

Work Email



From: Boss
To: You

2:39 PM

RE: New Position

Good Afternoon,

You have been a hard working reporter with us for the last 7 years. Your articles have been read by thousands of readers and their feedback has been positive. Your investigative skills are impressive which allow you to dive into areas to find the information our readers are looking for.

As a result of this, we have decided to move you to another section of our magazine. You will now be reassigned to the agriculture section. You will need to write articles which capture facts in the world of agriculture.

We know you will succeed in this new position. Your first article will be featured in our next issue.

Congratulations!

Sincerely,

Boss

**FIND
THE
FACTS!**

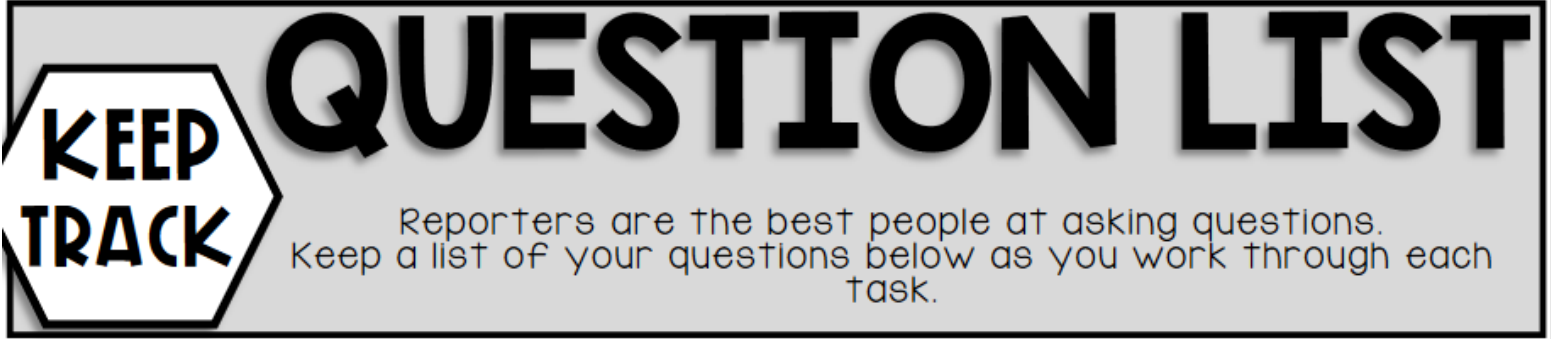
GETTING STARTED

Congratulations on the new position!
You are excited about this new opportunity, however you do not know the first thing about agriculture.

You contact a local farmer and ask if you can visit the farm to collect information that you will need for your articles.
The farmer is more than happy to help.

**Work through the tasks to collect information.
Keep track of your tasks as you complete them.**

TASK NUMBER/NAME	
TASK 1: CLASSIFYING CROPS	
TASK 2: SEEDING CALCULATIONS	
TASK 3: CROP YIELD	
TASK 4: AUGER FACTS	
TASK 5: BUYING EQUIPMENT	
TASK 6: AGRICULTURE ARTICLE	
BONUS TASK: ASK A FARMER	



QUESTION LIST

KEEP TRACK

Reporters are the best people at asking questions. Keep a list of your questions below as you work through each task.

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TASK 1

CLASSIFYING CROPS

Crops can be classified into groups according to their characteristics and uses.

DISCOVER FACTS ABOUT EACH CROP BELOW.

CANOLA



Canola is harvested for its seed. It is used in oil, margarine, salad dressings, & more.

CARROTS



Carrots grow in the ground and are full of vitamins & minerals.

OATS



Oats are grown for their seeds, which are commonly used in oatmeal & oat flour.

POTATOES



potatoes contain carbohydrates. The plant is visible on top of the soil, while the tuber grows below.

FLAX



Flax is grown for its seeds. They are used in linseed oil & margarine.

LEGUME

Although soybeans contain a high amount of oil, they are classified as a **legume**, not an oilseed. They are used for oil, margarine, salad dressings, tofu, milk, cheese, flour, and much more!



SOYBEANS

PULSE CROP

Lentils are classified as a **pulse** crop as their seeds are dry & edible. Pulse crops are high in fibre, carbohydrates, & low in fat. Lentils are an excellent source of protein.



LENTILS

CORN



Corn is a tall grass that is grown for uses such as corn flour, corn oil & corn chips.

BARLEY



Barley is a grass crop used in breads, cereals, porridges & much more.

SUNFLOWERS



Sunflowers are grown for their seeds. Once crushed, they produce cooking oil.

