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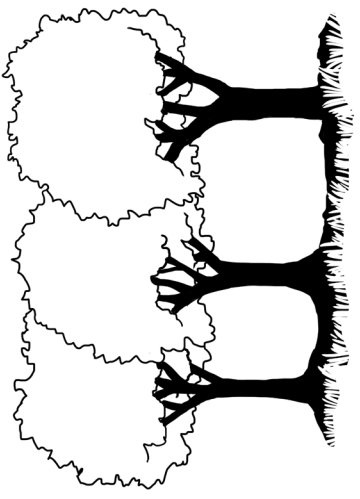
27



Knowing my tree

My name _____

Date _____ Time _____



A. My tree's neighbourhood

Let us find a group of trees in our neighbourhood.

- 1 What's the name of this town/village?
- 2 What's the name of this street (or nearest street)?
- 3 How many trees are there in this area?
☐ Less than 10 ☐ 11 to 20 ☐ 21 to 40 ☐ More than 40
- 4 On another sheet draw a simple map to show the way from your school to this place.

B. My tree

Choose one tree and make it your special friend.

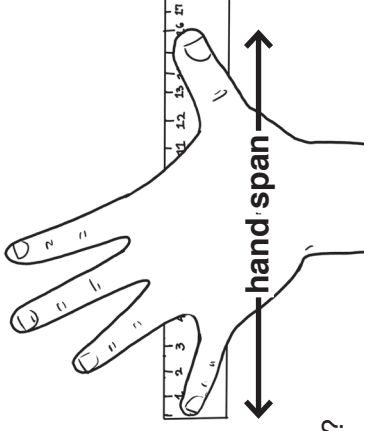
- 1 Do you know what kind of tree it is? If you don't, give it a name!
- 2 I know my tree is alive because _____
- 3 Are there any other living things on my tree? ☐ Yes ☐ No
- 4 What **environments** can I see around my tree?
- 5 ☐ town square ☐ street ☐ garden ☐ fields ☐ houses ☐ rubble wall

With your tablet take a photo of your special tree friend.

- 6 Is my tree symmetrical? ☐ Yes ☐ No
- 7 My tree is ☐ vertical.
☐ leaning to the left.
☐ leaning to the right.
☐ wider than it is tall.
☐ taller than it is wide.
☐ as wide as it is tall.
- 8 Draw the shape of your tree in the box.

C. Estimate and measure

- Find the **circumference** of your tree's trunk. Use **hand spans** to estimate the answer. Open your hand flat on a ruler (see the picture). What's your hand span?



Answer A. My hand span is cm

- How many times does your hand span go round the tree trunk?

Answer B. My hand span goes round the trunk times.

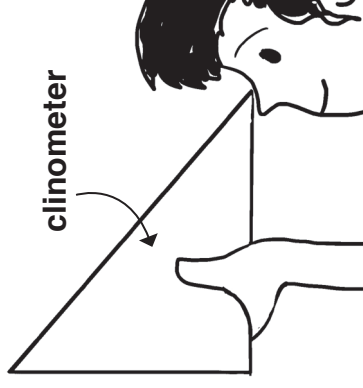
- Now multiply answers A x B and you get cm. This is your estimate.

- Now measure the circumference with a **tape measure**. The answer is cm

Was the answer close to your estimate? ☐ Yes ☐ No

- How tall is your tree? Use your **clinometer** to estimate the height of your tree. Don't forget to add your own height to the answer.

My tree is about cm tall.



D. Collecting and sorting

- Look around your tree. Can you find any organic, mineral, plastic or paper material? Wear your gloves and collect some of these things. **Don't pick sharp things that can hurt you.** Count the things you collected and write the totals in the table here.

organic	leaves, twigs, bark, etc.
mineral	stones, cement, etc.
plastic	caps, bottles, bags, etc.
paper	bags, boxes, etc.

- Before you leave, put any organic and mineral material back on the ground, but keep any plastic and paper litter and dispose of it in recycling bins.

- Back at school make a block graph of the materials.

E. Calculating

- Stand at a point and count the number of cars you see in one minute.

Answer cars



- **A car produces about 4000kg of CO₂ every year.**
- **A tree absorbs about 20kg of CO₂ every year.**

- Can you calculate how many trees it would take to clean the air pollution from the cars you saw in that minute?

We would need trees!

Now you know why
trees are our friends!



A Dinja, Wahda + Resource



Roosts!

We have many **sparrow roosts** in the Maltese Islands. It's where sparrows meet up to sleep in big groups.

The map shows many of these places. Do you live near a **sparrow roost**?



The picture of a sleeping sparrow marks a sparrow roost on the map.



Here's the same map with the names of places. Is there a **sparrow roost** near your home?

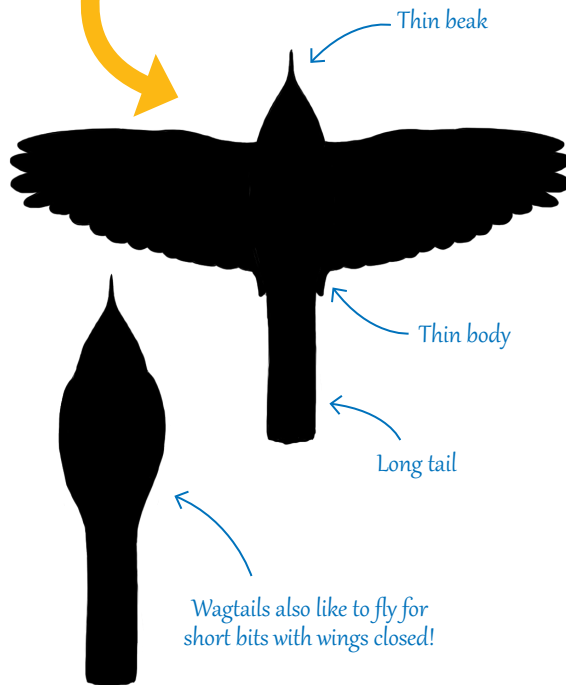


My Sparrow Roost Count Sheet

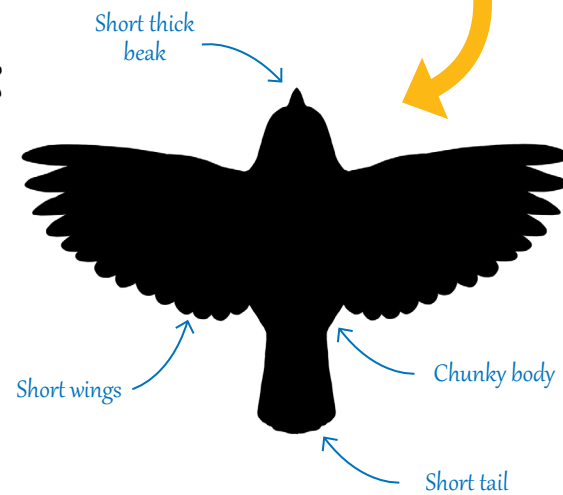
date	place	
time	sparrows I counted	total
4.30pm to 4.35pm		
4.35pm to 4.40pm		
4.40pm to 4.45pm		
4.45pm to 4.50pm		
4.50pm to 4.55pm		
4.55pm to 5.00pm		
5.00pm to 5.05pm		
5.05pm to 5.10pm		
5.10pm to 5.15pm		
5.15pm to 5.20pm		
5.20pm to 5.25pm		
5.25pm to 5.30pm		
 		grand total →



