

# The PRU Farm

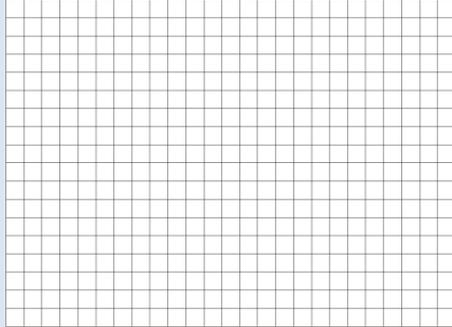
Design a...  
**'Self Sufficient Farm'**

WALT:  
Think about perimeter and area in context



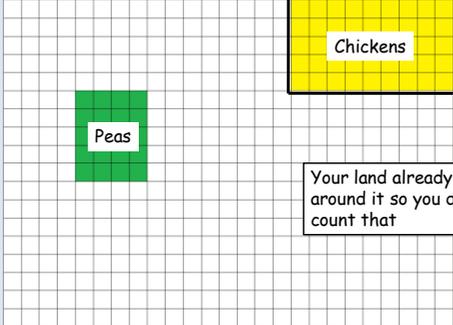
LO: Think about perimeter and area in context

Your task is to design a farm.



You have been given a sheet of A4 square paper.  
This will be your farm yard space.

LO: Think about perimeter and area in context



Peas

Chickens

Your land already has a fence around it so you don't need to count that

You will have to divide up the paper into the sections you want and add labels and a bit of colour.  
If you have animals then you will need to fence them in.  
There is limit on the fencing you have available. You can only draw on 150 of the 1cm lines

LO: Think about perimeter and area in context



Each square will have a value that it will add or take away from the farm depending on what you put on it.

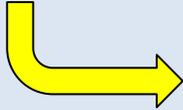
For example, each square of carrots you grow will add £10 to your total value.




You want to maximise the total value of your farm.

LO: Think about perimeter and area in context

You have been given this sheet that tells you how much value you get for each animal square or vegetable square etc.



Farm Yard Values		
	When planting potatoes you will need to use at least 10 squares to make it worth while. You can only sell enough potatoes for 100.	€12 for each square
	When planting carrots you will need to use at least 10 squares to make it worth while. You can only sell enough carrots for 100.	€10 for each square
	When planting parsnips you will need to use at least 10 squares to make it worth while. You can only sell enough parsnips for 100.	€11 for each square
	When planting peas you will need to use at least 10 squares to make it worth while. You can only sell enough peas for 100 squares.	€10 for each square
	You could have some squares for meat and some for eggs or all for just one of these. If you have chickens you need to cover at least 30 squares, but no more than 150 squares.	Free Range for Eggs: +€4 Free Range for Meat: +€6 Non-Free Range Eggs: +€6 Non-Free Range Meat: +€9
	You can use cows to produce milk or meat. Cows need at least 50 squares. You can only have a maximum of 200 squares for cows.	Meat Value: €12 for each square Milk Value: €8 for each square
	Half of all duck squares must be labelled as pond area. Ducks can be used for eggs or meat. You cannot have a pond bigger than 40 squares, but it needs to be at least 9 squares.	Egg Value: €5 for each square Meat Value: €8 for each square

LO: Think about perimeter and area in context

There are a few constraints when building a farm.

You have been given a sheet with all the things you need to consider on it.

**Farm Yard Constraints**

- Only up to half of your animals are allowed to be used for meat so that they can repopulate.
- You must include the farm buildings.
- You only have 150 lengths of fencing to use.
- If you have goats and at least two other animals you will add an extra €100 to your total value from school visits.
- At least a half of your chickens have to be free range to stop animal rights protesters.
- You must grow at least three types of vegetable.

LO: Think about perimeter and area in context

- You must grow at least three types of vegetable.
- At least a half of your chickens have to be free range to stop animal rights protesters.
- You only have 150 lengths of fencing to use.
- You must include the farm buildings.
- If you have goats and at least two other animals you will add an extra €100 to your total value from school visits.
- Only up to half of your animals are allowed to be used for meat so that they can repopulate.

LO: Think about perimeter and area in context

Once you have designed your farm you need to think of a 'suitable' name for it.

**Smarty McSmartface Farm**

<b>Animals</b>	<b>Vegetables</b>
Chickens FR Eggs: €6 x 38 squares = €228 Cows Milk: €8 x 50 squares = €400 Ducks Eggs: €5 x 40 squares = €200 Sheep: €10 x 50 squares = €500 Horses: €15 x 80 squares = €1200 Goats: €2 x 21.5 squares = €43 (+€100 Schools) <b>Total = €2483</b>	Potatoes: €12 x 100 squares = €1200 Carrots: €10 x 18 squares = €180 Parsnips: €11 x 100 squares = €1100 Peas: €10 x 15 squares = €150 <b>Total = €2630</b>
Duck Pond Duck Land Farm House Stables Sheeds Horses Goats Chickens Cows Sheep Peas Carrots	Potatoes Parsnips
<b>Buildings</b> Farm House: €0 x 11 squares = €0 Sheeds: €10 x 10 squares = €100 Stables: €8 x 5 squares = €40 <b>Total = €140</b>	
<b>Total Farm Value = €2483 + €2630 - €140 = €4973</b>	

