Mondays.

### Question 5

Do you agree **OR** disagree with Mr. Morgan that there is enough space on Mondays?

*Put a tick ( ✓ ) beside the answer you have chosen.*

- ☐ I agree, there is enough space.
- ☐ I disagree, there is **NOT** enough space.

Explain your response in the space provided below.

**Use calculations to support your response**.

# Primary Exit Profile - 2025

Name: _____

Date of Birth: _____

School Name: _____

School Code: _____

Centre: _____

Parish: _____

Name of Test: PERFORMANCE TASK (PEP5) 2025 - MATHEMATICS

**IDENTIFICATION NUMBER**

| | 0 1 2 3 4 5 6 7 8 9 |
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(A) Absent

**SCHOOL CODE**

| | 0 1 2 3 4 5 6 7 8 9 |
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## GENERAL INSTRUCTIONS

**Read the instructions below before answering the questions in the booklet:**

1. Write the answer to all questions in your test booklet.
2. Read each instruction carefully, before responding to the questions in each part.
3. Ensure that all questions are answered.

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Bringing Abilities to Light

**BOOKLET # ASSIGNED**



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