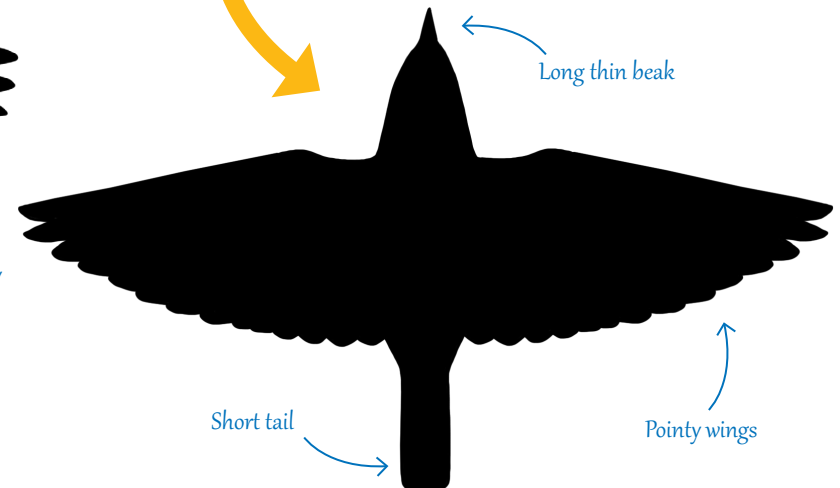
Wagtail

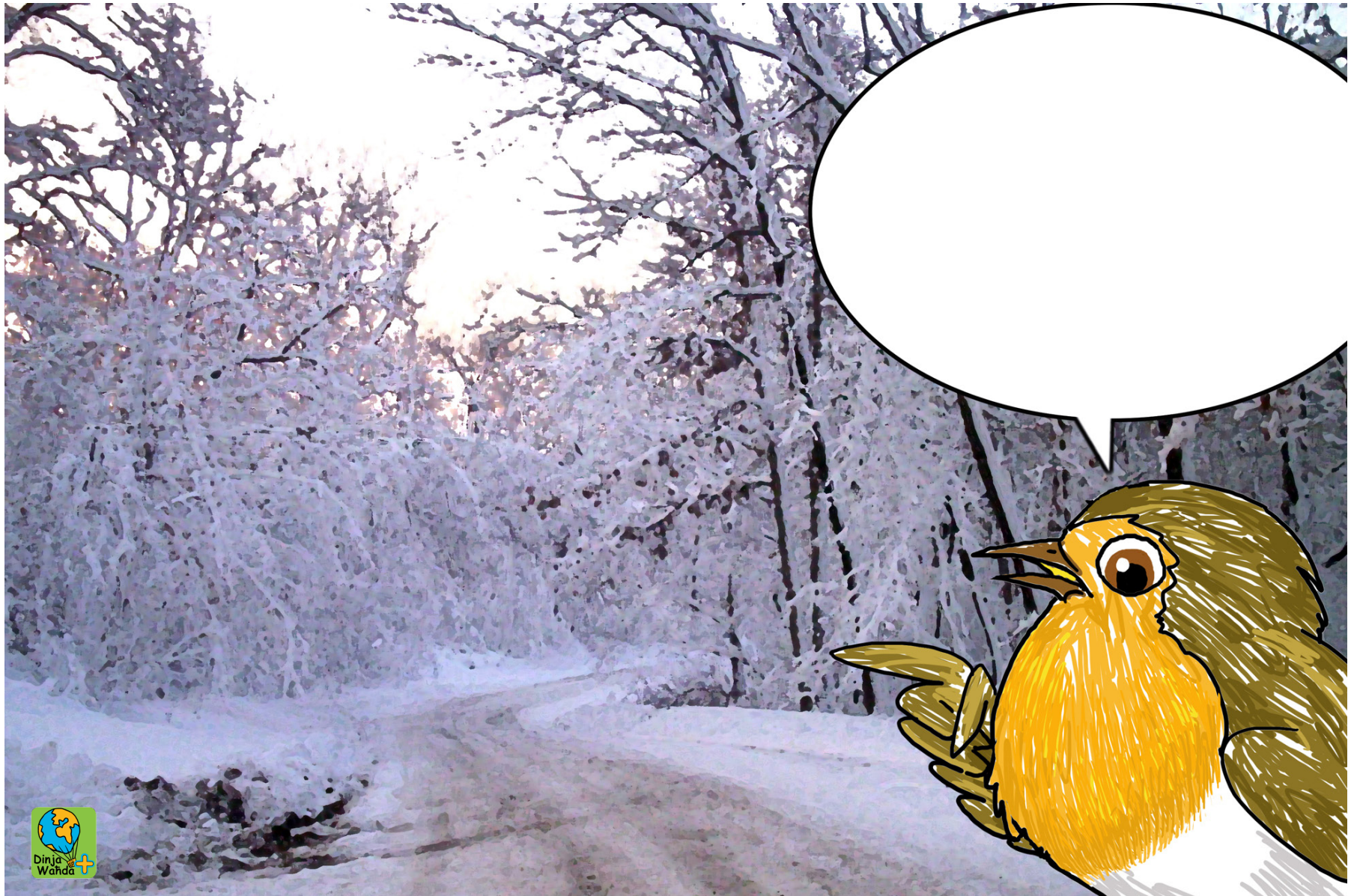


Sparrow



Starling





1. Robin • Pitirross



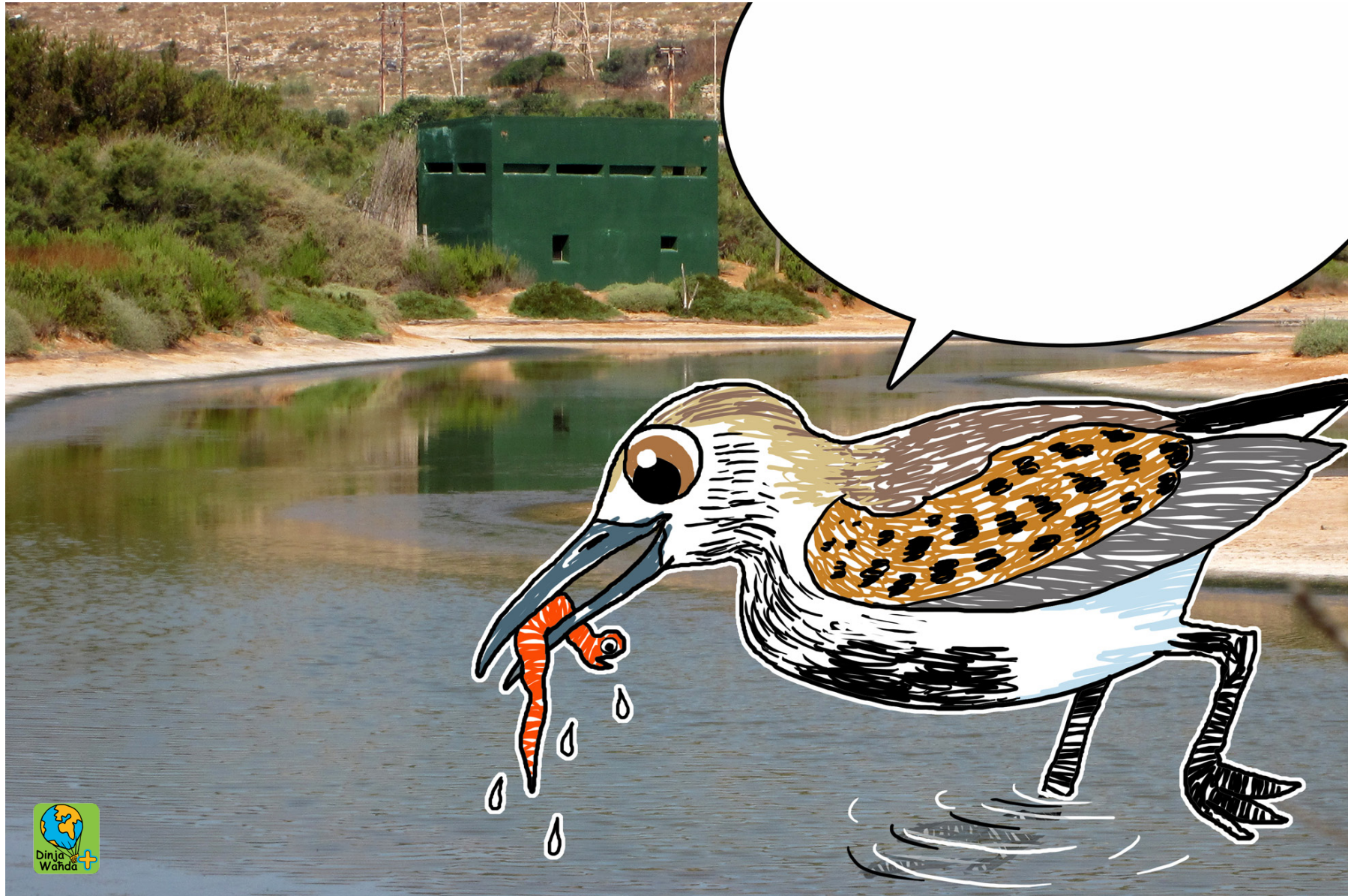
2. White Wagtail • Zakak Abjad



3. Osprey • Arpa



4. Turtle Dove • Gamiema



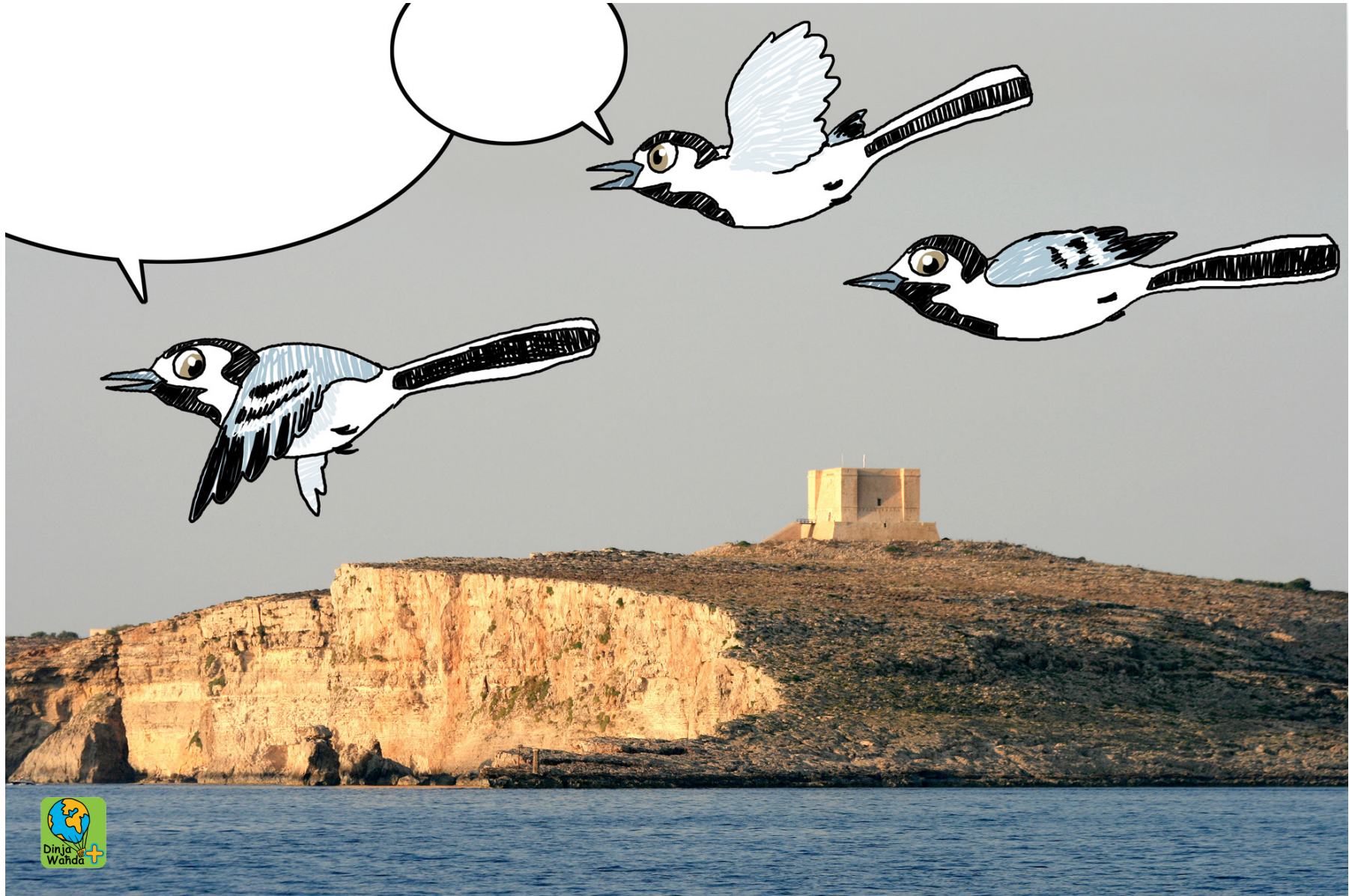
5. Dunlin • Pispisella



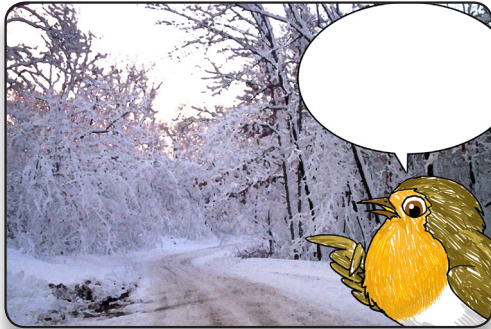
6. Black Redstart • Fjamma Sewda



7. Stonechat • Buċaqq tax-Xitwa



8. White Wagtail • Zakak Abjad



Picture 1

This robin hatched in Finland and spent a great summer growing up and feeding on mosquitoes, caterpillars and other insects and grubs. But he is concerned that he won't survive if he stays in the same place for the winter. That's because the weather up north becomes terribly cold, there is snow everywhere and all the insects are either dead or hidden away in holes and burrows. The robin's only chance to stay alive is to fly away south where the winters are not so cold.

What he could be saying, therefore, is something like:

"If I stay here for the winter I will die!"

"My forest is nice and warm in summer but it's very cold in winter."

"I cannot find food in this snow. That's why I fly south in autumn."

"Birds migrate in autumn because winter is too cold for them here."



Picture 2

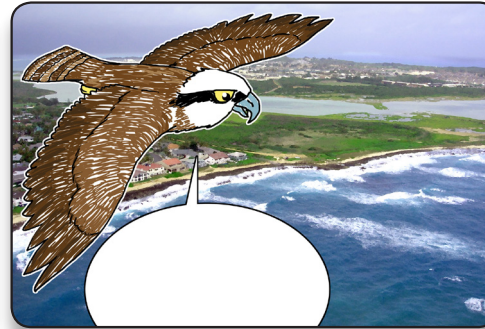
This white wagtail spent his summer up in Lithuania. But the days are starting to get shorter, and he is noticing that the leaves are turning yellow and falling from the trees. It means that it is autumn and that winter will soon arrive. He is checking his watch too, to show that it's time to fly away and go find a nice land in the Mediterranean where to spend the winter. White wagtails arrive in Malta in October and November and thousands spend the winter here.

What he could be saying, therefore, is something like:

"Uh-oh, autumn is here! Time to go!"

"It is time to fly south!"

"The leaves are falling. I must fly south before it gets too cold."



Picture 3

This osprey spent spring and summer raising a family in a forest by a lake in Scotland. But she cannot stay there in winter because the lakes will freeze and she won't be able to catch the fish that are the speciality of this species. So she flies south to spend winter in Africa. It is a very long journey, and one of her biggest problems is the sea, because she cannot land on it if she gets tired. She has to cross it in one go. She looks concerned as she leaves the shores of Sicily - there are 100km of sea before she reaches Malta. Will she be strong enough?

What she could be saying, therefore, is something like:

"Am I strong enough to fly across this sea?"

"Will I reach Malta or will I get tired and drown?"

"I hope I don't meet a storm while crossing the sea."

"Wow, what a long journey! And I can't stop on the way."



Picture 4

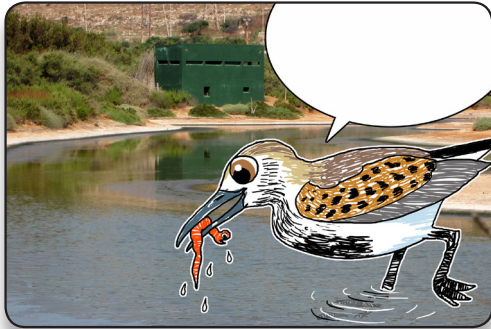
This turtle dove hatched and grew up in Germany, and is now on migration. She has just crossed the sea from Sicily and has reached Malta. In the picture, she is flying over Il-Prajjet (Anchor Bay, Popeye Village). She would love to land in some nice tree and have a good rest. But will hunters try to kill her? If she stays alive she will maybe spend a night resting in Malta. But the next day she will continue her migration, cross the sea to Libya, cross the Sahara Desert and spend the winter in Central Africa.

What she could be saying, therefore, is something like:

"Ah Malta! I hope I find a nice tree somewhere to sleep and rest."

"I am so tired. This looks like a nice place to rest."

"I hope hunters do not shoot me down. I need to rest after all that sea."



Picture 5

This dunlin spent her summer raising a family of chicks on the northern shores of Russia. There was a lot of food up there to feed her family, but she did not want to stay for the freezing winter. So when autumn came she and her grown chicks migrated south to the Mediterranean region. She stopped at Ghadira nature reserve (notice the birdwatching hide in the background) and decided to spend the winter there. In that little lake she can find all the food she wants, such as worms and other minibeasts (invertebrates).

What she could be saying, therefore, is something like:

"Yum yum, after that long journey, this food tastes delicious."

"This lake at Ghadira is like a restaurant for me."

"I like this place, I think I will spend all winter here."



Picture 6

This black redstart from Belgium is spending his winter in Malta. It's much less cold here than up there near the North Sea, the water is not frozen, there is no snow, and he can find food to stay alive. Also, some people and some schools have the nice habit of putting up bird tables and providing even more food for the hungry birds. This bird has found a garden with a nice bird table full of delicious food. Thanks to this regular supply, he will not need to fly around too much, and can stay all winter near this garden, and be enjoyed by everyone.

What he could be saying, therefore, is something like:

"I really love bird tables. There is so much good food for me here."

"Yummy, it's cake again! My favourite winter snack!"

"Bird tables help us birds to stay alive and strong in winter."

"Thank you for putting out food for me this winter!"



Picture 7

This little stonechat from Bulgaria has stayed all winter in the open Maltese countryside, which he loves so much. He has spent five whole months here, catching grasshoppers and slugs and other minibeasts (invertebrates). But it is now March and winter is over. The rains have stopped and the days are becoming a bit hot. This bird cannot live in a hot climate so he must soon leave and go back home, before it gets too hot and dry.

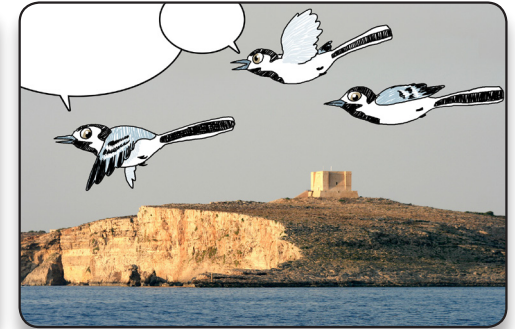
What he could be saying, therefore, is something like:

"I really loved spending winter here, but now it's getting too hot for me."

"Winter is almost over, it will soon be time for me to go back home."

"Phew! The sun is so hot. I cannot spend summer here."

"Malta is great for me in winter but it's too hot for me in summer."



Picture 8

These white wagtails from Poland have spent their winter in Malta. They stayed together all through winter and had a great time feeding in our green fields and meadows, and also visiting a school playground to hunt for titbits after lunchtime. Every evening they went to sleep in a nice big tree in a village square. Now winter is over and they are flying back home. As they fly past Kemmuna, they wonder if they can make it all the way without accident.

What they could be saying, therefore, is something like:

"Do you think we'll make it back home?" "I hope so."

"Are we still far from home?" "Very far!"

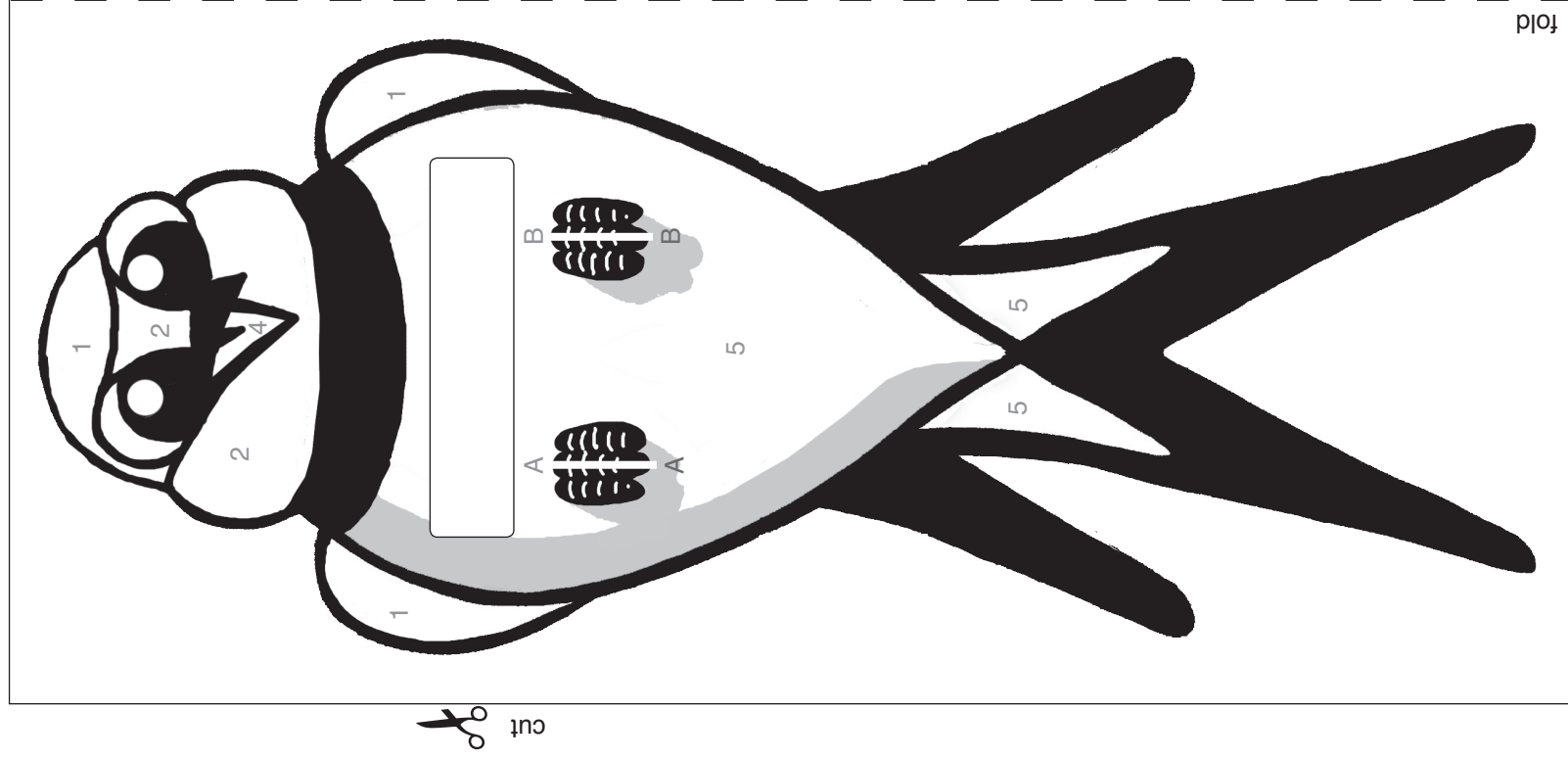
"Do you think the snow has melted back home?"

"I think so."

"We really enjoyed our stay in Malta, didn't we?"

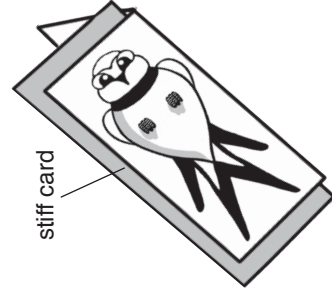
"We sure did."

