

Areas of Learning

- The World Around Us
- Personal Development and Mutual Understanding

Learning Intentions

We are learning:

- that animals and plants together form ecosystems, and interdependence within systems is essential;
- ways in which animals can be influenced over time by seasonal or environmental change;
- that populations have a shared responsibility to find ways to reduce the negative impact that humans have on the earth;
- that changes in materials can be temporary or permanent; and
- to name, taste and prepare healthy recipes, reflecting cultural diversity.

Throughout the activities links to the curriculum skills have been signposted.



Get Growing!



Managing
Information

Explain to the children that, just like us, plants need nutrients for healthy growth. Some of these essential nutrients come from the soil and are absorbed through the plant roots. Farmers and edible gardeners like Jilly Dougan add nutrients to the soil for healthy plant growth. These additional nutrients are found in compost, animal manure and even in dried fish blood and ground fish bone. Explain to the children that we can make our own liquid fertiliser, saving money and packaging and reusing what's already available to us.

Making organic Liquid Fertiliser

What you need:

- 2 litre plastic bottle with lid
- Hand drill
- Compost ingredients (vegetable peelings, comfrey leaves and/or nettles)
- Bucket or basin



Instructions

Note: If making nettle fertiliser, make sure to wear gloves when handling the nettles, so as to avoid nasty stings.

1. Cut the base off the two litre bottle, about 5 cm from the base.
2. Drill a hole into the cap of the bottle and screw it tightly back onto the bottle.
3. Invert the bottle and stuff it tightly with compost ingredients. Why not try using a selection of compost ingredients, filling some bottles with vegetable cuttings, some with nettles and some with comfrey leaves?
4. Sprinkle some water over the tightly packed compost ingredients.
5. Set the bottle, lid side down, above a container such as a bucket or basin.
6. Wait 2–3 weeks and you should see a liquid fertiliser collect in your bucket or basin.

Warning: the liquid fertiliser may have an unpleasant and strong smell.

The fertiliser is potent and, if put directly onto soil, could burn the plant roots. Always dilute the fertiliser, usually one part fertiliser to ten parts water. It is sufficient to add fertiliser to the soil once every 2–3 weeks.

Key



Using ICT



Using Maths



Communication

Give a Bird a Home!

Explain to the children that many species of birds use tree cavities to build their nests. However, with removal of woodland areas, there is more and more competition for space. This is one factor contributing to the decline in population of some of our native birds, such as blue tits. Late autumn or early winter is a good time to offer local birds a roosting place in the harsher weather. Spring is a good time to offer them a nesting place. Encourage the children to try building a home for native birds using [Making a nestbox](#) at www.rspb.org.uk

Help the children to set up a webcam in the nestbox. Explain that, if they are fortunate, they may get to watch birds take up residence, prepare a nest, lay eggs and rear their young.

Feed the Birds

Explain to the children that, as winter is approaching, berries and seeds may not be as readily available for many birds. Suggest that, now that they have provided a temporary home for the birds in their garden, they could help to feed them, too.

See [Make your own bird cake for the garden](#) at www.edenproject.com

(Be aware of allergies in school before deciding which seeds or nuts to use in the bird food.)



Managing
Information





Managing
Information

Get Inspired!

Encourage the children to take part in a birdwatch over the coming months. Ask them to take pictures of and research birds that visit the garden or school grounds. These may include:

- Starling
- Great tit
- Blue tit
- Collared dove
- Magpie
- Robin
- Blackbird.



Continue the birdwatch throughout the year. Ask the children:

- Do the same birds visit all year round?
- Where have some of them come from or gone to?

Ask the children to read, using shared reading, this [factsheet](#) on the blue tit (see www.heritagewoodsonline.co.uk) and identify the features of factual writing.

Invite the children to choose a bird to research. Ask them to then write a factual report on their chosen bird.



Explain that many birds migrate to more favourable conditions during the harsher seasons. See the [Migration](#) section at www.rspb.org.uk for lots of classroom activities for learning about migration.

For online videos and information about migration, see [Why is Britain a wildlife migration hotspot?](#) at www.bbc.co.uk

Explain to the children that climate change is having an impact on our seasons. This, in turn, is creating disruptions for migratory birds. Ask the children to find out about some of the impacts and consider things we can do to avoid climate change. Ask them to write a persuasive argument about the reasons for implementing some of these ideas.



Get cooking!



Being Creative

Explain to the children that pizza originated in Italy and is traditionally a round flat dough base baked with a topping of tomatoes and cheese.

Making Pizza

Pizza Base Ingredients (serves three)

- 2 tablespoons dried yeast
- 90 ml tepid water
- 1 tablespoon olive oil
- 175 g plain flour
- 1 tablespoon salt

Margherita Pizza Topping Ingredients

- 8 tablespoons passata
- 6 tomatoes, chopped
- 175 g mozzarella cheese, sliced
- 2 tablespoons fresh basil, chopped
- 2 tablespoons olive oil



Method

1. Pour the water into a large bowl.
2. Sprinkle the dried yeast over the surface of the water and whisk it in until it has dissolved.
3. Leave the mixture to rest in a warm place for approximately 15 minutes until it's frothy on the surface.
4. Stir in the olive oil.
5. Sift the flour and salt into a large bowl.
6. Make a well in the centre and pour in the yeast liquid.
7. Using a wooden spoon, mix the ingredients together to form a dough.
8. Turn the dough out onto a floured work surface and knead it for about five minutes until it's smooth and elastic.
9. Place the dough in a large greased plastic bag and leave it in a warm place to prove for about one hour or until it has doubled in size.
10. Turn the dough out onto a lightly floured work surface and 'knock back' the dough by punching it, as this releases any air bubbles that would make the pizza uneven.
11. Knead four or five times. The pizza base bread dough is now ready to use!
12. Preheat the oven to 200°C.
13. Cut the pizza dough in half and roll out each piece into a circle about 1/2 cm thick. Set onto a well-greased baking sheet.

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Being Creative

14. Spoon four tablespoons of passata over each pizza.
15. Add the tomatoes followed by the mozzarella slices.
16. Invite the children to add extra toppings of their choice. Additional toppings to choose from might include chopped onion, peppers, sweetcorn, pineapple, pepperoni, ham, salami, tuna, anchovies etc.
17. Sprinkle the basil generously over the top and season to taste.
18. Drizzle the olive oil over all the toppings.
19. Put the pizza, still on the baking sheet, into the oven and bake for 15–20 minutes, or until the dough is cooked through.

Discuss the effects of the yeast on the water and visible changes after the hour proving time.

Before the pizzas are ready to put into the oven, ask the children to give each one a name, for example Mighty Meaty or Seafood Surprise.

As the pizzas bake in the oven, draw the children's attention to the aroma in the room. Ask them if they can find suitable words to describe it.

When the pizzas are ready, ask the children to cut them with a pizza slicer. Discuss the connections between fractions – whole, half, quarter, eighth etc. Encourage the children to try different pizzas. Ask them if they have a favourite.

Discuss with the children their favourite toppings, asking them which tasted best. Ask the children to make a list of the favourite toppings and design the ultimate class pizza with all of these toppings on it.