WHEAT



Wheat is a grass harvested for its seeds. Breads, cereals, & flours are all made from wheat.

RYE



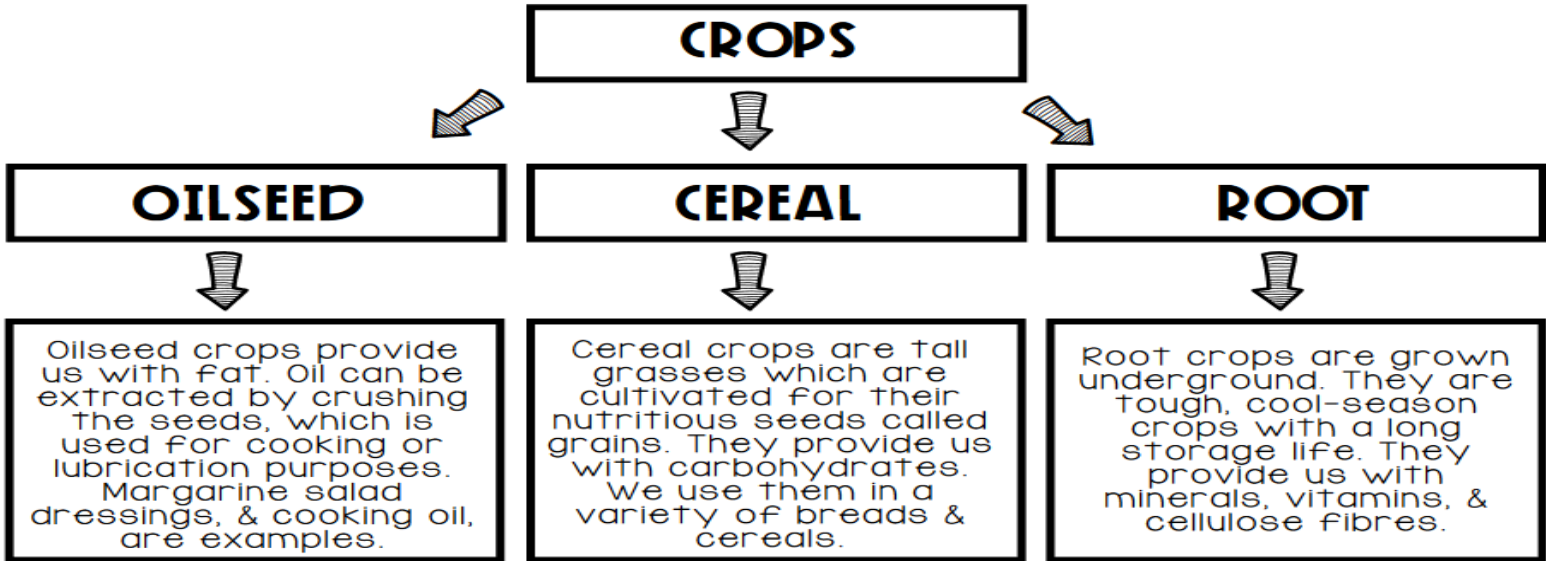
Rye is a grass grown for flour, bread, and some alcohols.

TASK 1

CLASSIFYING CROPS

Farmers need to know what type of crop they are growing. After reading the previous page, the farmer asks if you can identify crops according to three categories, oilseed, cereal, or root crop.

Determine if the crop is an oilseed, cereal, or root crop. Write your answer below the picture.



