



THE PANTHER PRIDE

Middle School Edition

Gardening Week

"There are no gardening mistakes, only experiments."

~ Janet Kilburn Phillips

What an amazing time of year! Flowers are blooming. Leaves are popping out on trees. Lawns are greening up. Summed up in one word...a time of **GROWTH!**

Watching things grow is fascinating. But nurturing and helping something grow is rewarding.

Earlier this spring, some of us planted seeds inside in containers, waiting for them to become strong enough to plant outside. While others of us are waiting for the soil to warm up enough to sow our seeds in the garden.

Gardening is a lot of work. But it doesn't have to cost that much. Everyday, we throw away parts of fruits and vegetables that we could use to regrow more! For free!

Your Challenge:

Grow food from parts of the vegetable/fruit.

Don't Throw That Away!

Growing food with kitchen scraps.

It can save you money, cut down on food waste, and teach valuable lessons about nature and sustainability! Scraps still have plenty of life left. They can be grown inside all year long, or be moved to the garden. Try some of these out!

Bottoms/Base: Celery & Romaine

- Cut off the plant's base (the part you would normally throw away). It must be at least 1 inch tall.
- Place it base down in about 1/2 an inch of water.
- Refresh the water every couple of days.
- Plant in soil when you see new green growth.

Roots: Onions Green Onions & Garlic

- Cut off the root end. It must be at least 1.5 inches tall.
- Place it water and wait a couple of days for it to callous over.
- Plant it in soil root-side down.

Peel: Potatoes

- Potatoes have eyes on them. If you've ever had the job of sprouting potatoes, it's out of the eye that the spout grows.
- Cut a 2 inch cube with the peel on it. Make sure it has at least 1 eye...2 or 3 are better!

- Let them dry out over night.
- Plant deep in the soil, 4 inches apart, eyes facing up.

Stem: Basil & Cilantro

- Snip a length of the stem that still has leaves on it.
- Place the end of the stem in water.
- Soon, roots will grow out of the end of the stem. That's when it's ready to be planted.

Seeds: Tomatoes, Peppers, etc.

- Save the seeds!
- Let them dry.
- Plant in soil.

Experiment with other fruits and veggies.

Video: [How to Regrow Everything](#)

Video: [Gardening Hacks & Tips](#)



It All Starts With A Seed

All the plants around you start life as a seed.

Without seeds, there would be no plants and Earth would be a **barren** place that would not support the many forms of life that surround us every day. Seeds are usually fairly small. Some are even tiny. Despite their small size, though, seeds contain food and all the instructions necessary to **sprout** to life as a plant. When seeds are planted, they first grow roots. Once these roots take hold, a small plant will begin to **emerge** and eventually break through the soil. When this happens, we say that the seed has sprouted. The scientific name for this process is **germination**.

As the plant grows and begins to make its own food from **nutrients** it takes from the soil, it will grow into a larger plant. The seed itself is like a survival package. It contains the food the seed needs while it is growing roots and forming into a small plant. The three things plants need to grow are light, food and water. Light, whether from the Sun or an artificial light source (like a light bulb), gives the small plant the energy it needs to begin photosynthesis. **Photosynthesis** is the process the plant uses to convert light energy into food.

Like all living things, plants need water. Once a seed sends out roots, these roots will deliver water from the soil to the plant. As the plant grows and needs more water, roots will grow longer and stretch farther to find the necessary water in the soil. When you get dry seeds at a gardening store, the seeds are **dormant**, which means they're inactive. All it usually takes to wake them up, though, is just to add water. Whether you plant them in moist soil or simply wrap them in a moist paper towel, they will begin to come to life.

Amazingly, scientists still don't fully understand what all happens inside of a seed as it comes to life. As the seed soaks up water, its food stored inside begins to be converted into energy in the form of enzymes. These enzymes start the process of sending out roots and sprouting the first parts of the plant. Exactly how all this works is still a bit of a mystery, but it is fascinating to watch whether you're a child or an adult!



Gotta Love Gardening

It's that time of year!

The time of year when gardeners love to feel the sunshine and dig in the dirt.

Using any available materials you have at home, draw, colour or paint what you would want in your garden. It can be a flower garden, vegetable garden or a combination of both.

