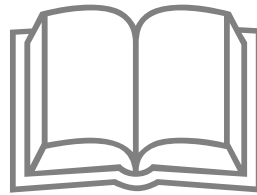


LIKE – Living on a Karst Edge

Green Book of Knowledge

Educational Project NATURE 2000



The educational project „NATURE 2000“ is accompanied by the Green Book of Knowledge which participants complete during the workshops and which they receive upon completion of the education.

The participants will also receive sheets and materials they have used in each workshop and which they will be able to file into a separate map which will eventually make up the “Green Book of Knowledge”.

The common objective of all workshops is to raise awareness of the reasons and the need for nature protection, which will be mostly conducted through group work and various games. The workshops have a theme plant and animal which will help to cover the terms related to nature protection and the “Natura 2000” area, as well as specific terms related to biology and wildlife. In addition, the focus of all workshops will be placed on the habitats within the “LIKE” project scope.

Workshop 1.

Be the Protector of Nature 1 (Natura 2000 area)



1. „I was in a special park today!“ (protected areas in my region).

The sheet with Natura 2000 areas in the territory of Croatia/Slovenia.

The sheet with puzzle containing national parks in Croatia/Slovenia.

The sheet with puzzle containing nature parks in Croatia/Slovenia.

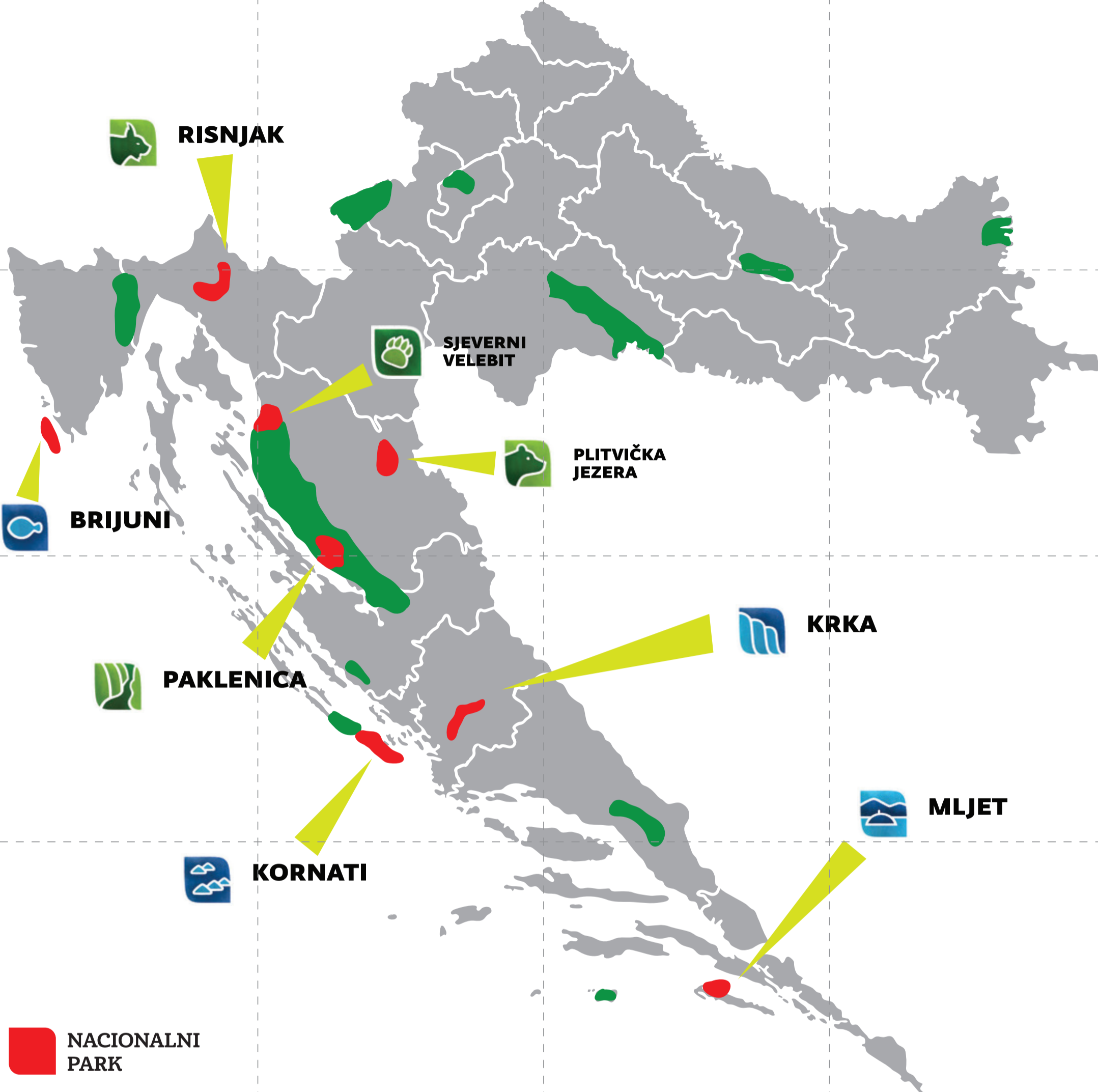
2. „Whizz quiz!“

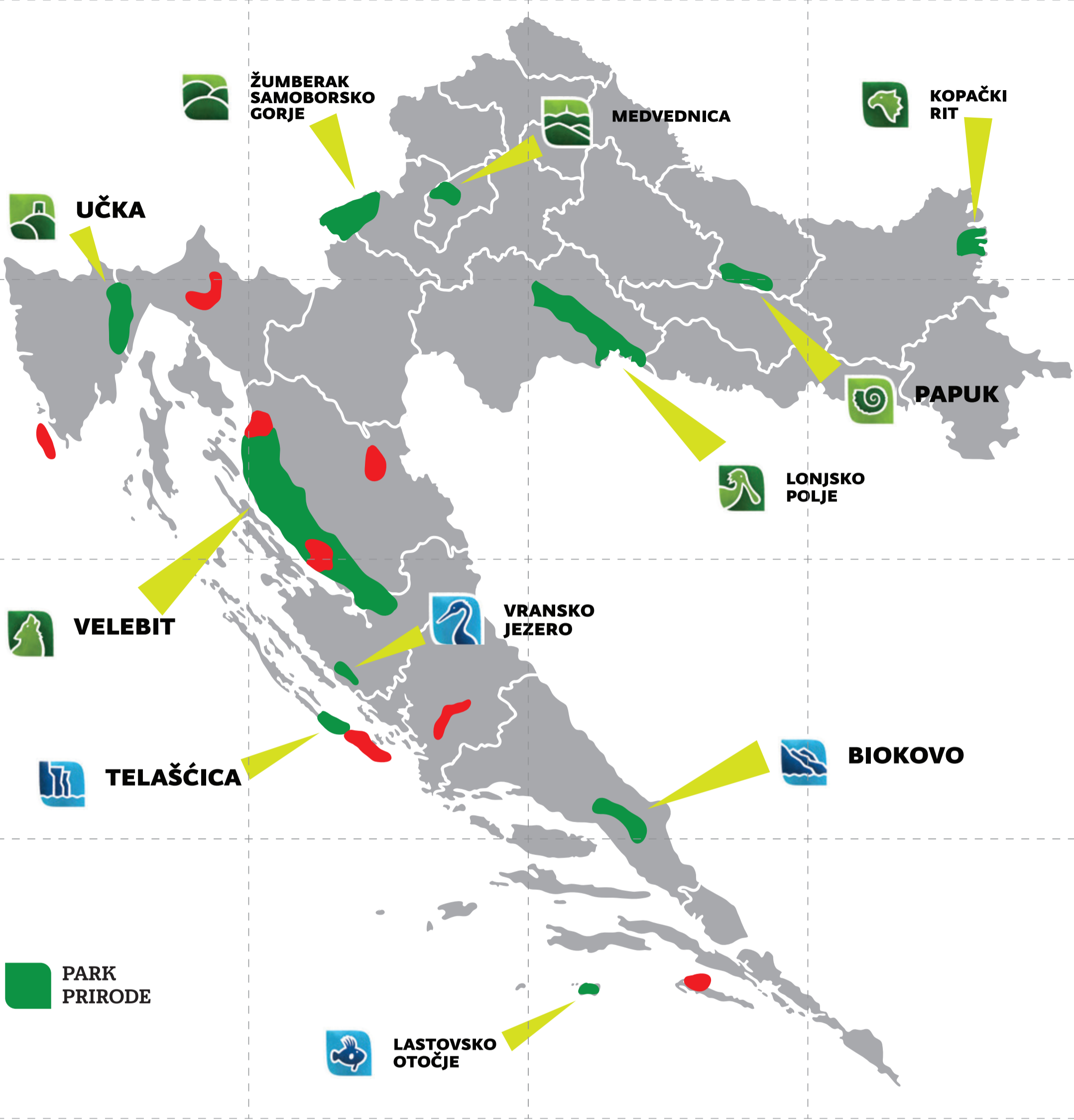
The sheet with quiz questions.

