

# Green-Schools Global Citizenship Food & Biodiversity

## Crop Cards

Recommended Crop List for Schools Working on this Theme:



- Potatoes
- Spring Onions
- Radishes
- Rainbow Chard
- Swiss Chard
- Lettuce & Salad Leaves:
  - Oak Leaf
  - Mizuna
  - Rocket
  - Mustard
- Strawberries
- Carrots
- Peas
- Spinach
- Dwarf French Bean

# Potatoes

Difficulty level: Low

Earliest Harvest: start of June

## Start

Get a bag of seed potatoes; 'First Earlies' if possible. Empty egg cartons are also useful to 'chit' the potatoes.

To give you an idea of how many you might need: 1kg would give you approx. 10 potatoes, i.e. 10 new potato plants. NB: Consider the size of a plot that you have too. If you want to plant 1 kg, you will need a single drill 3m long. So if you plant 5 kgs worth of potatoes you would need  $3m \times 3m = 9m^2$

## Sow

Indoors – From the end February you can prepare the potatoes indoors to help them get a good start – this is called 'chitting'. To 'chit' your seed potatoes, lay them in open egg cartons. Place the 'rose end' of each potato upwards; this is the rounded end where sprouts are forming. Keep the potatoes in the open, near the light of the window, but not in direct sunlight or too close to radiators, as they may dry out. Sprouts will grow on the potatoes. They will be ready to plant out when the sprouts reach approximately 2.5cms long, which is normally 5-6 weeks later. St. Patrick's Day is the traditional time in Ireland to plant potatoes out.

Outdoors – The week of St. Patrick's day sow your potatoes outside. Some people find it best to pick off all except three shoots on each potato they are sowing outside. They will need to be planted deep into the soil 15cms down. They also need room to spread and expand as they grow. It is good to leave about 25-30cms between each potato within a row or 'drill' and plant each row 45cms apart.

Potatoes also grow well in large (at least 'bucket-sized') bags or pots. If planting in this way, 2 seed potatoes can go into each container. Place a layer of compost about 15cm deep in the bottom of the container, THEN add the potatoes, and cover them with compost to a depth of 15cms again. Make sure there are drainage holes for water to escape.

## Care

Potatoes like to grow in the dark so it is good to add some extra soil on top if they start to peep up, it will mean that more potatoes grow and that none of them turn green.

## Harvest

You can harvest what are known as 'earlies' in June. These potatoes will have a very thin skin and be really nice boiled. Look out for flowers on your plants, if you see them have a gentle look underneath and you should see the potatoes very nearly ready to harvest. From two weeks after flowering you can start to dig the first potatoes. Gently dig them up with a fork or trowel.

# Spring onions

Difficulty level: Low

Earliest Harvest: end of April

## Start

You will need toilet roll tubes, compost or soil, and seeds for planting.

## Sow

Indoors – In early February start to sow the spring onion seeds in your toilet roll growing modules. Place about ten seeds in each module and gently cover with 1.5cms of light soil.

Outdoors – In April (before Easter Holidays, in 2019!) transplant the seedlings outside in straight lines, called drills, about 15cms apart. The seedlings will be bunched together, sow these bunches as one. You can leave about 20cms between each drill. They like a sunny spot and well-drained soil.

## Care

Keep weeds away from your spring onions. They are fast growers and usually do not get too bothered with insects or moulds.

## Harvest

Harvest your spring onions once they are about 14cms tall (usually about 2 months after sowing). They add an aromatic flavour to a salad, they are a bit milder than a more standard onion but as you often eat them raw they have a nice punchy flavour. They can be added to stir-fry's and chopped over a bowl of spaghetti bolognese too. They are best eaten really fresh so you can pick what you need for that day and leave the others in the ground. Gently tease the spring onions from the ground shaking off any extra soil.

# Radishes

Difficulty level: Low  
Earliest Harvest: May

## Start

You will need packets of seeds for planting, and a fork for harvesting.

## Sow

Outdoors: Sow from start of April to May and they will be ready in about 4 to 6 weeks. It is best to sprinkle the seeds straight into the ground in your garden as they do not like being moved once they have started growing. Gently press a stick into the soft soil to give you a straight line about 1cm deep, then sprinkle the seeds into this furrow and try to put each seed about 3cms apart. This it will give you neat lines of radishes. Cover loosely with soil, and sprinkle with water.

