

Children appreciate how special soil is for hosting life.



Nature's magic 1



Process

- 1 Find an area in the school grounds, ideally somewhere the children don't see regularly. Set up a number of containers, ideally wide and shallow (e.g. trays) rather than narrow and deep, e.g. bottles) This activity is best done in autumn, when it is more likely to rain.
- 2 Explore soil with your class. Prepare a small tray with dry soil for them to handle as you ask questions. Do they know what it is? What do they know about it? Where do they see it?
- 3 Tell the children that there is magic in soil. Let them question you but keep mysterious. Tell them you'll show them the magic. Invite them to get a small bag of soil, three child fistfuls will do. Tell them to carry a paper bag and trowel or old spoon when out with their family and look out for soil.
- 4 Once the children start bringing in the soil, take them to the special outdoor spot and let them mix the soil into the containers. Every time a child drops soil into the container make a mini ceremony of it, saying something like, "Come on soil, do your magic!". With the children's help decorate the containers with labels saying *Soil Magic*. Try to do this over not more than a week. Keep some soil for another experiment in the third activity.
- 5 Leave the soil for 2–3 weeks and hope for rain (if it doesn't, water the containers). Remind the children about the soil magic, ask what they are expecting. Allow their imagination to roam. Grab your outdoor cushions and go check the Soil Magic boxes, where wild plants should have started to grow (check beforehand to make sure!). See the children's reactions, if they had imagined big magical things direct their focus to wondering how the plants got there. "How are there plants when we only put soil?" Bring out how wonderful it is that soil keeps so much life in it. Sit and extend the discussion, link with topics that emerge, always sustaining the sense of wonder and reverence. End with an easy rhyme that you can animate, e.g.

*Magic soil, magic soil, peekaboo!**

What are you, what's inside you?

Plants grow from you, green and tall,

Some are big and some are small.

Fittex, fittex fil-ħamrija,

Minn fejn ġejja dil-maġija?

Tkabbar pjanti ċari w skuri,

Minnhom jifthu ħafna fjuri.

*Can be sung to the tune of *Pat a Cake*

Points

250 points

Send photos of children (1) putting soil in containers (2) looking at sprouting wild plants and discussing.

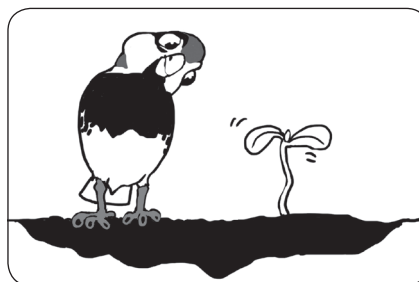
50 points

Send photos of how this activity was linked with other subjects or learning areas in the curriculum.

Children learn to observe and record wild plant growth and development.



Nature's magic 2



Process

- 1 Your wild plants will be increasing, changing, flowering, seeding and withering throughout the first and second terms. You will be taking the children to the Soil Magic place regularly to see the changes. Never lose that sense of wonder about the way life emerged from handfuls of what seemed like 'just soil'.
- 2 Once you are confident that the children have regard for the soil as something very special, you can now develop some science skills: theorising, observing and recording. How do the children think the plants grew? Lead them to understand that soil contains seeds that are 'asleep'. Question what makes them wake up. Link with weather topics and people's routines to help children understand that we are part of nature and that we too behave a bit like seeds.
- 3 Now find the best way to record what you are seeing. Here are some ideas:
 - Children invent a symbol for wild plants, which they draw, copy and cut out, then stick onto a Soil Magic chart.
 - Focus on shapes and patterns of leaves and 'assemble' leaves from triangles, circles, squares, etc., matching the shapes with the particular plant.
 - Have a frieze with days of the week and stick symbols for clouds, sun, rain, wind on each day according to the weather, then take a photo of the Soil Magic Boxes every week and stick them on the relevant day.
 - Create a 'replica in miniature' container in class and use coloured-in matchsticks and other objects to represent wild plants, each different object representing a different plant.

Points

100 points

Send photos of (1) children counting and making observations of plants (2) your chosen way of children's record-keeping.

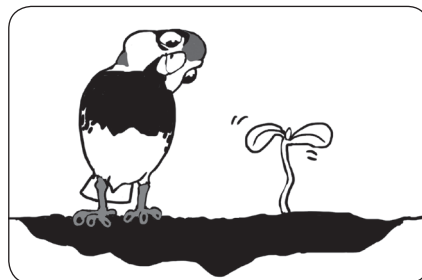
50 points

Send photos of how this activity was linked with other subjects or learning areas in the curriculum.



Nature's magic 3

Children learn that soil is also special for its ability to 'magically' decompose green things.