OR

If you could create your own special flower, what would it look like?

Draw, colour or paint it.

Get Out Of Here!

Top 5 Culprits of Garden Destruction

1. **Deer:** Managing their impact is very expensive due to their size. Most obvious and less harmful solution is commonly fencing.
2. **Groundhogs:** If seen, catch and release far away from your home with a nonlethal trap!
3. **Rabbits:** A repellent that is safe for the environment is the easiest way to prevent them from entering your garden.
4. **Raccoons:** Due to their intelligence, these animals require multiple tactics to scare away, such as fences, trapping and repellent.
5. **Squirrels:** These animals are small enough to get through the smallest spaces and able enough to climb fences with ease. Repellent is best choice.

1. Go through the text and find the **definition** of the highlighted words.
2. Name something you already **knew**, something you **learned** and a **question** that you have after having read the text above!



$$\begin{aligned} \text{🌻} + \text{🌻} &= 18 \\ \text{🌻} \times \text{🌱} &= 72 \\ \text{🌺} \times \text{🌱} &= 12 \\ \text{🌻} - \text{🌺} &= ? \end{aligned}$$

$$\begin{aligned} \text{🌻} + \text{🌻} + \text{🌻} &= 24 \\ \text{🌺} + \text{🌻} + \text{🌻} &= 19 \\ \text{🌺} + \text{🌺} + \text{🌺} &= 15 \\ \text{🌻} \times \text{🌺} + \text{🌺} &= ? \end{aligned}$$



Catching and killing these animals is illegal in many parts of the country. Always use non-lethal products.

Plant Seeds & Watch Them Grow

All the plants around you start life as a seed.

Learn about seed germination by planting some seeds and by following the **growth** of the seedlings as they sprout from the soil. Make sure to take proper care of them with just the right amount of **light, heat** and **water**. Have fun growing plants with this cool science project.

What you'll need:

- 🌱 Fresh **seeds** of your choice such as pumpkins seeds, sunflower seeds, lima beans or pinto beans.
- 🌱 Good quality **soil** (loose, aerated, lots of peat moss), if you don't have any you can buy some potting soil at your local garden store.
- 🌱 A **container** to hold the soil and your seeds.
- 🌱 Water
- 🌱 Light and heat



Activity:
Create a list of local farms/markets in our area and what they grow/sell.

Instructions:

1. Fill the container with soil.
2. Plant the seeds inside the soil.
3. Place the container somewhere warm; sunlight is good but try to avoid too much direct sunlight; a windowsill is a good spot.
4. Keep the soil moist by watering it every day (be careful not to use too much water).
5. Record your observations as the seeds germinate and seedlings begin to sprout from the seeds.

What's Happening?

Hopefully after a week of looking after them, your seedlings will be on their way. **Germination** is the process of a plant emerging from a seed and beginning to grow. For seedlings to grow properly from a seed they need the right conditions. **Water** and **oxygen** are required for seeds to germinate. Many seeds germinate at a temperature just above normal room **temperature** but others respond better to warmer temperatures, cooler temperatures or even changes in temperature. While **light** can be an important trigger for germination, some seeds actually need darkness to germinate, if you buy seeds it should mention the requirements for that specific type of seed in the instructions.

Continue to look after your seedlings and monitor their growth. For further experiments you could compare the growth rates of different types of seeds or the effect of different conditions on their growth.

R	C	O	M	P	O	S	T	I	T	B	J	X	M	K	COMMUNAUTE COMPOST DEHORS EAU GRAINES LEGUMES NUTRIMENTS PLUIE POUSSE SOLEIL TERRE VERREDETERRE
V	E	R	E	D	E	T	E	R	R	E	A	U	W		
V	P	A	F	J	L	Z	T	R	E	P	F	T	C	P	
W	C	U	A	T	V	P	O	U	S	S	E	L	X	J	
A	I	N	D	O	F	F	B	C	V	J	S	S	F	U	
X	A	B	D	Y	M	X	F	U	F	Z	O	Q	X	F	
A	G	B	P	D	G	K	V	E	A	G	L	S	L	Q	
N	U	T	R	I	M	E	N	T	S	E	E	E	K	H	
E	N	Q	D	G	T	I	V	W	B	Y	I	M	X	G	
X	L	L	L	S	F	Z	I	N	P	V	L	U	B	R	
Y	L	X	E	S	V	K	O	X	L	F	S	G	N	A	
F	U	C	A	T	E	R	R	E	U	V	L	E	D	I	
T	C	S	L	B	P	Y	M	C	I	L	Q	L	Z	N	
N	W	T	D	E	H	O	R	S	E	G	Z	J	E	E	
W	U	E	T	U	A	N	U	M	M	O	C	P	J	S	