Make a Perching Swallow

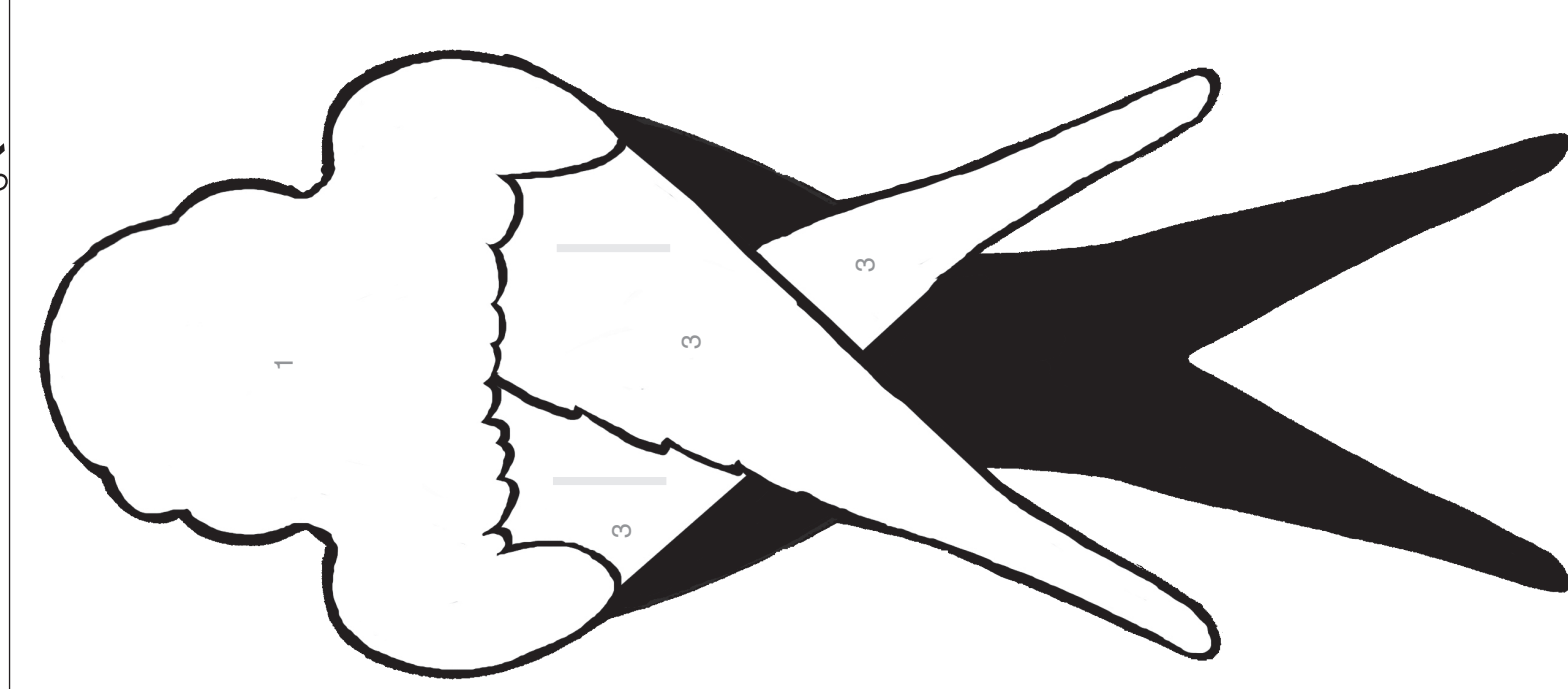


Here's how

- 1 Cut out rectangle and colour birds: 1 = blue, 2 = red, 3 = dark brown, 4 = yellow, 5 = leave white (colour diagram on p.19). Blank box on breast is for student's name.
- 2 Fold down middle along dotted line.
- 3 Insert piece of stiff card between folds (see diagram).
- 4 Glue both folds to card to make one solid 'sandwich'. Leave to dry.
- 5 Cut around bird outline – front and back should match.
- 6 Make two vertical slits at A–A and B–B and thread string through slits to 'perch' bird.
OR forget slits and use paperclips to attach birds to string.



cut



fold

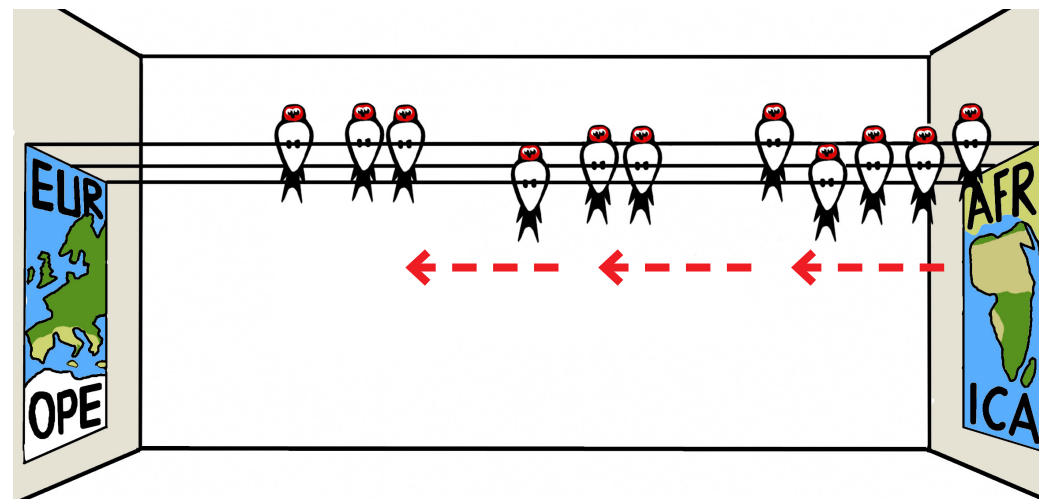
cut

cut

Out of Africa

This game is best played in spring, to coincide with birds flying north to their nesting ground.

- Hang a map or picture of Europe on one classroom wall and a matching picture of Africa facing it on the opposite wall (see diagram). Children share what they know about these lands. Ask what they think the classroom space in between the maps represents: it's the Mediterranean Sea!
- Thread each swallow model through lengths of string spanning the width of the classroom – “between the two continents” – as in the diagram, so you will have as many strings as children in the class (or pairs, or groups, up to you). Leave no slack or knots in the strings. These lines will be the birds' perches, but also their migration route. Children mark their string every 10cm with a marker that shows.
- Start by huddling all the swallows on the 'African' side, ensuring that the children understand what's going on: it's spring and birds are gathering on the African coast before they cross the sea.



- Now every day, before moving any swallows, discuss where the birds are and what is happening. Then, every day for about a week, groups of these swallows start 'migrating' across the classroom until they reach 'Europe'. Singly, in pairs or in groups children roll dice once daily and 'migrate' their swallows along the line markers correspondingly. This progress reflects the fact that not all swallows leave Africa at the same time. Continue until all swallows reach Europe.
- During the process children should realise that migrating birds get tired and hungry and need land where to rest and look for food. That's why Malta's position in the middle of the sea is so important for birds.



Here's how your perching swallow will look in colour.





What kind of **habitats** do you have at school?



pond



flower pots



grassy patch



wall cracks



shrubs



soil heap



planter



stone pile



9

twig pile



10

rubble wall



11

trees



12

flower patch



13

creeper



14

bare soil



15

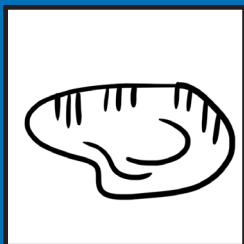
bug hotel



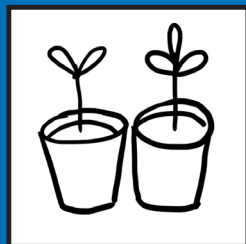
16

compost bin

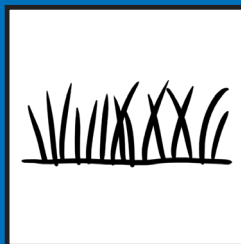
Here are some habitat symbols you can use



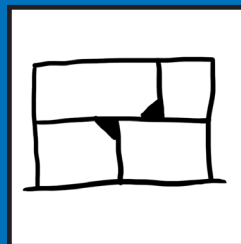
1. pond



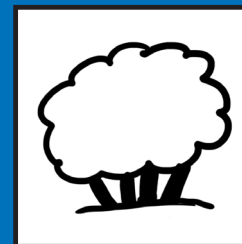
2. flower pots



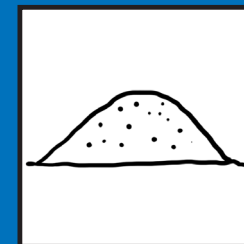
3. grassy patch



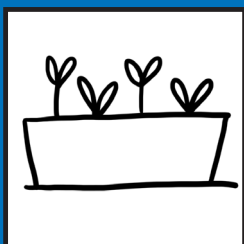
4. wall cracks



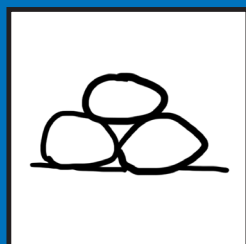
5. shrubs



6 soil heap



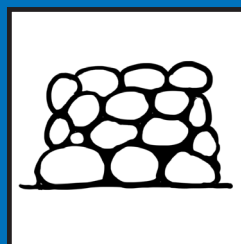
7. planter



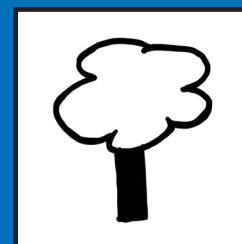
8. stone pile



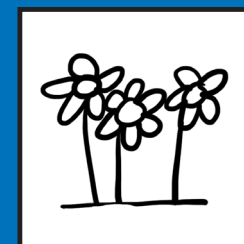
9. twig pile



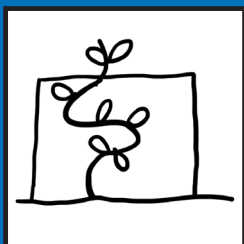
10. rubble wall



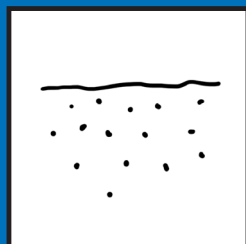
11. trees



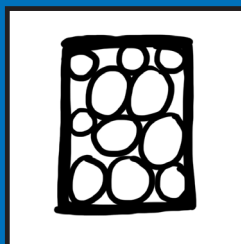
12. flower patch



13. creeper



14. bare soil



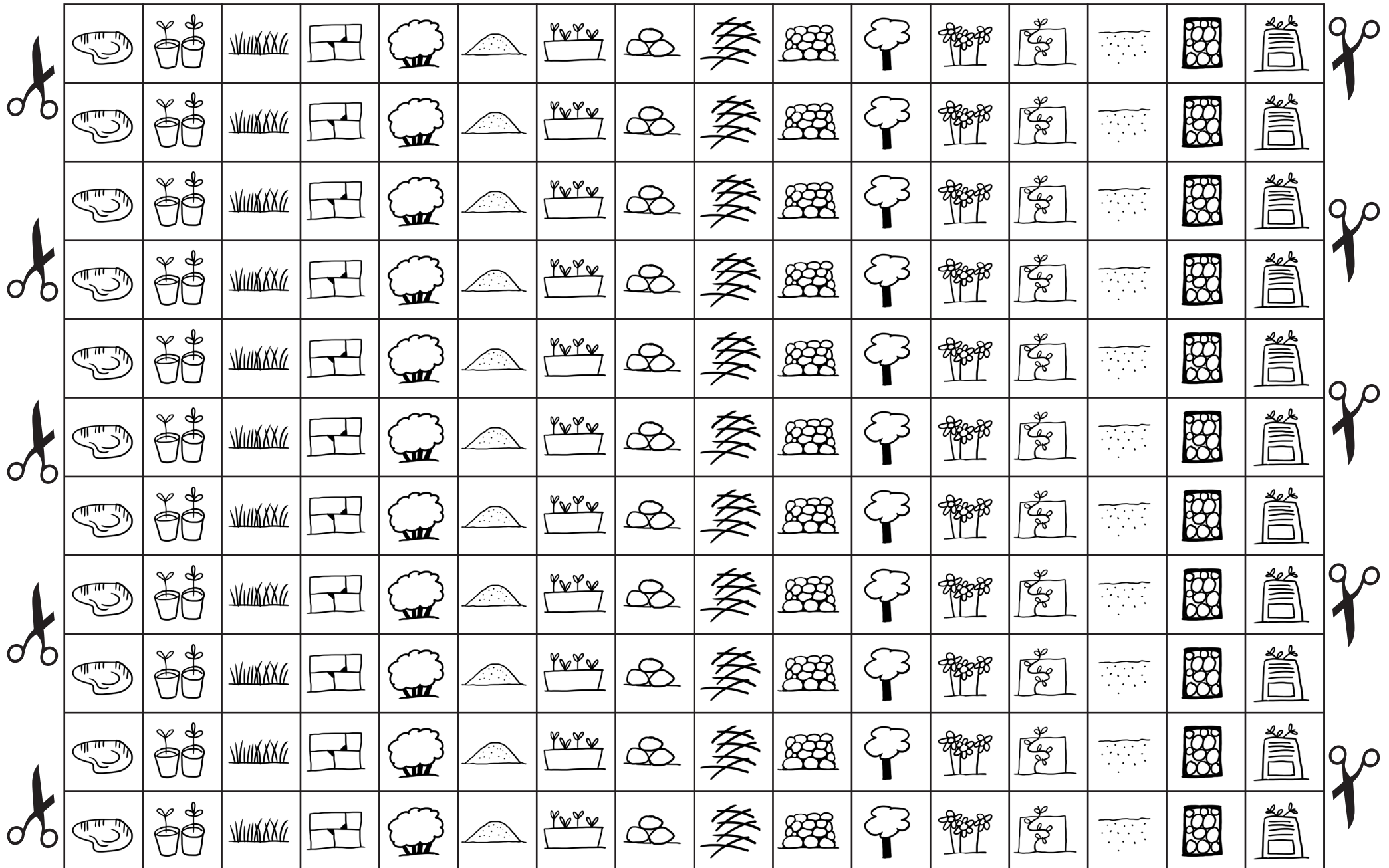
15. bug hotel



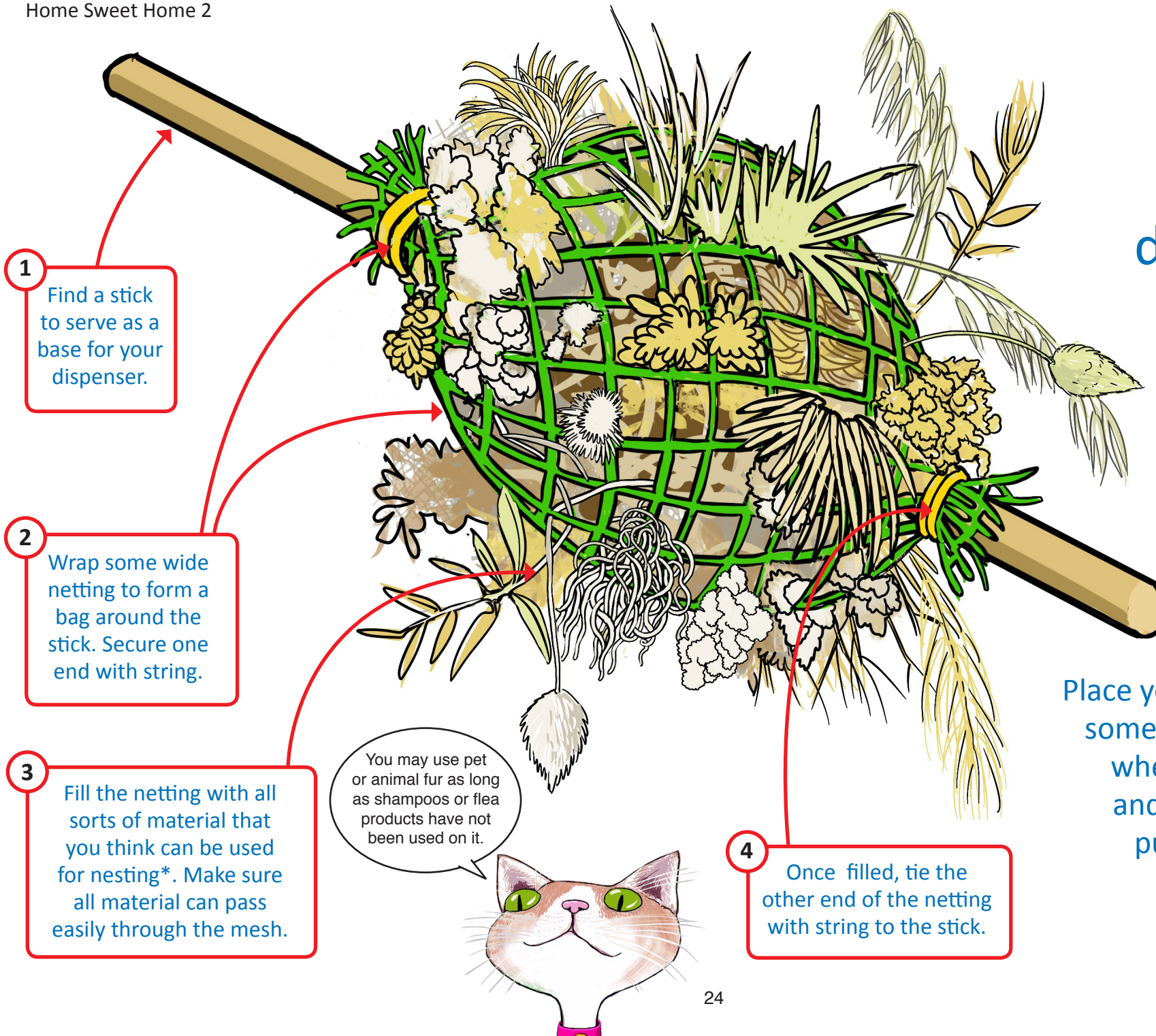
16. compost bin

But you can invent
your own symbols
if you like!





Building a nest dispenser



1

Find a stick to serve as a base for your dispenser.

2

Wrap some wide netting to form a bag around the stick. Secure one end with string.

3

Fill the netting with all sorts of material that you think can be used for nesting*. Make sure all material can pass easily through the mesh.

You may use pet or animal fur as long as shampoos or flea products have not been used on it.

4

Once filled, tie the other end of the netting with string to the stick.

Place your nest dispenser somewhere in the open where birds can see it and can land safely to pull bits of material.





Rubble Facts!

Rubble walls are different from ordinary walls because they are not built with bricks or flat blocks (*kantun*). The stones are rough and of different shapes and sizes.

Rubble walls are also called dry-stone walls. This is because the builders do not use mortar (*tikhil*) or cement to hold the stones together.

Rubble walls are strong and stay in place because the builders fit the stones very carefully, like a jigsaw puzzle. You need lots of practice to learn to build a rubble wall.

Rubble walls are built around fields to mark where one field ends and another begins. If you have animals like sheep and goats in your field, rubble walls help keep them from walking off and getting lost.

Rubble walls are great for holding the soil in, especially when the fields are on slopy ground.

Rubble walls let rainwater through the holes between the stones so the field will not drown when it's very rainy.

Rubble walls are great for wildlife!

All those nice holes between the stones make wonderful hidey-holes for many creatures. A rubble wall is a great habitat for nature.



Geckoes, snakes, lizards and **skinks** sun themselves on the warm stones, and in winter they hide away in the cracks and sleep safe and dry.



Snails wedge themselves in shady cracks to hide from the sun and sleep the summer away.



Many **wildflowers** grow on rubble walls or at the bottom. Flowers attract more insects, like **butterflies, moths, bugs, bees** and **wasps**.



Wasps use the stones as a base on which to build their nests.



Ants, beetles, bugs, slugs, millipedes, hedgehogs, shrews and **weasels** live in and around rubble walls.



Lots of **lichens** (*likeni*) and **mosses** (*ħaziż*) too grow on walls, sometimes even **ferns** (*felċi*) which are very rare.



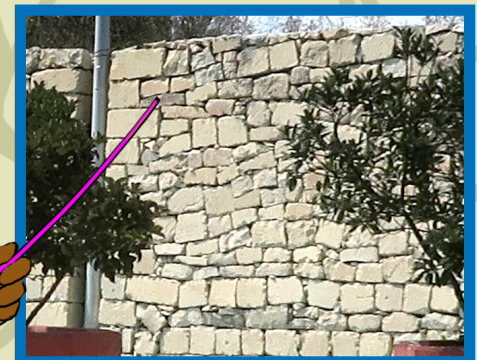
Spiders build their webs and shelters in the gaps between the stones.



Birds perch on top of the walls and use them as look-out posts.

Is it fake?

Some builders make brick walls and then cover them with rough stones to look like rubble walls. But the face is flat and that gives them away. Real rubble walls don't have a flat face and they are usually less than 3 metres high.



Let's look at rubble walls...

1 Where is your rubble wall?

☐

In a built-up place

☐

Near a built-up place

☐

Out in the countryside

2 What is the name of the nearest town or village?

3 What is on the other side of the wall?

☐

a field

☐

a road

☐

a footpath

☐

a garden

☐

rocky land

4 How tall is the wall?

 cm

5 Are there plants growing in the wall?

☐

Yes

☐

No

6 Can you name any of them?

7 Are there plants growing at the bottom of the wall?

☐

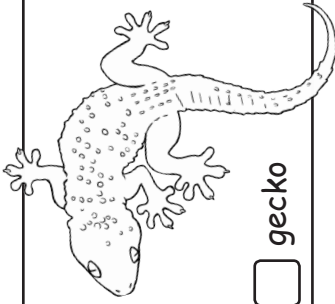
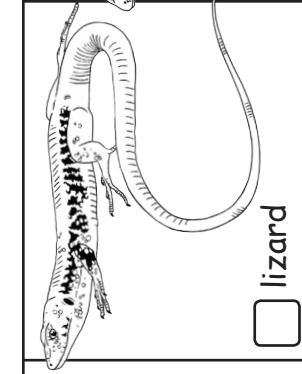
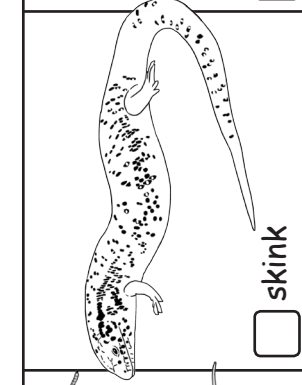
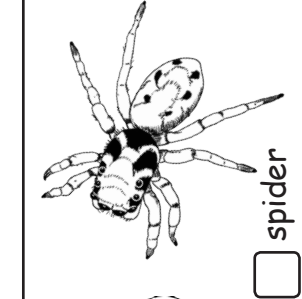
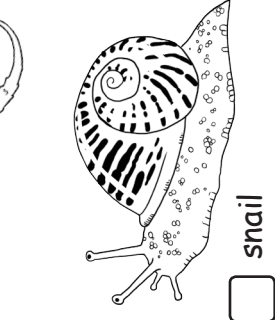
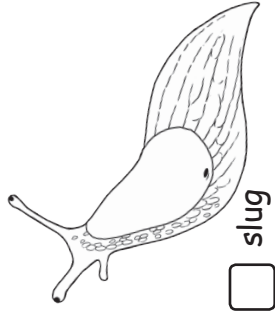
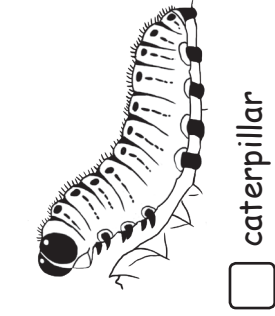
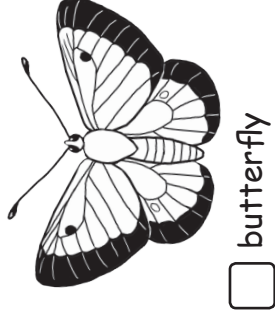
Yes

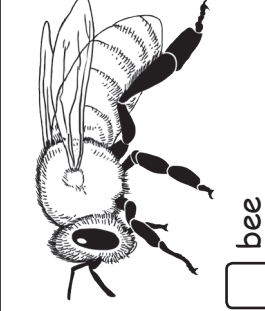
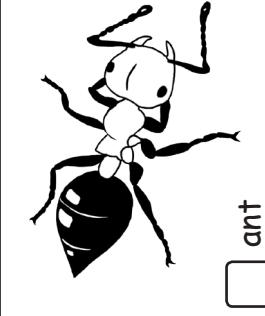
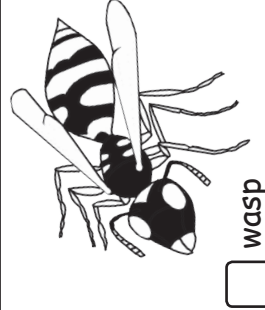
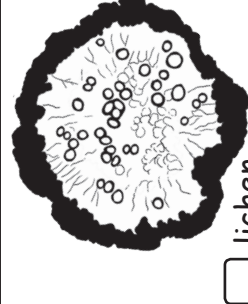
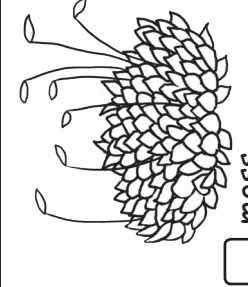
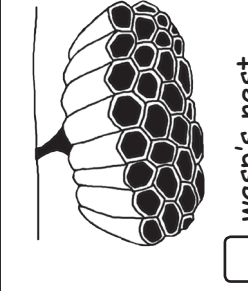
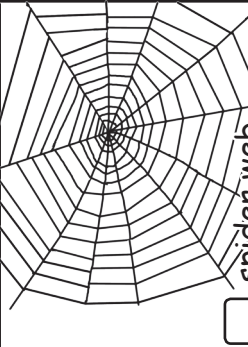
☐

No

8 Can you name any of them?

9 A rubble wall is the home of many living things. Can you spot any of these on the wall?


☐ gecko

☐ lizard

☐ skink

☐ spider

☐ snail

☐ slug

☐ caterpillar

☐ butterfly

☐ beetle

☐ bee

☐ ant

☐ wasp

☐ lichen

☐ moss

☐ wasp's nest

☐ spider web

name

date

Harsa lejn ħajt tas-sejjeġh...