Process

- 1 This activity will introduce to the children the wonder of plant decomposition, which is a critical part of the life cycle. You need (1) a fresh tray-container (2) some leaves (orange-tree leaves are best for the purpose because as the leaf decomposes it leaves a beautiful mesh of veins) and (3) the soil you saved from NATURE'S MAGIC 2. Give your children a feel that they are scientists and you are going to investigate if the soil has any more magic. Increase the excitement of discovery and observation by inventing props the children can wear (e.g. cardboard monocle) before going out to observe.
- 2 Take the children to the Soil Magic Place, bringing with you the container, the leaves, the soil and a camera. Fill the tray with soil (leaving some aside), then lay the leaves flat on top of the soil. Take an overhead picture of the leaves, then cover them very lightly with soil and sprinkle a bit of water. Print the picture for the Soil Magic Display, and project the image on the board for the children to see the leaves in detail. Forget about them for a couple of weeks.
- 3 Revisit the tray with the children and carefully remove the top layer of soil, trying as much as possible not to move the leaves. You will notice that the leaves are changing. Take another overhead picture and back in class compare the first photograph with the new one. Get the children to spot the differences. Ask what is happening, how and why.
- 4 Repeat the process a couple of weeks later and keep doing this until only the leaf veins are left, each time asking children what they think is making the change happen. Sustain the sense of wonder about the things soil can do. Link any topics that emerge from the discussion about decomposing material in soil.
- 5 Create a story line with your photos, making a display with letters/numbers to represent what has been happening.

Points

150 points

Send photos of (1) children putting vegetation in soil (2) children checking and taking photos (3) the story line.

50 points

Send photos of how this activity was linked with other subjects or learning areas in the curriculum.

Children use magnifying lenses to explore nature from a different perspective, and stimulate creativity.



Nature Detectives 1



Process

- 1 For these activities you will need a nature spot outdoors. You will be using magnifying lenses or loupes (acquire a set for your class) and looking closely at things, so the space need not be large. If you do not already have one, contact BirdLife Malta for advice. You can expand on your Soil Magic Space for this, or simply use wild plants growing out of walls, etc.
- 2 Prepare small boxes with different seeds you have collected over summer or since October. Try to get seeds of different shapes, sizes and textures.
- 3 Place the loupes on a table and invite the children to take one and look through it. Allow them time to experiment and realise that you need to look at things closely for the lens to 'work'. Listen to the children talk and see if you can catch a sense of wonder at how magnified things look. Invite them to look at their own skin or each other's hair, eyes, etc.
- 4 Armed with the loupes, lead the children to the seed boxes to have a close-up look at them. Ask questions: "What does it look like? How does it feel? What does the feeling remind you of?" These specific questions encourage creative thinking. Jot down words and phrases the children use.
- 5 Invent a poem together, using words and phrases you jotted down. You could start with "It reminds me of..." and string together words and phrases alternately, using your own creativity to make it feel like a poem. As you read, include different ideas the children might suggest. Make a chart with the poem you composed together and urge the children to illustrate it with drawings or pictures they find. Display the final product and read it to them.
- 6 Taking the children with the loupes to your outdoor nature spot and repeat the exercise with leaves, soil and other things they find. Jot down their ideas and this time, as a follow up, create a visual poem. For instance, use pictures of the things they mention, write one word (the object looked at) in the middle of a chart/card, with pictures of what it reminds them of around it.

Points

150 points

Send photos of (1) children using loupes to explore seeds (2) the poem chart (3) children using loupes to explore nature (4) the visual poem display.

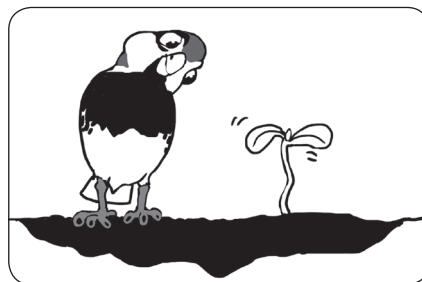
50 points

Send photos of how this activity was linked with other subjects or learning areas in the curriculum.

Children use magnifying lenses to explore nature from a different perspective, and develop mathematical literacy.



Nature Detectives 2



Process

- 1 This activity builds on the skills of the previous activity, this time using observation and recording skills. You will need an area with flowers, preferably on the school grounds, but you may also plan a school trip to the countryside.
- 2 You will need playdough to make shapes the children learned about in Maths to create the insides of flowers. Spread a sheet or take tables outdoors for the children to work on, and put your materials here. The work place must be close to the flowers.
- 3 Children use their magnifying lenses to look at the centres of flowers. Marvel at colours, shapes and patterns with them. Ask what shapes they can see. What is the most common shape? Which are the biggest/smallest/longest/shortest shapes in the flowers? Now say that everyone is going to make a flower from playdough and get them to choose a favourite flower. Make sure the children do not pick the flowers or pull off parts of them, and understand why this is not a good idea (if we pick the flowers the insects will go hungry).
- 4 This part of the activity combines gross and fine motor coordination with observation and memory, together with maths and science. Before starting, each child rolls out playdough and cuts different shapes from different coloured playdough. Provide each with a square of cardboard on which they will build their flower. Each then run to the flower patch, look through the lens at the flower and run back to start making a flower like the one they are observing. The flower is built up slowly, and it does not matter if the end result looks very different from the original! Apart from the fun element, the exercise will also show you who has good memory and spatial skills, or who likes to be creative and totally invent their flower.
- 5 Take pictures of the playdough flowers for classroom display before you head back to class. Now you can link flowers to people. Together you can build a boy or a girl from playdough shapes. This serves to bond children with nature in an "I am like nature" way.