This Week's Schmath Problems

Monday	Farmer Joe from Petit Potato farm is preparing to plant a crop of potatoes this spring. The field will have 317 rows of potatoes with 195 plants in each row. Derrick estimates that they will plant the entire field in 15 hours with their planting machine. How many potato plants are there in all? How many potatoes will be planted each hour?
Tuesday	Mary is going to the garden centre to buy some garden tools to tend her new vegetable garden. She would like to buy a rake for \$27.08 and a hoe for \$14.20. Mary also needs a shovel that costs \$13.62. How much will these three items cost?
Wednesday	A raised garden box with the dimensions of 8ft(long) by 6ft(wide) by 3ft(tall) is built. What is the volume of soil that the box can hold?
Thursday	Use the information from Wednesday's question: Good nutrient rich soil can be made with a combination of 75% topsoil and 25% compost. With this winning combination, what volume of each will be in the box?
Friday	Mr. Matte is planting 10 trees in his backyard, all varying in species. The total weight of all 10 trees is 75kg. The individual weights are 15kg, 13kg, 11kg, 10kg, 9kg, 8kg, 4kg, 2kg, 2kg, and 1kg. He needs to pack all the trees into 3 crates. Each crate can only hold 25kg. How can he pack the crates?

Planifier Son Potager

Un des secrets du succès: bien se préparer avant de se lancer.

D'abord, on évalue nos connaissances en jardinage. On est débutante? On se limite à des cultures faciles comme la bette à carde, la laitue ou la tomate. Ensuite, on détermine l'ampleur du projet: on a de l'espace pour trois ou quatre pots, ou on dispose de plusieurs mètres carrés? La réponse influencera le choix des légumes qu'on fera pousser. Autre facteur à considérer: nos goûts et ceux des gens qui profiteront de nos récoltes. Par exemple, les enfants apprécient souvent les mini-légumes, comme les mini-tomates; c'est le temps d'y penser.

Pois	Concombre	Oignon	Carotte	Tomate
Poireaux	Haricots	Tagete	Laitues	Persil
Bette a cadre	Basilic	Coriandre		

La clé du succès est dans la préparation.

Élabore un plan pour un potager. Fais une légende des légumes que tu vas récolter dans ton potager et dessine le potager.



Binette	Râteau	Pelle	Brouette	Petite pelle	Arrosoire
Fourche à bêcher	Coupe-bordure	Binette à dents	Sécateur	Boyeaux d'arrosage	Tuteur

Qu'est-ce qu'il y a dans ton potager?

Justin, Amélie, André et Sarah sont des voisins. Ce printemps, chacun a planté un potager dans sa cour. Tous les potagers contiennent un légume-feuille, un légume-racine, un légume-fruit et une herbe fine. En utilisant les indices, peux-tu déterminer ce que chaque personne a planté dans son potager?

Légumes-feuilles	Légumes-racines	Légumes-fruits	Herbes fines
Céleri	Carotte	Tomate	Origan
Chou	Betterave	Concombre	Menthe
Épinard	Oignon	Avocat	Ciboulette
Laitue	Pomme de terre	Piment	Persil

- Amélie a planté un oignon, mais pas d'épinards ou de chou.
- André n'a pas planté de carottes ou de concombres.
- Le voisin qui a les avocats dans son potager a aussi planté la ciboulette et les oignons.
- Justin a planté des pommes de terre et du persil.
- Le voisin qui a planté les carottes n'a pas planté du chou ou du céleri.
- Le voisin qui a des carottes dans son potager a aussi des piments et de l'origan.
- Le voisin qui a les épinards dans son potager, n'a pas planté des pommes de terre, d'oignons ou de carottes.
- Le voisin qui a planté les laitues, n'a pas planté les concombres.
- Sarah n'a pas planté les concombres.