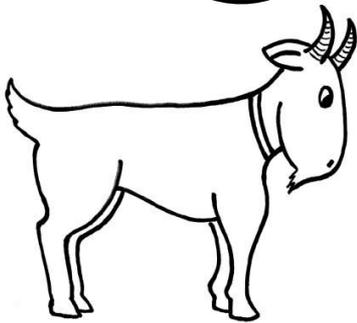
## Farm Yard Constraints



Only up to half of your animals are allowed to be used for meat so that they can repopulate.

You must include the farm buildings.

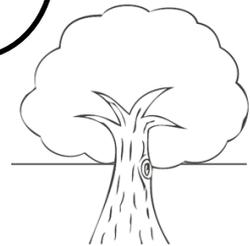
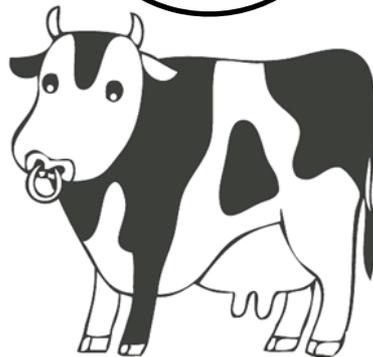
You only have 150 lengths of fencing to use.



If you have goats and at least two other animals you will add an extra £100 to your total value from school visits.

At least a half of your chickens have to be free range to stop animal rights protesters.

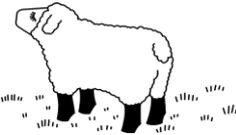
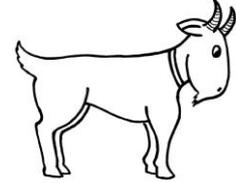
You must grow at least three types of vegetable



## Farm Yard Values

<p>Potatoes</p> 	<p>When planting potatoes you will need to use at least 10 squares to make it worth while. You can only sell enough potatoes for 100.</p>	<p>£12 for each square</p>
<p>Carrots</p> 	<p>When planting carrots you will need to use at least 10 squares to make it worth while. You can only sell enough carrots for 100.</p>	<p>£10 for each square</p>
<p>Parsnips</p> 	<p>When planting parsnips you will need to use at least 10 squares to make it worth while. You can only sell enough parsnips for 100.</p>	<p>£11 for each square</p>
<p>Peas</p> 	<p>When planting peas you will need to use at least 10 squares to make it worth while. You can only sell enough peas for 100 squares.</p>	<p>£10 for each square</p>

<p>Chickens</p> 	<p>You could have some squares for meat and some for eggs or all for just one of these. If you have chickens you need to cover at least 30 squares, but no more than 150 squares.</p>	<p>Free Range for Eggs: +£4          Free Range for Meat: +£6          Non-Free Range Eggs: +£6          Non-Free Range Meat: +9</p>
<p>Cows</p> 	<p>You can use cows to produce milk or meat. Cows need at least 50 squares. You can only have a maximum of 200 squares for cows.</p>	<p>Meat Value: £12 for each square          Milk Value: £8 for each square</p>
<p>Ducks</p> 	<p>Half of all duck squares must be labelled as pond area. Ducks can be used for eggs or meat. You cannot have a pond bigger than 40 squares, but it needs to be at least 5 squares.</p>	<p>Egg Value: £5 for each square          Meat Value: £8 for each square</p>

<p>Sheep</p> 	<p>Sheep are used for both wool and meat. The smallest field for sheep is 50 squares and the largest if 150 squares.</p>	<p>Total Value: £10 for each square</p>
<p>Horses</p> 	<p>If you have a field of horses you will also have to include some stables. You get money from these by people riding. They are good at attracting schools. If you include them you have to use them on 80 squares.</p>	<p>Value: £15 for each square</p>
<p>Goats</p> 	<p>Goats are only used for milk. They do not bring in a great deal of money themselves but the school children love them. To have goats they need at least 20 squares.</p>	<p>Value: £2 for each square</p>

<p>Farm House</p> 	<p>You must include a farm house. This needs to be at least 8 squares but can be as big as you would like.</p>	<p>Value: £0 for each square</p>
<p>Sheds</p> 	<p>You must have 1 shed square for every different animal/vegetable that you use to put in your equipment and tractors. You can have additional sheds as well, but they do not bring in any money and just cost to build.</p>	<p>Value: -£10 for each square</p>
<p>Stables</p> 	<p>If you have horses you must build some stables. These take up 5 squares and must be next to the horse field.</p>	<p>Value: -£8 for each square</p>
<p>Open Field</p> 	<p>You can leave space as an open field. However, you still have to look after the land.</p>	<p>Value: -£3 for each square</p>