Points

100 points

Send photos of (1) children outdoors looking at flowers through loupes (2) children running to and fro and creating playdough flowers (3) final display.

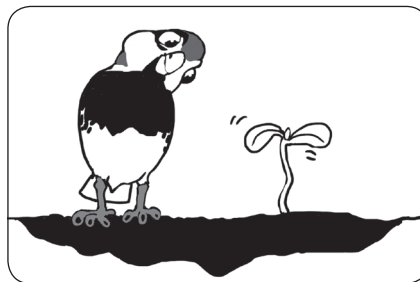
50 points

Send photos of how this activity was linked with other subjects or learning areas in the curriculum.

Children develop a bond with sparrows – our most common resident birds – through storytelling.



Sparrow in a spot 1



Process

- 1 Show the children a picture of a sparrow (there are some in the **Online Resources**) and ask them if they have ever seen the bird. Talk about what they know and make links, keeping the focus around nature.
- 2 Take the children into the schoolyard, saying that you are going to look for sparrows (good idea to check beforehand and find the best time and place for spotting sparrows). Watch the birds and talk about what they are doing. Ask if they think the sparrows are pets, and explore the difference between animals at home and animals that live in the wild.
- 3 Find a nice place, ideally where children can see sparrows in the background, set down your outdoors cushions and read the story *Ċips iż-Żgħir / Little Ċips* in the **Online Resources** about a nest of young sparrows. You can use related visual material from the **Online Resources** to create story prompts as you read, either by projecting them on the board or printing and making pics-on-sticks.
- 4 Ask the children questions at intervals and make links with their own lives and thoughts. Pause to animate the story and add sounds, asking children to imitate the bird sounds around them. Listen to the sparrows around you for inspiration.
- 5 Back in class (or outside if you have brought materials along with you) place children in groups and get them to create something from the story, such as the nest (from a plastic tub filled with shredded paper), the eggs (from scrunched up balls of paper), and the chicks (from cotton wool with eyes). Put them together in a story bag and when you wish to revisit the story, take out the objects and the children can put them in the right order while retelling the story. This will train memory and language skills.

Points

100 points

Send photos of (1) children outdoors looking for sparrows (2) children listening to and animating story (3) children creating props (4) story bag contents.

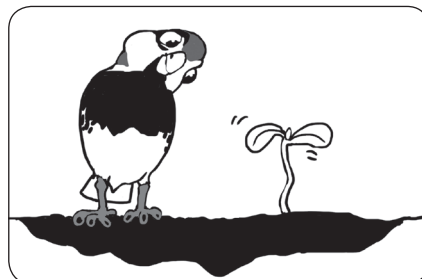
50 points

Send photos of how this activity was linked with other subjects or learning areas in the curriculum.

Children develop a bond with sparrows - our most common resident birds - through observation and imitation.



Sparrow in a spot 2



Process

- 1 This activity links schoolyard observation with creativity and observation. Go to the sparrow-spotting place in your schoolyard on a regular basis and each time, notice something about the sparrow, which may either be behaviours you've seen before, or something new you may see or realise. Link different subjects/skills with this. To help children bond with sparrows, imitate their behaviour in things like hopping, chirping or flapping wings (arms). When you do hopping, count to ten and notice how even 10 seconds are hard. Appreciate how sparrows hop for longer and so effortlessly.
- 2 Find a ledge or windowsill where you can leave titbits for sparrows and watch them come for the food, especially in cold weather, when no insect food is about. Notice that sparrows have beaks, make links with our soft lips and hard teeth.
- 3 Do a listening activity and try to imitate the chirp and the pattern of sparrow chirping.
- 4 Keep a sparrow diary in the classroom. Decide together how to do this. It may be in the form of a weekly diary like your Soil Magic Chart, in which case they must invent a symbol for the sparrow. Use your imagination to link sparrows to the children's lives in as many ways as possible. This is our most common bird and we take it for granted living around us!

Points

100 points

Send photos of children (1) observing sparrows (2) imitating them and other activities (3) keeping a sparrow diary.

50 points

Send photos of how this activity was linked with other subjects or learning areas in the curriculum.