



**Ministry of Education, Youth and Information**

**Primary Exit Profile (PEP 4)**

**May 2019**

**Mathematics**

**Time: 1 hour 30 minutes**

**PLACE LABEL HERE**



Name of Student

Name of School

Name of Class

**DO NOT OPEN THIS BOOKLET UNTIL TOLD TO DO SO**

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## General Instructions

Read the Introduction to the task below then answer ALL the questions that follow. ALL answers must be written in this booklet.

### Introduction to Task

#### Starting a Chicken Farm

Your school wants to start a chicken farm in order to provide meat for the canteen and to raise funds for the school. There is a plot of unused land to the back of the school that the principal has identified to place a chicken coop for the farm.

You have been asked to help your principal to:

- determine the number of chickens the coop will fit
- determine the number of feeders needed
- calculate cost of the feeders needed



Source: Amazon.com

**The rectangular base of the chicken coop has a length of 10 m and a width of 4 m.**

1. Draw the outline of the base of the chicken coop in the grid below.

Each square represents  $1 \text{ m}^2$



2. What is the area of the base of the coop in  $\text{m}^2$ ?
3. Each chicken needs a floor space of approximately  $\frac{1}{2} \text{ m}^2$ .  
What is the maximum number of chickens that will fit in the coop?  
Show your work.

The table below shows the number of chickens that three (3) parents wish to donate. Use the information in the table to help you answer question 4.

Parent	Number of Chickens
Mrs Grey	100
Mr White	70
Miss Brown	50

4. **Based on your response in question 3**, which parent's donation would you suggest the school take?  
Explain your choice.

5. The chickens need feeders from which to eat.  
Ten (10) chickens use one (1) feeder.

**Based on your response in question 4**, how many feeders will be needed for the farm?

Show your work.

**A farm store has two options when selling the feeders. The options are outlined in the table below. Use the information in the table to help you answer question 6.**

<b>Option A</b>	<b>Option B</b>
Feeders are sold individually. One (1) feeder costs \$300.00.	Feeders are sold by the case. One case has five (5) feeders. One case costs \$1300.00.

- 6.** Which option is better for the school? Explain your choice.