1 Fejn qiegħed il-ħajt tas-sejjeġh?

☐ Qalb il-bini ☐ Mhux bogħod mill-bini ☐ Barra fil-kampanja

2 X'jismu l-egreb raħal jew belt?

3 X'hemm in-naħa l-oħra tal-ħajt?

☐ għalqa ☐ triq ☐ mogħdija ☐ ġnien ☐ blat

4 Kemm hu għoli l-ħajt?

cm

5 Hemm pjanti qed jikbru fil-ħajt?

☐ Iva ☐ Le

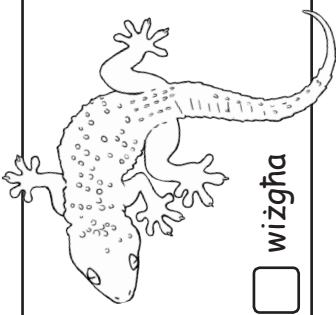
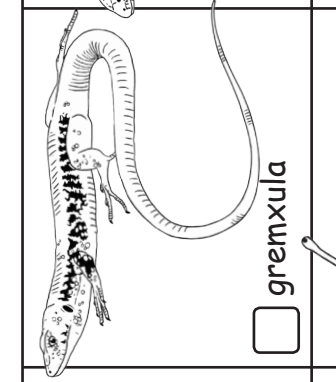
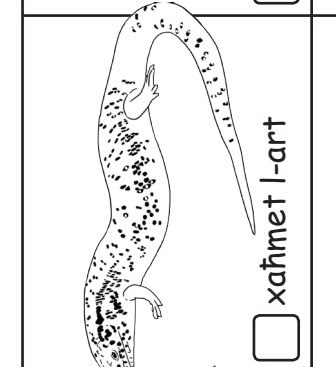
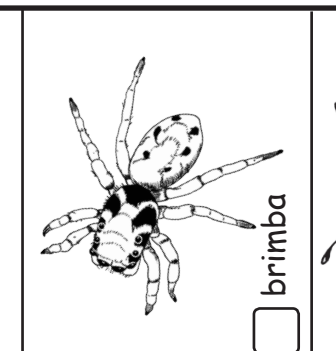
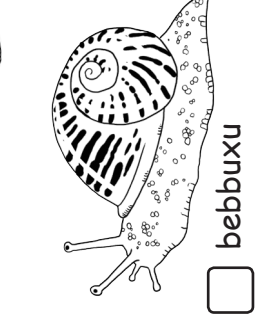
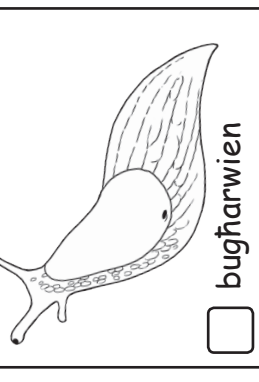
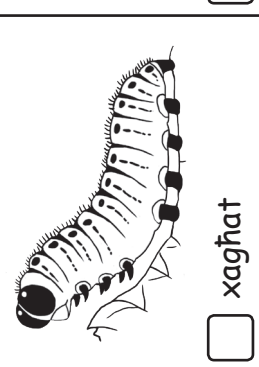
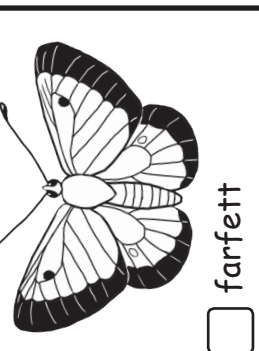
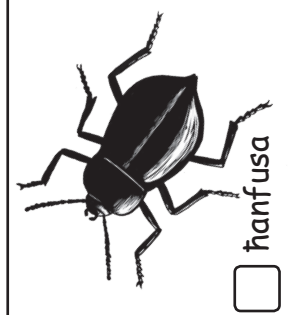
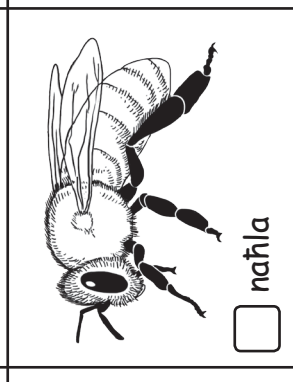
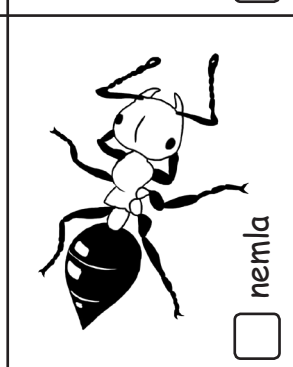
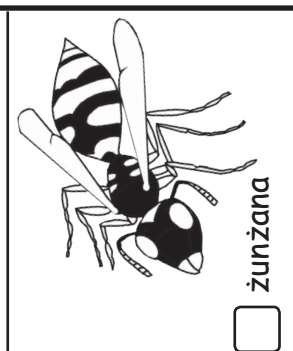
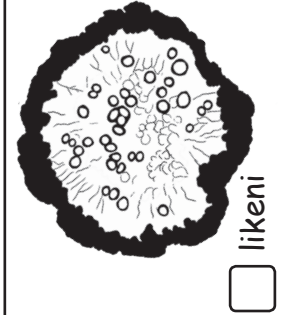
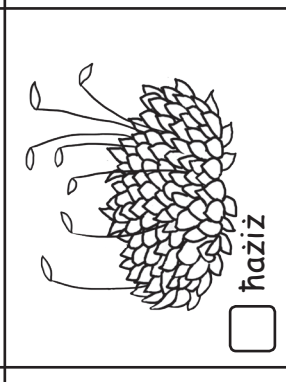
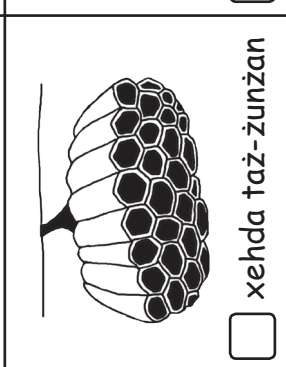
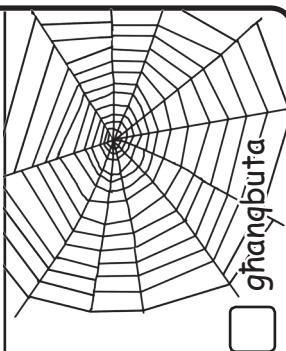
6 Tista' ssemmi xi tnejn?

7 Hemm pjanti fl-art quddiem il-ħajt?

☐ Iva ☐ Le

8 Tista' ssemmi xi tnejn?

9 F'ħajt tas-sejjeġh jgħixu ħafna ħlejjaq. Ara kemm tara minn dawn t'hawn taht.

 <input type="checkbox"/> wiżgħa	 <input type="checkbox"/> gremxula	 <input type="checkbox"/> xaħmet l-art	 <input type="checkbox"/> brimba
 <input type="checkbox"/> bebbuxu	 <input type="checkbox"/> bugħarwien	 <input type="checkbox"/> xagħat	 <input type="checkbox"/> farfett
 <input type="checkbox"/> ħanfusa	 <input type="checkbox"/> naħla	 <input type="checkbox"/> nemla	 <input type="checkbox"/> żunzana
 <input type="checkbox"/> likeni	 <input type="checkbox"/> ħażiż	 <input type="checkbox"/> xehda taż-żunżan	 <input type="checkbox"/> għanqbuta

isem

data



This is a
Dinja Waħda
school



This is a
Dinja Waħda
class





Din skola
Dinja Waħda



Din klassi
Dinja Waħda