(Solutions: 1. c, 2. b, 5. c, 6. b, 7. approximately 37% of the land territory and 16% of the coastal sea area, 8. 743 conservation areas significant for species and habitat types (WWTP) and 38 areas significant for the conservation of birds (POP), in total about 30% of the total area of the Republic of Croatia, 9. a, 10.c)

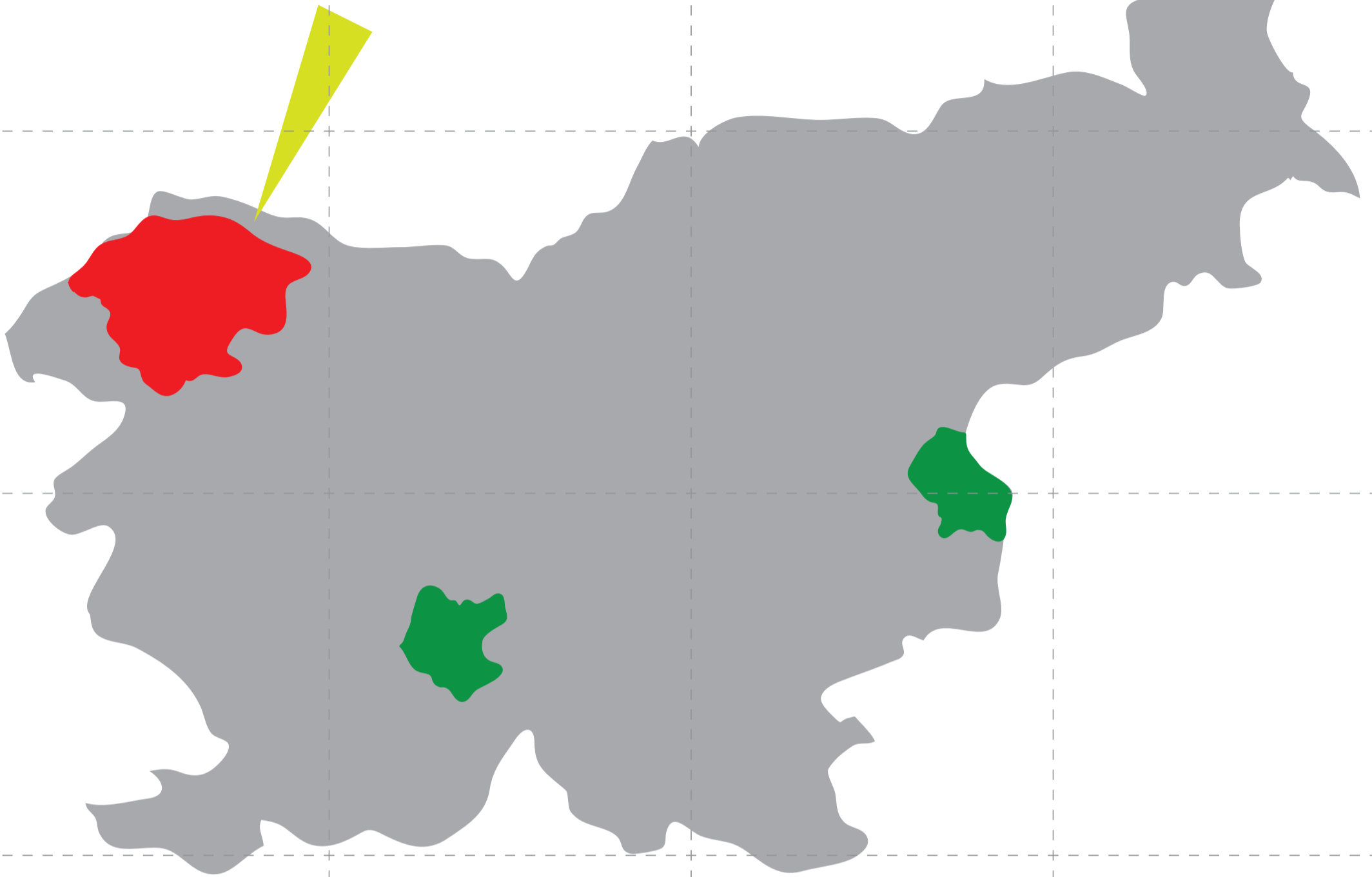
„I was in a special park today!“

Protected areas in my region

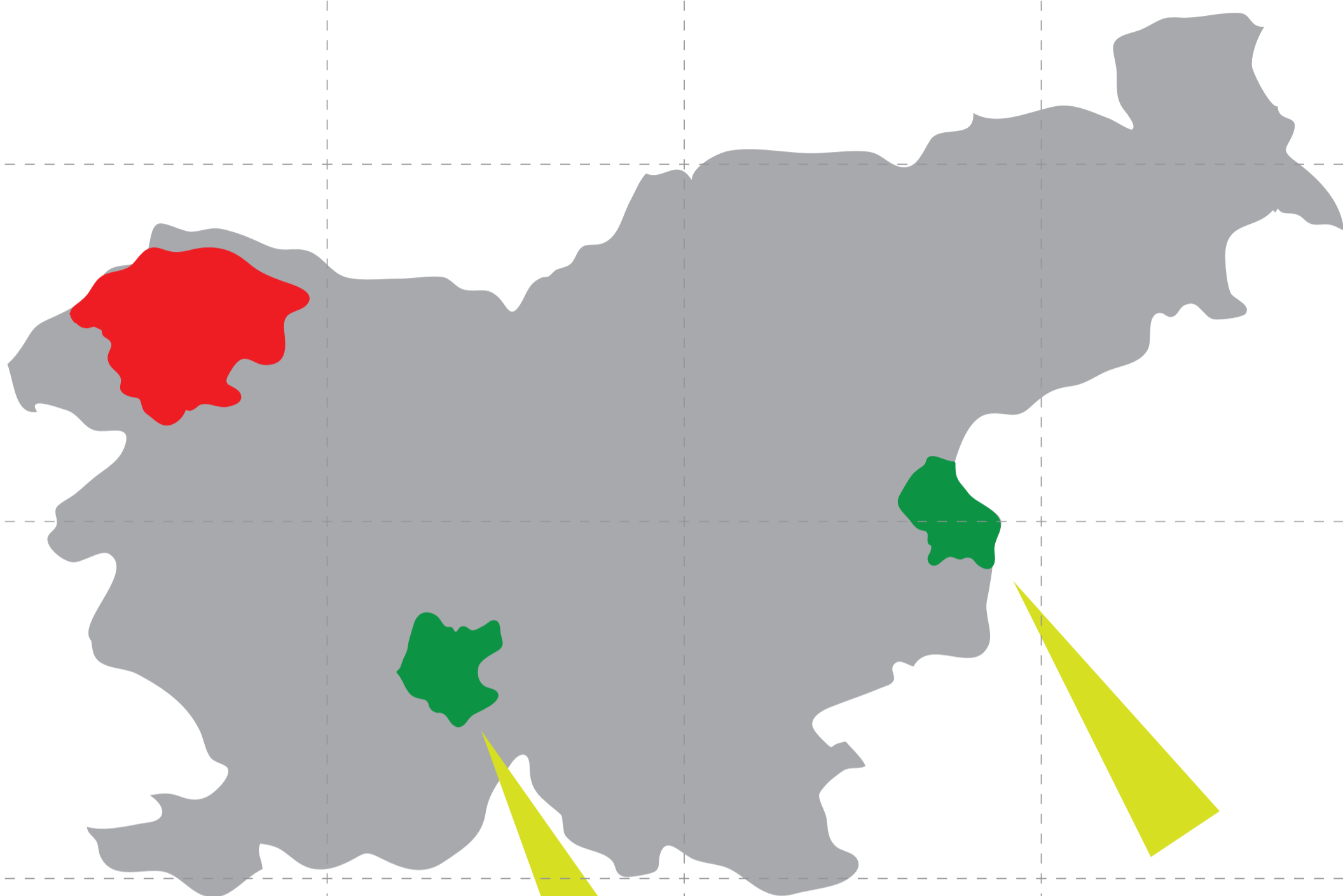




TRIGLAV



 **NACIONALNI
PARK**