	Justin	Amélie	André	Sarah
Légumes-feuilles				
Légumes-racine				
Légumes-fruit				
Herbe fine				

Notre Potager

Le Plan Du Potager

Nous avons fait un potager à l'école. Pour commencer, nous avons fait le plan du potager.



La Jardinerie

Notre enseignant est allé dans une jardinerie pour acheter des semences de légumes pour notre potager. Il a aussi acheté des plants de légumes.



Faire Le Potager

Tout les élèves ont aidé à faire le potager. Nous avons mis de **l'engrais** dans les plates-bandes. J'ai planté des graines de haricots et des laitues. J'ai arrosé mes plants. Nous avons mis un **paillis** autour de plants.

Entretenir Le Potager

Tout les élèves se sont occupés du potager. Les plants ont grossi et grossi. Aujourd'hui, nous avons cueilli des légumes dans notre potager. Nous avons mangé quelques laitues pour dîner. Nos légumes sont très bons!

À quoi ressemblent les jardins ailleurs dans le monde? Cliquez sur la laitue pour regarder la vidéo!



Faites votre propre salade **ULTIMATE** en **(4)** étapes faciles!

① Choisissez 1 LÉGUME-FEUILLE VERT

Roquette : Feuilles dentellées, goût poivré
Laitue Boston : Saveur de beurre, texture légère
Chou frisé : Légèrement amer, texture épaisse et frisée
Chou vert : Goût similaire au chou frisé, mais plus subtil
Épinards : Saveur douce
Bettes à cardes : Goût semblable aux épinards, mais plus relevé
Laitue romaine : Croquante et consistante
Cresson : Saveur vive et poivrée

② Choisissez 2 GARNITURES à salade

Exemples : avocat, betteraves crues râpées, carottes crues râpées, radis, quartiers d'orange, mûres, bleuets, framboises, canneberges, fraises, mangues, olives, pêches



③ Facultatif: Choisissez 1 PROTÉINE

Exemples : pois chiches, lentilles, haricots, pacanes, amandes, noix de cajou, graines de citrouille, œufs durs, tofu, tempeh, fromage faible en gras, poulet cuit ou thon ou saumon en conserve.

④ Facultatif: Choisissez 1 GRAIN

1 à 2 partie(s) d'aromatissant : ail, gingembre, fines herbes fraîches ou séchées, moutarde de Dijon, échalotes, sirop d'érable, miel, purée de fruit

Pour faire votre propre **VINAIGRETTE**, mélangez les ingrédients suivants au fouet:

3 parties d'huile: olive, canola, sésame, pépins de raisins, lin

+

1 partie d'un ingrédient acide: vinaigre balsamique, vinaigre de vin rouge, jus de citron, vinaigre de vin blanc

+

1-2 part(s) flavoring: ail, gingembre, fines herbes fraîches ou séchées, moutarde de Dijon, échalotes, sirop d'érable, miel, purée de fruit

Agriculture in NB

One of the oldest and most important technologies is agriculture.

It is the process in which land is **cultivated** to care for and **produce** animals and plants for humans to consume, or eat. An important part of the local economy in NB is **farming**. It employs over **13 000 people** and is valued at over **1 billion dollars**. Farming is the **second** largest economic sector in New Brunswick. Our most widely sold crop is the **potato**. This is because it is relatively easy to grow in harsh conditions, important for New Brunswick since only **20%** of our land can produce nutrient rich vegetables. Most crops grown in New Brunswick are consumed within the province, except for potatoes and berries which are exported across Canada and the United States.

Many of us have a very close connection to farming in this neck of the woods. For some of us, it's in our blood...farming, maple products, blueberries, etc.
 How is agriculture important to you and your family?
 Do you see agriculture in your future? How so?