CANOLA



CARROTS



OATS



POTATOES



FLAX



CORN



BARLEY



SUNFLOWERS



WHEAT



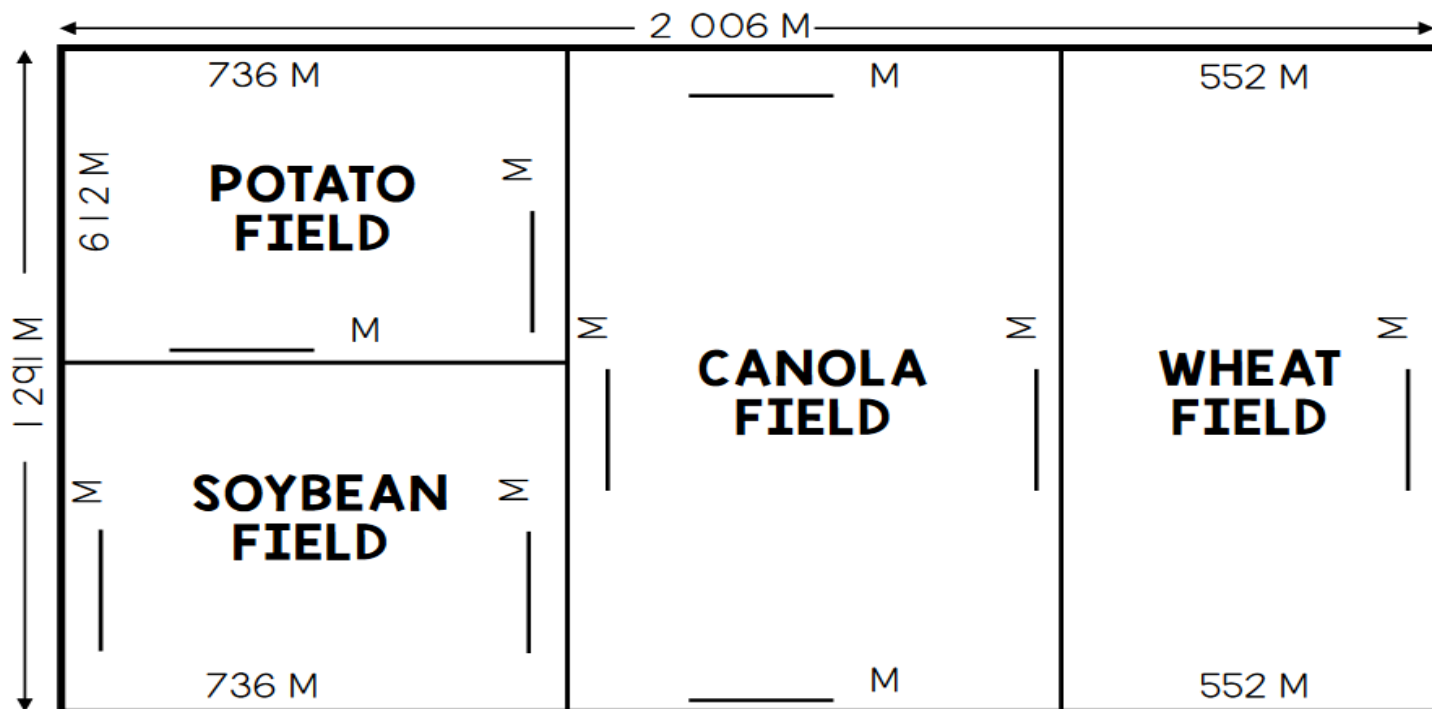
RYE



TASK 2

SEEDING CALCULATIONS

Use a calculator to figure out the perimeter of each field to calculate the area. Then calculate how much seed the farmer will need for each field.
Although seed is sold in different units, for this task, use bags which are 22 kg of seed for all crops.



CROP INPUT	COVERAGE (AREA) / BAG
POTATOES	110 Metres ²
SOYBEANS	2 200 Metres ²
CANOLA	40 500 Metres ²
WHEAT	2 000 Metres ²

FIELD CROP	AREA (Metres ²)	BAGS OF SEED NEEDED (ALWAYS ROUND THE NUMBER UP)
POTATOES	612 x 736 = 450 432	450 432 ÷ 110 = 4 094.83 (4 095)
SOYBEANS		
CANOLA		
WHEAT		

TASK 3

CROP YIELDS

Yields are how much crop a field produces.
Crop yields fluctuate each year due to a number of factors.
The farmer has provided data for the last 5 years for
canola and wheat.

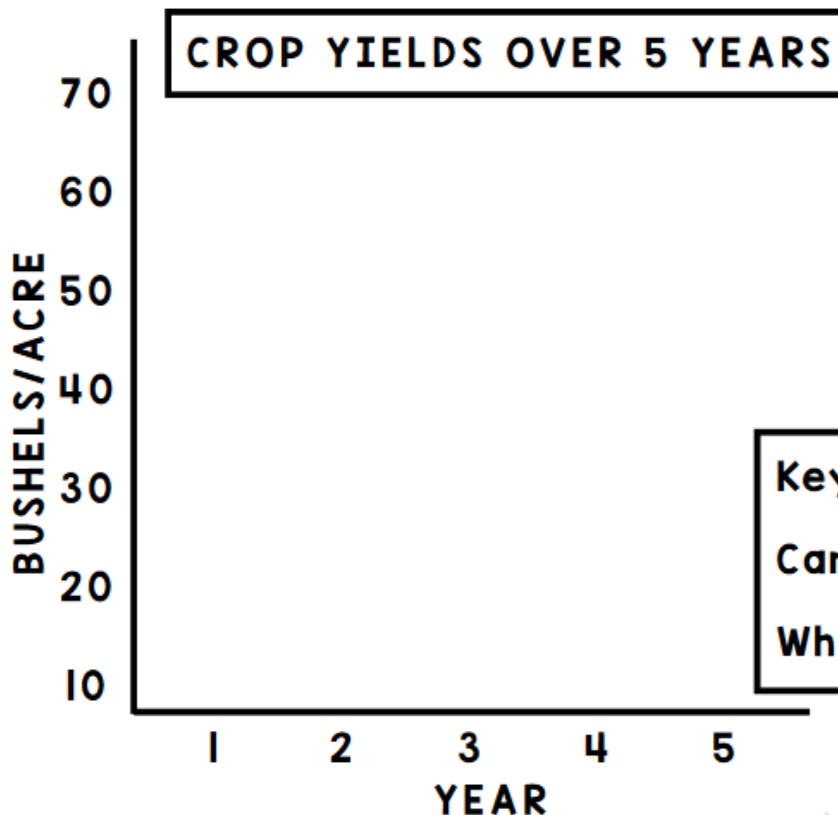
Create a line plot for the data then answer the questions.