## Care

If some of your seeds landed nearer to each other than 3cms apart you can thin them out as they grow. Thinning plants out helps giving the ones left in the ground more room to grow. Radishes are pretty hardy and do most of the growing by themselves without too much help. They can even grow in partially shaded areas.

## Harvest

Radishes are spicy and crunchy, they are great added to salads, used for dipping into sauces or sprinkled over a dinner such as a pumpkin stew. There are lots a different types of radishes to choose from so you could grow a variety of colours and sizes.

# Rainbow Chard

Difficulty level: Low

Earliest Harvest: mid-May

## Start

You will need packets of seeds for planting, toilet roll tubes, and a scissors for harvesting.

## Sow

Indoors: In March you can start to sow your Chard seeds in modules. Prepare your toilet roll growing modules and sow three seeds into each. Keep them moist as they grow.

Outdoors: Transplant them outside in April (before Easter) once they get established at ~3cm tall. You should leave about 30cms between each plant when you transplant them, so they have room to expand.

## Care

Chard is relatively hardy. It prefers slightly cool and damp conditions so keep it moist and add compost to the place where it is planted.

## Harvest

The chard leaves will be ready to start eating after five to eight weeks. It is best to pick the larger leaves from about the outside of the plant as this will give the smaller leaves more space to grow before your next harvest. You can take up to half of the leaves off at a time and the plant will regenerate. When picking the leaves either use a scissors or gently twist the leaves off rather than pulling or tugging them from the plant.

Young leaves can be used in salad. Larger leaves can be cooked like spinach. Chard is great in tarts and pies, quiche, patties and curry.

# Swiss Chard

Difficulty level: Low

Earliest Harvest: mid-May

## Start

You will need packets of seeds for planting, toilet roll tubes, and a scissors for harvesting.

## Sow

Indoors: In March you can start to sow your Chard seeds in modules. Prepare your toilet roll growing modules and sow three seeds into each. Keep them moist as they grow.

Outdoors: Transplant them outside in April once they get established at ~3cm tall. You should leave about 30cms between each plant when you transplant them, so they have room to expand.

## Care

Chard is relatively hardy. It prefers slightly cool and damp conditions so keep it moist and add compost to the place where it is planted.

## Harvest

The chard leaves will be ready to start eating after five to eight weeks. It is best to pick the larger leaves from about the outside of the plant as this will give the smaller leaves more space to grow before your next harvest. You can take up to half of the leaves off at a time and the plant will regenerate. When picking the leaves either use a scissors or gently twist the leaves off rather than pulling or tugging them from the plant.

Young leaves can be used in salad. Larger leaves can be cooked like spinach. Chard is great in tarts and pies, quiche, patties and curry.

# Lettuce & Salad Leaves No.1

## Oak Leaf Lettuce

Difficulty level: Low

Earliest Harvest: end of April

### Start

You will need seeds, toilet roll tubes or flat trays, and compost.

### Sow

Indoors – Start in April (after the Easter Break in most years, should be fine). Sprinkle seeds in tubes or trays of compost, 2-3cms apart. Water them and leave to germinate, which should take just over a week. This lettuce can be grown from seed to mature plant fully indoors, on your classroom window.

Outdoors – If planning to finish the plants outdoors, start in late April by planting seeds in modules in the classroom. Transplant outside 3-4 weeks later. Harden seedlings (to prepare them gently for being outside) by reducing water and temperature for 3 days before transplanting. Select a partially shaded location, to prevent excessive heat on the plant. Space the plants 20cms apart in rows 30cms apart.

### Care

Indoors- this lettuce can be grown indoors in pots on the classroom windowsill. Seedlings should not be too crowded, so thin them out, to about 20cms apart. The plant can be sensitive to extremes of heat and light, which may result in wilting or in bolting (growing fast and stalky, and putting energy into seeds, and not into the leaves), so keep out of direct sunlight on hot days, and keep them well watered.

Outdoors- water the plants on hot days, and during dry spells and keep an eye out for slugs!

### Harvest

They usually reach maturity 6-7 weeks after germination, though larger leaves can be collected throughout the growth cycle. While generally grown as a leaf lettuce and picked at baby-leaf stage, oakleaf lettuces can also be grown for full-size heads.

This variety is commonly used in salads and sandwiches.

# Lettuce & Salad Leaves No.2

## Mizuna

Difficulty level: Low

Earliest Harvest: end of April

### Start

You will need seeds, toilet roll tubes or flat trays, and compost.

### Sow

Indoors – Start in April (after the Easter Break in most years, should be fine). Prepare the tubes or trays with at least 10-15cms in depth of compost. Sprinkle the seeds on top, 2-3cms apart. Water them and leave to germinate, which should take just over a week. This plant can be grown from seed to mature plant fully indoors, on your classroom window.

Outdoors – If planning to finish the plants outdoors, start in late April by planting seeds in modules in the classroom. Transplant outside 3-4 weeks later. Harden seedlings (to prepare them gently for being outside) by reducing water and temperature for 3 days before transplanting. Space the plants 20cms apart.

### Care

Indoors- this plant can be grown indoors in pots on the classroom windowsill. Seedlings should be thinned out to about 20cms apart. The plant can be sensitive to extremes of heat and light, which may result in wilting or in bolting (growing fast and stalky, and putting energy into seeds, and not into the leaves), so keep out of direct sunlight on hot days, and keep them well watered.

Outdoors- water the plants on hot days, and during dry spells and keep an eye out for slugs!

### Harvest

They usually reach maturity 6-7 weeks after germination, though larger leaves can be collected throughout the growth cycle; if you don't pick the larger leaves on time, they may become a bit tough, and are then better cooked than in salads.

Mizuna is ideal for what is known as "cut-and-come again" harvesting. This means you can harvest a small number of leaves from each plant on a regular basis, and each plant will regenerate; so you can get a consistent supply of leaves from all plants for a number of weeks.

You can also harvest all of the leaves from a single plant in one go, to about 3cms above the soil, and the leaves will regrow for a second harvest.

This variety has lightly spicy flavoured leaves which are great in mixed-leaf salads, and can also be used in stir fries.



# Lettuce & Salad Leaves No.3

## Rocket Leaves

Difficulty level: Low

Earliest Harvest: end of April

### Start

You will need seeds, toilet roll tubes or flat trays, and compost.

### Sow

Indoors – Start in April (after the Easter Break in most years, should be fine). Sprinkle seeds in tubes or trays of compost, 2-3cms apart. Water them and leave to germinate, which should take just over a week. This Rocket can be grown from seed to mature plant fully indoors, on your classroom window.

Outdoors – If planning to finish the plants outdoors, start in late April by planting seeds in modules in the classroom. Transplant outside 3-4 weeks later. Harden seedlings (to prepare them gently for being outside) by reducing water and temperature for 3 days before transplanting. Space the plants 15cms apart in the soil.

### Care

Indoors- this plant can be grown indoors in pots on the classroom windowsill. Seedlings should not be too crowded, so thin them out, to about 15cms apart. The plant can be sensitive to extremes of heat and light, which may result in wilting or in bolting (growing fast and stalky, and putting energy into seeds, and not into the leaves), so keep out of direct sunlight on hot days, and keep them well watered.

Outdoors- water the plants on hot days, and during dry spells and keep an eye out for slugs!

### Harvest

The leaves can be picked from young plants as soon as they are ready but if you let some of them mature, the leaves will get large and more peppery. They usually reach maturity 6-7 weeks after germination, though larger leaves can be collected throughout the growth cycle. While generally grown as a leaf lettuce and picked at baby-leaf stage, oakleaf lettuces can also be grown for full-size heads.

Rocket is spicy and aromatic, but not too hot, and is a great addition to salads and sandwiches. It is nice mixed with milder salad leaves and goes very well with tomatoes. Rocket is grown mainly for the leaves, but the flowers are also edible.

# Lettuce & Salad Leaves No.4

## Mustards

Difficulty level: Low

Earliest Harvest: end of April

### Start

You will need seeds, toilet roll tubes or flat trays, and compost.

### Sow

Indoors – Start in April (be mindful of Easter school closures). Sprinkle seeds in tubes or trays of compost, 2-3cms apart. Water them and leave to germinate, which should take just over a week. This lettuce can be grown from seed to mature plant fully indoors, on your classroom window.