Last Week's Answers

www.solveit.com - 20
 www.solveit.com - 5

Mon.	Carly hikes 48km every day.
Tues.	There are 42 marshmallows in total and yes, each person can have 7 (42/6=7).
Wed.	Pictures may vary. 1/3 of the area is grass.
Thurs.	1x48, 2x24, 3x16, 4x12, 6x8 perimeter will vary
Fri.	5th day= 15km, 3+6+9+12+15= 45km in 5 days

Wanted Dead Or Alive

Two Dangerous Suspects on the Loose in New Brunswick Forests, Cities and Towns.

May 25, 2020

Police are on the search in NB today looking for two suspects responsible for dangerous assault and destruction of property. Chief of Police, Faye Kename, has urged the public to be on the lookout for a tall and slender purple suspect who goes by the alias "Purple Loosestrife" and its short and dumpy white partner in crime, known as "Giant Hogweed."

Chief Kename stated, "It is believed they came to our country long ago from Europe and Asia, hijacking ships by travelling as seeds on the bottom of sailors' boots. Purple Loosestrife has been seen in our towns and cities for hundreds of years, but its accomplice Giant Hogweed has only been in our country since 1917.

Crimes -> deaths of native plant species and injuries to native animals and townspeople.

Purple Loosestrife's MO -> smothers out native plant populations by spreading so easily.

Giant Hogweed's MO -> has a watery substance inside its branches that can cause severe burns, and even blindness when exposed to sunlight.

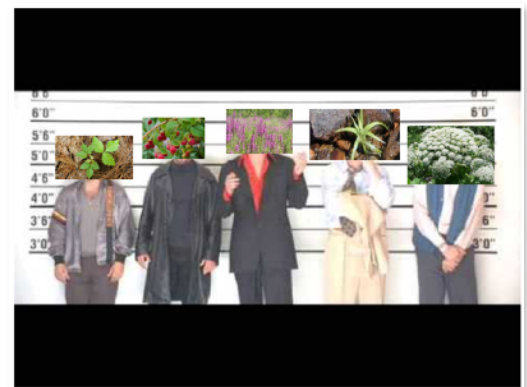
Detective Aryu K. Idding stated, "It was 2008. We were led on a high-speed chase down the Trans Canada between Petitcodiac and Moncton when we saw the suspects hiding in ditches by Magnetic Hill. We jumped out and yelled 'Freeze!' but they refused to comply. Just stood there swaying gently in the wind! After our tasers and pepper spray had no effect we tried negotiations. After 12 hours, we realized they couldn't speak!

Last week, a civilian, Shirley Yucant Besirius, detailed her close encounter with the two suspects: "I saw two hitchhikers on the road. As I slowed my car down I realized they had long purple leaves and round white bulbs where their faces should be. Next thing I knew, they entered my car and demanded I take them to the nearest airport by pointing to a map aggressively with their stems. They took my iPhone and sent a text to some guy named Poison Ivy saying they'd be in Maine shortly. I never dreamed picking up two plants could ever turn into this."

Around 30% of plants in NB are invasive species, but these two are known to be two of the most dangerous. If you do see any sign of Giant Hogweed notify city officials immediately and do not hesitate to uproot Purple Loosestrife. Save our native flora by planting native species on your own property and stop these criminal plants immediately.

The Usual Suspects

Using the description of the suspects in the news article, identify which of these plants is Purple Loosestrife and Giant Hogweed.



MUSICAL SPELLING BEE

Bass Clef Note Names

Spell the word below the staff in whole notes.

BEAD	CAFE
BEEF	FACADE
BADGE	ACE
DECADE	ADAGE
ADD	DABBED

Don't Stop BEE-lieving!

The bee is a fascinating part of nature.

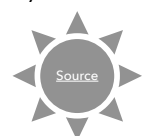
While many people view bees as scary insects that may sting when disturbed, bees play a critical role in the daily lives of humans. From pollinating up to 1/6 all flowering plants in the world to increasing the yield of food crops, bees are a vital part of the global economy.

Lines: Good Boys Do Fine Always

Spaces: All Cows Eat Grass

Remember...the rhymes work from the bottom up.

Activity: Find information about another invasive species in NB and share it on teams.



Go to the **Cheerios website** to get your free pack of sunflowers and HELP BRING BACK THE BEES!