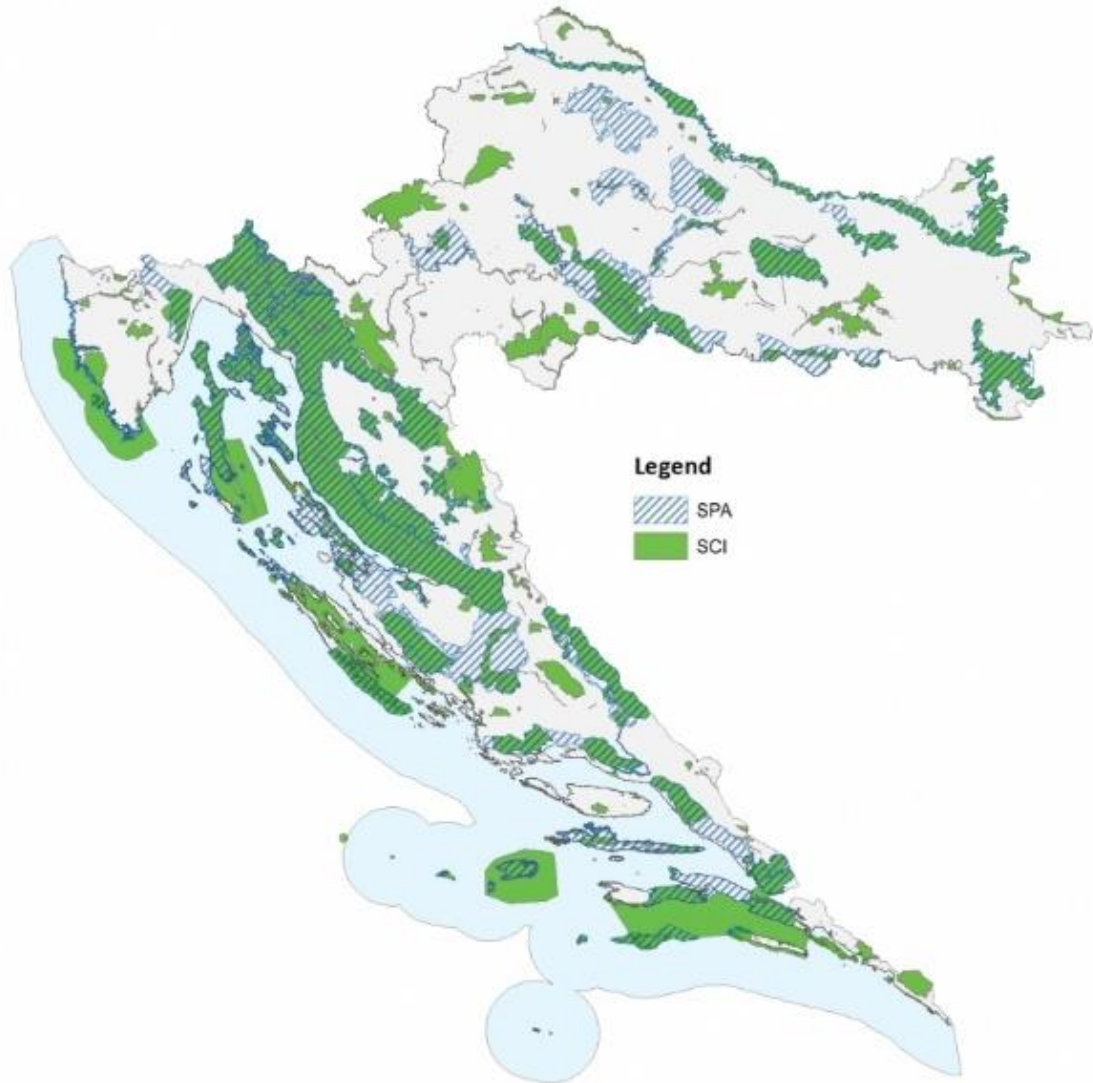


 REGIONALNI
PARK

**ŠKOCJANSKE
JAME**

KOZJANSKO

Natura 2000 areas in the territory of Croatia.



Natura 2000 areas in the territory of Slovenia.



„Whizz quiz!“

1. What is Natura 2000?
 - a) a special cake type made in the European Union in 2000.
 - b) a network of protected areas in Africa
 - c) an ecological network of the European Union which comprises areas important for preserving biodiversity
2. Natura 2000 is based on two directives: the Habitats Directive and:
 - a) the Flying Squirrels Directive
 - b) the Birds Directive
 - c) the Flying Reptiles Directive
3. An ecological network is _____ (*respond with your own words*).
4. Name at least three categories of protected areas which are not a national park or a nature park! _____, _____, _____
5. Natura 2000 comprises _____ of the European land territory!
 - a) 38%
 - b) 23%
 - c) 18%
6. Natura 2000 comprises _____ of the European maritime territory!
 - a) 3%
 - b) 6%
 - c) 9%
7. In Croatia, Natura 2000 comprises _____ of the territory?
8. How many locations does Natura 2000 comprise? _____ And which surface? _____
9. How many national parks does Croatia have?
 - a) 8
 - b) 7
 - c) 6
10. How many nature parks does Croatia have?
 - a) 10
 - b) 9
 - c) 11

Workshop 2.

SAW-WORT and ORTOLAN BUNTING



ortolan bunting
(*Emberiza hortulana*)



eastern sub-Mediterranean
dry grasslands



single-flowered saw-wort
(*Serratula lycopifolia*)

1. „Birds are looking for food!“

Sheet with dark and light coloured insects.