Outdoors – If planning to finish the plants outdoors, start in late April by planting seeds in modules in the classroom. Transplant outside 3-4 weeks later. Harden seedlings (to prepare them gently for being outside) by reducing water and temperature for 3 days before transplanting. Select a partially shaded location, to prevent excessive heat on the plant. Space the plants 15cms apart in rows 15cms apart.

### Care

Indoors- this plant can be grown indoors in pots on the classroom windowsill. Seedlings should not be too crowded, so thin them out, to about 15cms apart. The plant can be sensitive to extremes of heat and light, which may result in wilting or in bolting (growing fast and stalky, and putting energy into seeds, and not into the leaves), so keep out of direct sunlight on hot days, and keep them well watered.

Outdoors- water the plants on hot days, and during dry spells and keep an eye out for slugs!

### Harvest

They usually reach maturity 6-7 weeks after germination, though larger leaves can be collected throughout the growth cycle; if you don't pick the larger leaves on time, they may become a bit tough, and are then better cooked than in salads.

Mustard is ideal for what is known as “cut-and-come again” harvesting. This means you can harvest a small number of leaves from each plant on a regular basis, and each plant will regenerate; so you can get a consistent supply of leaves from all plants for a number of weeks.

This variety is commonly used in salads and sandwiches.

# Strawberries

Difficulty level: Low

Earliest Harvest: start of June

## Start

Strawberries grow very well in pots and hanging baskets, so if you are short on green space, these are a great crop option! You will need to look for 'early fruiting' strawberry plants, to ensure fruits ripen before the end of the school year.

## Sow

Outdoors: Choose a sunny, open position and prepare the ground with some compost. Plant directly into compost, spacing 30cm between plants in a drill (row), and 40cms between drills. Dig a hole deep enough for the roots to fit in without curling, but not too deep, otherwise the crown might rot. The crown should be exactly at soil level. Refill the hole with soil and pat down to ensure there are no air gaps left.

## Care

Keep well-watered during dry weather. Add cardboard or bark mulch, plus maybe some straw around the base of the plant, so that as fruit develops it is kept clean, and thus less likely to rot.

## Harvest

Harvest when the berries turn red. To harvest, pull strawberries from their stalks; just be careful you do not tug on the overall plant too hard.

Strawberries are delicious on their own, but are also a great addition to salads, smoothies or breakfast cereal.

# Carrots

Difficulty level: Medium

Earliest Harvest: June

## Start

You will need toilet roll tubes, stone-free compost/soil, carrot seeds for planting, and a fork for harvesting.

## Sow

Outdoors in April – Prepare the soil before the Easter Break; clear weeds and stones. Carrots will split and grow in twisted shapes if they bump into stones as they grow deep into the soil

At the end of April (or VERY start of May, if Easter falls late) carrot seeds can be sown directly into the soil, if the weather is good. They need deep soil and they grow best if there are no stones in the soil. They also like lots of sun so find a good spot where they can get the sun as much as possible.

If you gently press a stick into the soft soil to give you a straight line about 1cm deep, then sprinkle the seeds into this furrow; approximately one seed every 2.5cms. Keep the seed bed moist while the seeds are germinating and expanding into baby plants.

Although not ideal, carrots could be started indoors in March – Toilet roll modules can be used for planting carrots but the whole module will need to be planted into the ground when moving them outside, as a carrot does not like getting disturbed too much. By planting the whole module into the ground we avoid tampering with the growing root. Once you have made sure that the soil or compost has no stones, you can sprinkle your seeds into the module in March. You can thin out any extra seedling that grow so that you have one strong looking carrot plant in each module. Plant outdoors at the end of April (or the first week in May at the latest; only leave it this late, if the Easter Break forces you to).

## Care

When the seedlings are big enough to see clearly, thin them out so they are about 5cms apart. Weed the bed as often as you can.

## Harvest

As the school year ends in June, we will only be able to harvest baby carrots. You can gently ease the carrot out of the ground using a trowel or small fork to help you. Baby carrots are very sweet and tasty and can be dipped into sauces and eaten whole or sliced and added to salads or used as topping on a pizza.

# Peas

Difficulty level: Medium

Earliest Pea Pod Harvest: start of June

Earliest pea-shoots/tendrils Harvest: May

## Start

You will need toilet roll tubes, compost or soil, and seeds for planting. Garden, Sugar Snap and Mange Tout are all good varieties.

## Sow

Indoors – In early March you can prepare to sow the peas. Firstly, soak the seeds overnight in water. Prepare the toilet roll growing modules by filling them with compost. Press two fingers into the soil to make two small holes approx. 4cms in depth. Put two pea seeds into each module, one in each hole. Cover the holes over with the soil and then water the module.

Outdoors – The baby pea plants can be transplanted outdoors in April once they have established themselves a bit and are close to 10cms tall.

## Care

Peas need support so pushing a twiggly stick into the ground beside each plant can help with this. Water the plants well especially when they are flowering. You do not need to feed the pea plants they are good at getting the food they need. They can take the nitrogen they need out of the air.

## Harvest

There will be little tendrils coming off your pea plant and these are really tasty (but do not take them all, as the plant needs them to climb!). You can add them to salads. Some flavours really work well together and pea and mint are two. If you have mint in your garden it is worth tasting the two together or cooking with them to make a pea and mint salad or stir them both into some boiled potatoes. The pea pods will be available to pick in June.

# Spinach

Difficulty level: Med-High

Earliest Harvest: May

## Start

You will need packets of seeds for planting, toilet roll tubes, and a scissors for harvesting.

## Sow

Indoors: In April (be mindful of Easter school closures) you can start to sow your spinach. Prepare your toilet roll growing modules and sow three seeds into each. Keep them moist as they grow.

Outdoors: Transplant them outside once they get established at ~3cm tall. You should leave about 30cms between each plant when you transplant them so they have room to expand.

You could sow the spinach directly into the ground in your vegetable patch but when the seedlings are very small it is difficult to protect them from slugs and snails.

## Care

**WARNING:** Although Spinach is a popular leaf to grow, it is not as straight forward as similar plants, such as Chard. Slugs love Spinach, it is not very hardy, and there is a high chance that it will 'bolt' i.e. grow too quickly but without enough leaves. Bolting happens if the weather gets too hot and dry.

The spinach plants love cool damp conditions so keep them moist and add compost to the place where they are planted. If you see fluffy white patches on the leaves it is a sign of downy mildew you can prevent this by giving plants plenty of space so the plants might need to be thinned out a bit more.

Chard might be a better option, if you have concerns about slugs and your overall availability to care for the growing spinach plants.

## Harvest

The spinach leaves will be ready to start eating after five to eight weeks. It is best to pick the larger leaves from about the outside of the plant as this will give the smaller leaves more space to grow before your next harvest. You can take up to half of the leaves off at a time and the plant will regenerate. When picking the leaves either use a scissors or gently twist the leaves off rather than pulling or tugging them from the plant. Spinach make an excellent addition to salads or can be chopped and stirred through pasta, or gently cooked and added to fried eggs on toast

# Dwarf French Beans

Difficulty level: High

Earliest Harvest: June

## Start

NB: Only attempt to grow Dwarf French Beans if you have some way of ensuring that the young plants are watered indoors (at school or at home) during the Easter Break.

Dwarf French Beans are a good bean option for the school setting as the plant reaches full height sooner (as they are dwarf) and will thus start to produce bean pods at the earliest opportunity. However they are very prone to frost damage, so need to be kept indoors until the risk of frost is gone.

## Sow

Indoors – In early April make a hole 5cms deep in your modular pots and place a bean (seed) into each hole, cover it over and water. You can thin them as they grow but it is good to have a few extra at the beginning as they often get eaten.

Outdoors – In May plant the seedlings outside and place them about 10cms apart.

## Care

Beans like lots of water when they are growing, adding some mulch – which is made from old leaves and garden scraps – to the base of the plants as they grow helps to keep them moist. You will need to push a stick into the ground to support each plant. It is good to have air circulating around each plant so thin them out if there is not enough space for each one to grow.

## Harvest

Beans will grow more the more they are picked. Pick them in June from the bottom of the plant first and work your way up. The beans will be inside a long green pod and are the bumps you see from the outside. Once you prize the pod open there is a soft silky lining and the beans are all nestled comfortably inside. You can pick each one out, there is still another layer to remove, the membrane, just peel it off and the beans can then be simmered in salt water and added to pasta or eaten with other vegetables for dinner.