CROP YIELDS OVER 5 YEARS

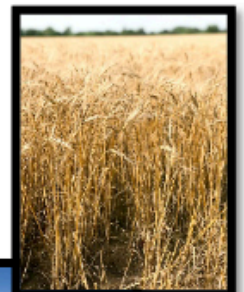
YEAR	CANOLA BUSHEL/ACRE	WHEAT BUSHEL/ACRE
1	50	60
2	45	40
3	30	50
4	55	40
5	40	50

What factors might effect the yield of crops?

If the farmer seeded the same amount of acres for both crops, which crop yielded the most after 5 years?



What year was the worst for growing wheat? Canola?



SIMPLE MACHINES

What simple machine(s) does an auger represent?

LEVER	GEAR	SCREW	PULLEY	INCLINED PLANE
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Explain why: _____

Simple Machine	FARM Equipment
Lever	
Gear	
Screw	
Pulley	
Inclined Plane	

TASK 5

BUYING EQUIPMENT

The farmer needs to replace some equipment over the next five years.

The budget is \$850 000.

Using the next page as a guide, what would you recommend the farmer buy?

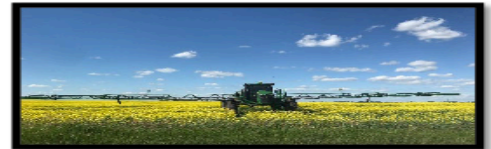
BUDGET: \$850 000



TRACTOR
\$250 000



AIR DRILL
\$50 000



SPRAYER
\$250 000



SWATHER
\$90 000



COMBINE
\$300 000.



GRAIN TRUCK
\$40 000



AUGER
\$10 000



GRAIN BIN
\$40 000



SEMI TRUCK
\$200 000

TASK 5

BUYING EQUIPMENT

Buying machinery is a big task and the farmer decides to let you try making a plan.

Read the requirements below and make your recommendation.

REMEMBER: THE BUDGET IS \$850 000 OVER 5 YEARS

- » The farmer cannot spend over \$350 000 per year.
- » The tractor the farmer was using has blown the engine and will need to be replaced immediately.
- » The farmer plans on hiring a trucking company to move canola when it is time to sell it so a semi truck is not needed.
- » Bin space is an issue and more bins will need to be purchased over the next 5 years. 4 more bins would be ideal.
- » The farmer has an auger that should last 3 more years.
- » Another combine will be needed in the next 2 years, the farmer plans on buying more land.
- » When you buy another combine, another grain truck will be needed the same year.
- » The swather the farmer is currently using will not last another 4 years.
- » The air drill was bought last year and should not need to be replaced.
- » The farmer paid someone to spray the crop this year and plans to do this for the next 5 years.

EQUIPMENT PIECE	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	TOTAL AMOUNT SPENT OVER 5 YEARS
TRACTOR						
COMBINE						
SWATHER						
GRAIN BIN						
GRAIN TRUCK						
AIR DRILL						
SEMI TRUCK						
SPRAYER						
AUGER						
TOTAL AMOUNT SPENT PER YEAR						

AGRICULTURE ARTICLE

Be sure to include important points that your readers will want to read about.

- ☐ Catchy Title
- ☐ Organization
- ☐ Fascinating content
- ☐ Interesting first sentence
- ☐ Smart choice of words
- ☐ Strong summary
- ☐ Editing

**WRITE AN ARTICLE
THAT WILL KEEP
YOUR READERS
ENGAGED AND
INFORMED!**

This may be your visit to the farm (make up a farmer name) and/or from a real farmer interview.

Information I want to include in my article: