

# Id-Dakra



Maħruġ minn studenti u għalliema tat-Tmien Sena  
bħala parti mill-Programm Dinja Waħda



Doctrina Fons  
Omnium Bonorum

Kulleġġ San Ġorġ Preca  
Skola Medja Blata l-Bajda

Ġunju 2017





... the editorial board ... ..



**Deacon D'Agostino**



**Isaac Schembri, Zaida Pace and Mariah Micallef**

... .. the programme teachers ... ..



Ms Maria Vella  
Malti  
School Dinja Wanda  
Co-ordinator



Ms Deborah Debattista  
Art



Ms Daniela Ellul  
PSCD



Mr Andrea Gravina  
English



Mr Antoine Psaila  
ICT



Ms Sheryl Scerri  
Science

"Thanks to all  
these teachers I  
learned how to  
take care of nature  
and to appreciate  
it. Thank you for  
everything."





## View of our Reading Garden



Most of our students hail from urban localities and therefore it is a pleasure to see them involved with such enthusiasm in the Dinja Wahda Programme.

Through cross-curricular subjects, the Dinja Wahda project taps our students' innate fascination with nature and seeks to develop it into a sense of responsibility towards nature.

The best of it all is that learning is transformed into action-packed activities, which trigger in our students behavioural changes. Hopefully, this will help our students to develop into future adults, who will treat and cherish our planet better than we do today.

Ms Borg Gaffarena  
Head of School



Blata l-Bajda Middle School is a showcase of how Dinja Wahda works through subject syllabuses and non-formal break activities to connect children with nature. Such activities generate values, knowledge and skills

that will help them treat the planet better than we have done.

Last year, the school created the Reading Garden through four subjects, while this year six subjects applied various parts of their syllabus to outdoor learning in the garden.

This magazine is one of the fruits of the programme. BirdLife Malta would like to thank the Head of School, teachers and students for their dedication to the Dinja Wahda programme.

Ms Desirée Falzon  
BirdLife Malta DQSE



# Leaf Chromatography

## Experiment

Inside leaves of plants we find many different pigments (colours) such as green, red, orange and yellow. The green pigment is known as **chlorophyll**. Chlorophyll changes light energy coming from the Sun into sugars, during the process of **photosynthesis**. Chromatography is a technique that can be used to separate the different colours we find in the leaves.



### Method



#### Step 1

Go around a garden or a field and pick up some leaves all having different colours such as brown, orange, yellow and green.



#### Step 2

Using a pair of scissors cut the leaves into small pieces.



#### Step 3

Put the small pieces of leaves into a mortar. Using a pipette add some rubbing alcohol. Make sure that the leaves are covered with the rubbing alcohol. Be careful when using the rubbing alcohol. Make sure that you do not spill rubbing alcohol on your hands because it is an irritant.



#### Step 4

Using the pestle grind the mixture until you observe that the colour inside the leaves is coming out. Put the mixture of leaves and rubbing alcohol inside a test-tube.

### You need

- leaves
- plastic wrap
- test-tube rack
- 4 test-tubes
- permanent marker
- rubbing alcohol
- adhesive tape
- pestle and mortar
- scissors
- spatula
- filter paper
- pipette
- glass rod





### Step 5

Rubbing alcohol tends to evaporate into a gas at room temperature. Therefore, seal the mouth of the test-tube with a piece of plastic wrap. Use tape to make sure that it is tightly wrapped. Using a permanent marker label the test-tube according to the colour of the leaf. For example, if the mixture contains yellow leaves then label the test-tube yellow. Leave the test-tube in a test-tube rack for 3 days. One can observe that the colour of the leaf starts to come out.



### Step 6

Obtain a filter paper and use scissors to cut the filter paper in long strips. Remove the plastic wrap from the test-tube. Insert the filter paper in the test-tube. The edge of the filter paper has to just touch the surface of the mixture. After some time observe how the colours in the leaves are separated.

## Results

The colours present in leaves are green, orange, yellow and red. Dead leaves appear brown. Brown is the absence of a pigment in leaves as they are dead.



## Nahsbu għall-gejjieni



Minhabba li l-iskola tagħna hi skola medja, konna inkwetati x'se jiġri mill-ġnien tagħna s-sena d-diehla wara li nitalqu. L-għalliema tal-Malti u tal-Ingliš ġiethom l-idea li jgħaqqdu l-lezzjonijiet tagħhom halli nkunu nistgħu mmorru nkellmu lil tal-Year 7 dwar il-proġett u nħajruhom jieħdu hsiebu warajna.



# English and the Reading Garden



During our English lessons with Mr Gravina, the reading garden was used as an extra resource to expand our knowledge of literature. Since last year we've been doing this project, in collaboration with the **Dinja Wahda programme** and our main aim is to keep learning about nature through different subjects. The best way to learn about something, (in this case nature) is to be surrounded by it, and that is exactly what we've been doing.

The teacher chose English poems, written by great poets and related to nature. Two of the poems that most students appreciated are **A Bird came down the Walk** and **The Black Land**. These contained perfect examples of figures of speech and other aspects of our syllabus.

Furthermore, we managed to link what we've been doing throughout the **Reading Garden Project** and what we were reading in the poems. We understood that such poems could have

## THE BLACK LAND

I will plough the land,  
Turning up the black soil.  
I will ride upon this heaving surface  
As a boat rides upon the water.  
Even as a boat  
Cleaving the water with an eager keel,  
I have run a furrow  
Straight across the ridges.

I will sow down this field,  
Scattering gems.  
With both hands will I scatter  
Quivering emeralds out of a bottomless pouch.

As I tread the loam  
My feet sink deep.  
The black earth embraces my ankles  
And clings to my bent knees.

I sing as I go  
Scattering emeralds.  
The wind sings upon my lips,  
And pearls stream off my neck and forehead.  
I am bathed in a sweat of pearls.

Eyes straight forward  
Rest on a brightening ultimate slope.

Joseph Warren Beach

been written in fact to raise awareness on such an important subject. We noticed that in literature there is an emphasis on the gap between human beings and nature. Through this project, we are trying to reduce this gap by including nature in our lives and taking care of it whilst also trying to spread this knowledge with others.

## Inspired by nature

Students have been working on a variety of **sonnets** through the past few weeks, some of which have been mentioned in the magazine. After analysing a number of different types of sonnets, I gave them the job of planning and writing their own sonnet. Despite this seeming to be a very daunting task, step by step students started to manage to plan out the rhyme and actually write the poem. Students were encouraged to take the previous poems which all dealt with nature, as well as the reading garden itself as inspiration.

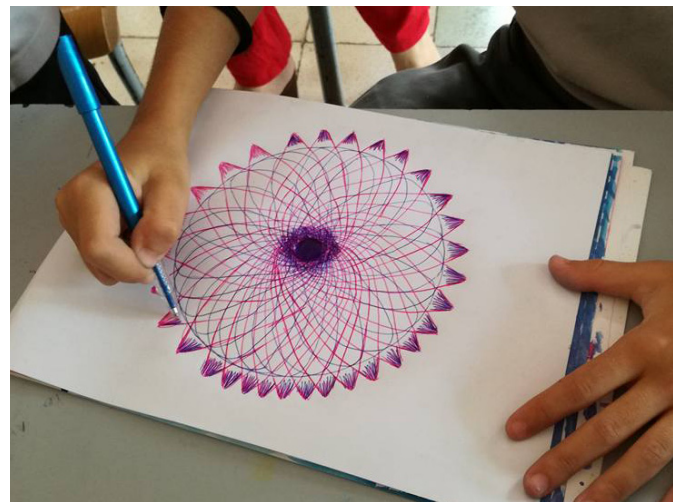
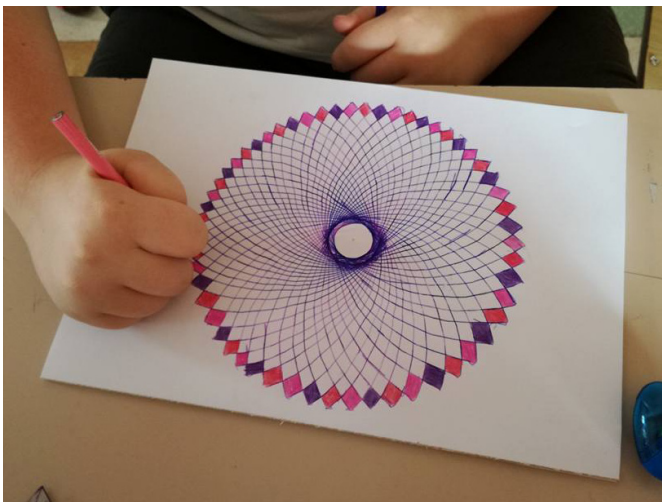
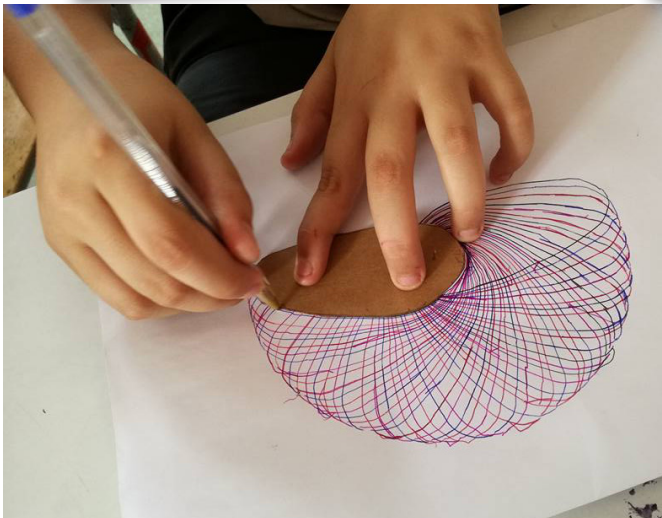






# Nature inspires Art

We went to the wildlife garden and took pictures of plants that have radial symmetry. Their shape and their patterns inspired us and gave us ideas to create our own patterns.





# Il-Malti u n-Natura

Il-Malti, bħall-Ingliż, huwa wieħed mis-suġġetti ewlenin f'dan il-proġett. Tul l-ewwel sena tal-proġett, l-istudenti kellhom iċ-ċans jesploraw modi differenti kif jiksibu l-informazzjoni u jitgħallmu. Hafna drabi, b'dak li kien isir, konna nsahħu ħiliet bħat-taħdit u l-kitba.

Din is-sena, komplejna nibnu fuq dan u fil-fatt l-ewwel attività li kellna kienet żjara pjuttust informali mas-Sinjura Michelle Muscat. L-istudenti laqgħuha fi **Ġnien il-Qari** u tkellmu fuq dak li hadmu fuqu s-sena ta' qabel, x'għogobhom u x'tgħallmu. Dan kollu għenhom aktar biex jesprimu ruħhom aħjar.

Barra minn hekk, numru oħra ta' lezzjonijiet saru f'dan l-ambjent – li ssostitwixxa l-ambjent tradizzjonali tal-klassi – u l-ġnien intuża bħala riżorsa. Apparti xi referenzi għall-poeżiji fis-sillabu tal-Malti, l-istudenti holqu waħda huma stess, fejn kulhadd ipprova jibni vers li jaqbel fil-ħsieb ma' ta' qablu u qgħadna attenti wkoll li niċċekkjaw l-istruttura li nużaw u t-tul tal-versi. It-tema tal-poeżija kienet ukoll marbuta man-natura għax tkellimna l-iktar dwar l-iskart u l-ħmieġ li noholqu.

Marbut ma' dan ukoll, iddiskutejna l-irwoli tagħna permezz ta' *role-play*. Ilkoll ippruvajna niehdu rwol – pereżempju min imexxi l-iskola u min jiehu ħsieb il-ġnien – biex insibu soluzzjoni għal xi problemi li l-tqajna magħhom tul dan il-proġett. Il-ġnien serva ta' riżorsa tajba ferm meta ġejna biex niddeskrivu post. Il-lezzjoni saret fil-ġnien innifsu u lkoll semmejna x'konna qed nosservaw, inħossu u nisimgħu. Wara ktibna x'konna qed naraw dak il-ħin li konna fil-ġnien.

Fl-aħħar u mhux l-inqas, il-ġnien serva ta' eżempju ċar biex minnu nibnu l-ħrejjef. Wara li rajna x'inhil ħrafa u x'inhuma l-karatteristiċi tagħha, stajna niehdu xi ideat għall-ħrafa li ktibna aħna stess billi nimmaginaw il-pjanti li tkellmu u taw tagħlima b'xi mod, u bosta ideat oħra.

Tul dawn il-lezzjonijiet hadna gost: is-sena l-oħra fil-ħidma tal-ġnien fih innifsu, biex poġġejna l-ħamrija, iffurmajna l-passaġġ u ħawwilna l-pjanti tagħna; u din is-sena fl-użu tal-ġnien innifsu bħala post fejn nistgħu naqraw u nitgħallmu xi haġa ġdida.

## X'għamilna lill-ambjent

L-ambjent tagħna wisq ħammigħna  
Kulhadd iħammeġ kullimkien  
M'għadx fejn baqa' tippassiġġa  
Għaliex qridna kullimkien.

Ms Maria Vella  
Tristan Zammit  
Ms Josette Borg  
Zaida Pace

Qatt ma għandek tarmi mal-art;  
Għandna narmu ġol-iskart,  
għax inkella ngħibu l-mard  
u jistgħu jmutu l-ward.

Deacon D'Agostino  
Aaliyah Pace  
Mariah Micallef  
Enrique Gusman

L-ambjent nadif għandna bżonnu  
għal ħajjitna u l-fjuri wkoll.  
X'nista' nagħmel iktar jien  
biex inkunu ferħana lkoll?

Dean Magri  
Xaniah Galea  
Ms Josette Borg  
Enrique Gusman

Nista' forsi ngħin l-ambjent,  
billi nagħmel sforz tremend  
u ma narmux l-affarijiet bl-ament  
biex insebbħu dan l-ambjent!

Celine Grech  
Kayleigh Henderson



Poeżija miktuba bl-  
għajnuna tal-istudenti  
tas-sett 2.123 (livell 7/8)





# Taking

# Responsibility

As part of the project, the students were taken to the **wildlife garden**.

First we did a quiz about the garden: who started it, what was planted, etc. In this way the students could reflect and gain some knowledge about their surroundings.

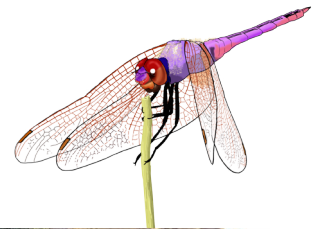
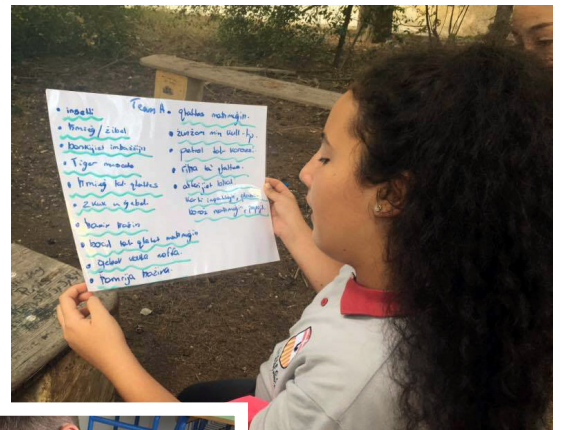
Then in groups, they had to observe things which were harmful for the garden. They came up with a lot of things, such as: litter, cats, cats' litter, bad smell, insects, mosquitoes and vandalism (graffiti on the benches). This was the part where the students were given time to observe and analyse their natural surroundings.

In the second part of the lesson, the students were given time to think, reflect and brainstorm ideas. They had to come up with solutions for these three main problems: cats, litter and fence. They came up with a lot of realistic solutions and action plans to reduce these problems.

The next step was to implement some action plans. One of the students offered to bring wooden signs to be put in the reading garden as *No litter* signs. In the next lesson the students were divided in three groups again, they wrote *No litter* on each sign and we decided to go and place them in the garden.

The students helped each other in digging the soil and place the signs where they had agreed to put them. Some student did the digging, some tried to wet the soil to make it easier to dig and the rest looked out for stones to be put underneath the sign in order to make it more stable.

This was a collective effort where the students worked in teams and came up with solutions themselves to preserve their surrounding environment.







Ahna d-**Dinja Wahda Rangers** Itqajna kull nhar ta' Tlieta biex inżommu **Gnien il-Qari** fi stat tajjeb. Kien xogħol iebes imma fl-istess hin ta' pjaċir u sodisfazzjon ghalina. Ahna u naħdmu tgħallimna li l-ħaxix selvaġġ mhux ħaxix ħażin. Bis-saħħa tiegħu l-insetti jsibu x'jieklu u dawn importanti għall-varjetà tal-ħajja u għan-nisga tal-ikel (*foodweb*).





Here are some of the animals we found and learned about in the Reading Garden



### Painted Frog

- The only native amphibian in the Maltese Islands.
- With large dark spots, with bright edges.
- Eggs usually hatch in 2-6 days.
- In Malta they are threatened by a reduction of the groundwater levels.
- Young frogs are called tadpoles.

### Leaf beetle

- The adult males are approximately 10mm (0.39 inches) long.
- The antenna is used to sense a chemical (known as pheromones) in order to locate females.
- They are predators of land snails which they kill with a poisonous bite and then eat it.

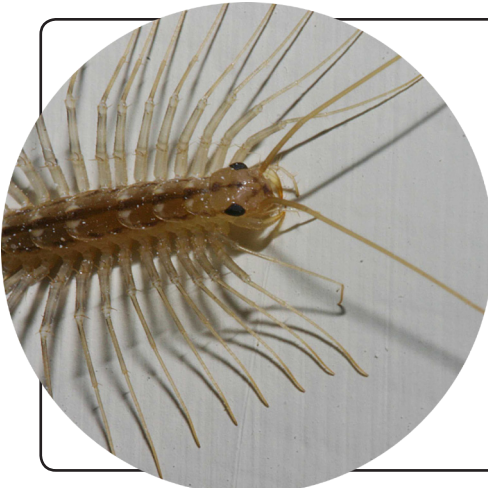


### Ladybird

- They live about 1 to 3 years.
- They are small invertebrate insects ranging from 1mm to 10mm.
- The scientific name of their family is Coccinellidae.
- When they are threatened, they release a toxic yellow substance.
- Their diet is mostly carnivorous.

### Honey bee

- Honey bees represent only a small fraction of all bees.
- Honey bees fly at 15 miles per hour.
- The queen may lay 600-800 or even 1500 eggs each day during her 3 or 4 year lifetime.

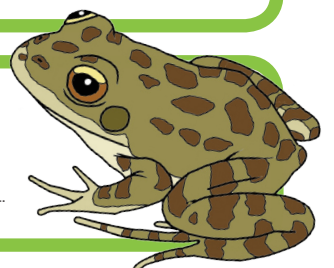
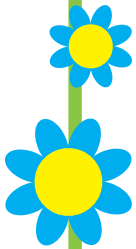
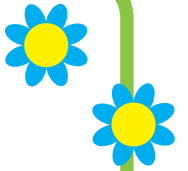


### Centipede

- Worldwide, an estimated 8000 species of centipedes are thought to exist.
- They are found in an array of habitats from tropical rainforests to deserts.
- Their size can range from a few millimetres to about 30cm.
- Centipedes are among the largest terrestrial invertebrate predators, and often contribute significantly to the invertebrate predatory biomass in terrestrial ecosystems.
- Centipedes always have an odd number of pairs of legs. Therefore, no centipede has exactly 100 legs!



# Firem u Awguri



Din il-kopja hija ta'

.....