



LEAF Education
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Introduction

Autumn is the time of year when pumpkins feature in our shops. They have become inextricably linked with Hallowe'en activities but what do we know about where and how they are grown; and what else can we use them for?

This booklet offers a few ideas to help teachers and farm educators use pumpkins in the classroom and on the farm so that children become better acquainted with this fascinating fruit.





Pumpkin facts

- Pumpkins are members of the vine crops family called cucurbits
- Pumpkins originated in Central America
- The name pumpkin originated from "pepon" the Greek word for "large melon"
- Pumpkins are 90% water
- Pumpkins are a fruit
- Pumpkins are usually shaped like a sphere (ball).
- They vary in weight but an average sized pumpkin might weigh around 13 pounds (6 kilograms)

Thanks to Science Kids—more facts can be found on their website http://www.sciencekids.co.nz/sciencefacts/food/pumpkins.html





Pumpkin seeds

What can we do with pumpkin seeds?

Roast them to eat as a snack

Pop them on an oiled baking sheet in the oven.

Mix with oil and spices of your choice.

Bake at 180°C/350°F/gas 4 for around 10 minutes, or until seeds are lightly golden brown.

Once they have cooled, enjoy them as a snack!

Get creative!

Use them artistically with other seeds and nuts to make interesting collages or pictures.

More eating ideas

Add them to soups and stews.

Make your own granola with pumpkin seeds—there are lots of ideas on the web.



Pumpkin and Apple soup

Serve 6 – 8 portions

Our good friend Idris Caldora of the Royal Academy of Culinary Arts — Chefs Adopt a School has provided a recipe for soup that anyone can try.

950ml 4	Chicken stock
4	Apples, peeled, cored and diced
500g	Pumpkin, peeled and diced
1	Small onion diced
1/2	Teaspoon freshly ground nutmeg
1/2	Teaspoon freshly ground cinnamon
1/2	Teaspoon freshly ground coriander
250ml	Apple cider
175ml	Sour cream
	Salt and pepper
30g	Chopped chives

Method

In a large saucepan, bring the stock to the boil.

Add apples, pumpkin, onions, cinnamon, nutmeg, and coriander. Simmer, partly covered, for 30 minutes.

Puree the soup in a food processor or blender.

Return to the pan.

In a small bowl whisk together the sour cream and cider until smooth.

Stir into the soup and reheat gently.

Taste and season with salt and pepper.

Sprinkle with chives and serve.



Growing pumpkins

Pumpkin seeds can be sown indoors in April or May ready to transplant outdoors once the weather starts to get warmer.

There are lots of varieties to choose from so decide if you want colour, size or taste and look carefully at the seed packets.

It's best to sow the seeds on their sides in small pots of compost about 2.5cm deep.

Pumpkin plants can continue to grow in their pots for about four weeks and then should be transplanted outdoors. This should be done by acclimatising them gradually over a week or so.

They should be planted in a warm, sunny spot, ideally with soil that has manure or well rotted compost added in advance.

They prefer to be grown in a mound of soil so that they don't sit in water which can cause them to rot.

Water them well during planting. Give the plants a general feed a few weeks later.



Growing pumpkins continued

Plants will produce long stems so keep an eye on these and try to direct them if you don't have a lot of space!

It is best to leave your pumpkins on the stem as long as possible before harvesting them but make sure this is before the first frost.





Make a pumpkin bird feeder

food for you and for the birds!

You will need:

A small pumpkin or other round shaped vegetable squash String or twine – uncoloured garden jute twine works well Bird food –seeds, fat ball, scraps etc.

Tools:

Sharp knife (for adult use), metal spoon or similar shape scoop, scissors

The pumpkin

Halve the pumpkin round its 'waist' making a top half and bottom half. Scoop out the seeds and some flesh and set flesh aside for cooking (soup, roast or pie filling; you could also save some of the seeds for planting next spring). Leave enough of the flesh to keep the outer skin firm - about 0.5-1.00cm thick. Use the knife tip to cut small drainage holes in the base of each pumpkin half.

The string hangers

Cut 6 lengths of the twine – about 1.25m each.

Plait the twine to make two strings to hang the pumpkin.

It is easiest to do this tying the starter knot to a chair, door handle or similar.

Children might need help learning to plait!

Completing the bird feeder

Tie the strings together at their centres to make a cradle for the pumpkin half. Some extra twine tied round the pumpkin and joining the strings together helps to secure the feeder.

Fill with the bird food, hang up and wait and watch!



Pumpkin bird feeder





Maths tasks

Estimate and then measure the circumference of a pumpkin

Estimate the weight of a pumpkin and then weigh it.

Create graphs to show what different pupils guessed and find out who was the closest.

Do the number of seeds relate to the size of the pumpkin?

Once the seeds are dry, use them as counters in maths activities.





English and art

Cut a pumpkin in half (adult needed for this!) and do the same with a parsnip, a potato, an orange etc.

Compare and contrast the different fruits and vegetables. What's the same? What's different? Introduce lots of new vocabulary depending on the pupils' ages. Make a word wall.

Use the bisected fruits and vegetables for art work.

Are the fruits symmetrical? Can you spot any other shapes?





Science

How do pumpkins vary? Consider colour, texture, mass, height, volume and flavour.

How can we investigate this? Observation, feeling, weighing, measuring with a ruler, string, displacement of water.

Why do farmers grow different kinds of pumpkin? Customer preferences for size, colour, taste, texture, time of ripening and shelf life.

There are lots of opportunities for discussion here!







Visit a pumpkin farm

There were very few pumpkins grown commercially before the turn of the century. The growth in popularity of Hallowe'en celebrations and the Trick or Treat phenomenon from America resulted in an increase in demand for pumpkins to make into lanterns.

For example, Bowman's of Spalding in Lincolnshire grew only 40 in 200, and now produce over 2,000,000 per year. 99% of production is eventually turned into Halloween lamps.

Look out for a pumpkin farm near you where you can pick your own pumpkins.. (Visit the Countryside Classroom website and look for places to visit www.countrysideclassroom.org.uk)





More ideas!

There are many more ideas for pumpkin activities and information on the internet.

https://www.tes.com/teaching-resource/pumpkin-soup-lesson-plan-and-extension-recipe-pumpkin-book-3008606

Good introduction and activities for Reception class

https://www.tes.com/teaching-resource/roasted-pumpkin-seeds-6037219
A picture recipe for preparing roasted pumpkin seeds.

https://www.tes.com/teaching-resource/make-a-paper-plate-pumpkin-6147111

Simple, step by step instructions to make a pumpkin - good model for pupils

https://www.tes.com/teaching-resource/once-upon-a-time-the-enormous-pumpkin-6175006

The classic tale told using synchronised movement, and a really enormous pumpkin!

Thank you to FACE team members David Etheridge, Janet Hickinbottom, Debbie Hicks, Moya Myerscough and Lauren Weller for contributions to this resource.