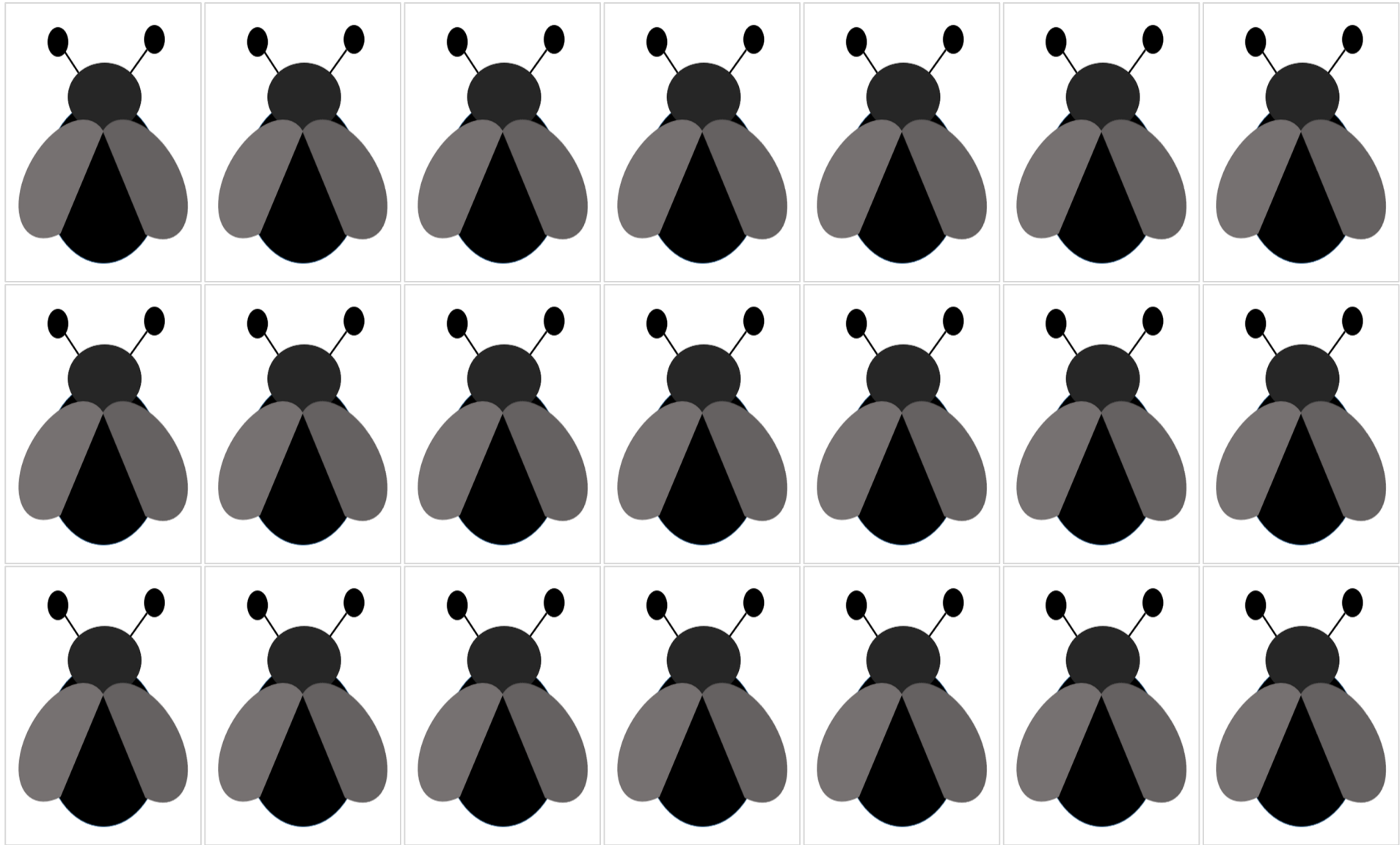
2. „Why do I have such a beak?“

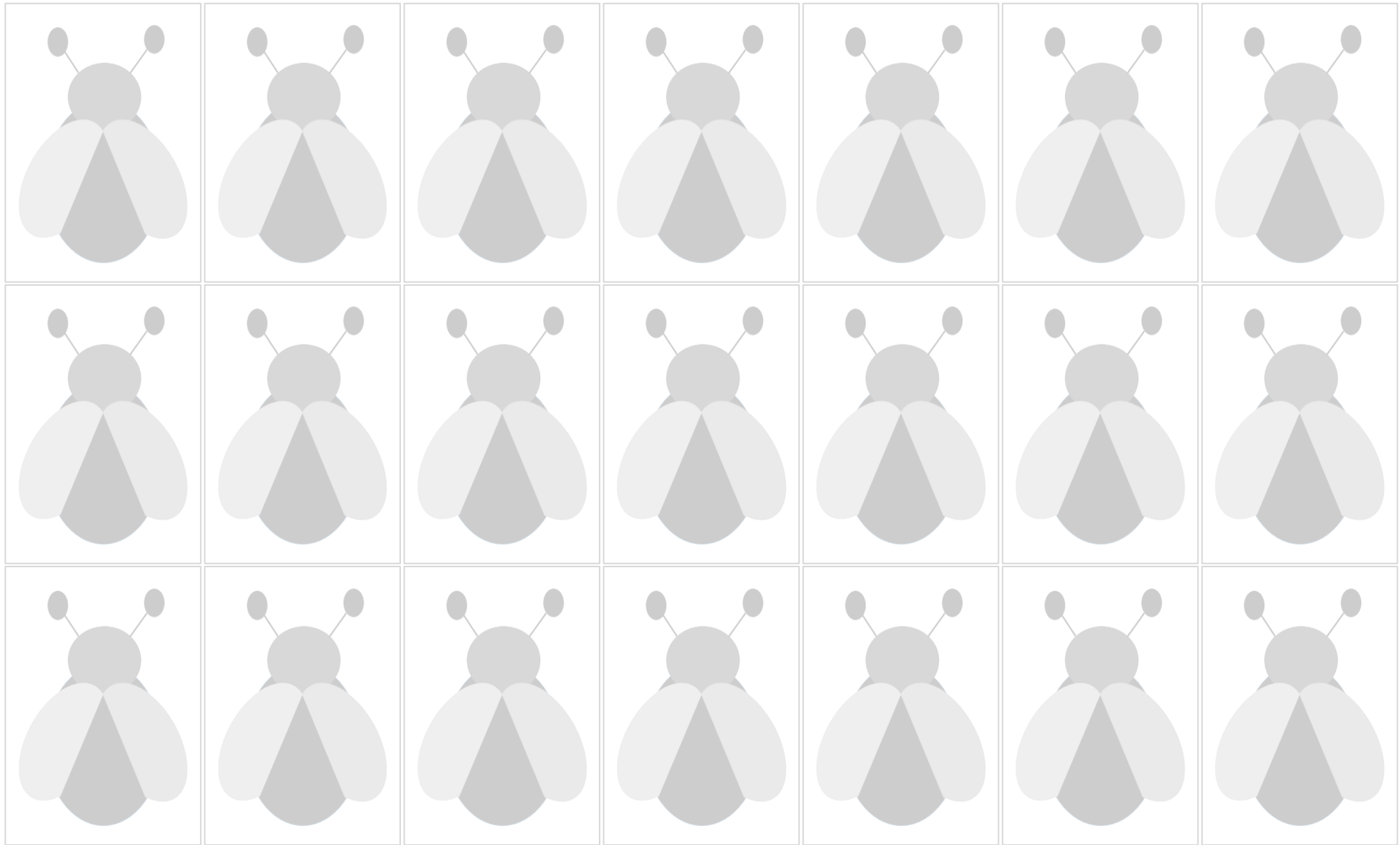
The sheet with the table to write down the feeding score during the game.

3. „Tic-tac-toe!“

The sheet with single-flowered saw-wort, ortolan bunting, mower and forest.
A tic-tac-toe template.

1. „Birds are looking for food!“





2. „Why do I have such a beak?“

Let's play birds! Each bird will choose a beak. The birds will get to choose from a selection of different types of food and they will try to collect as much food as they can. We will write down the score after each feeding round in the table below.

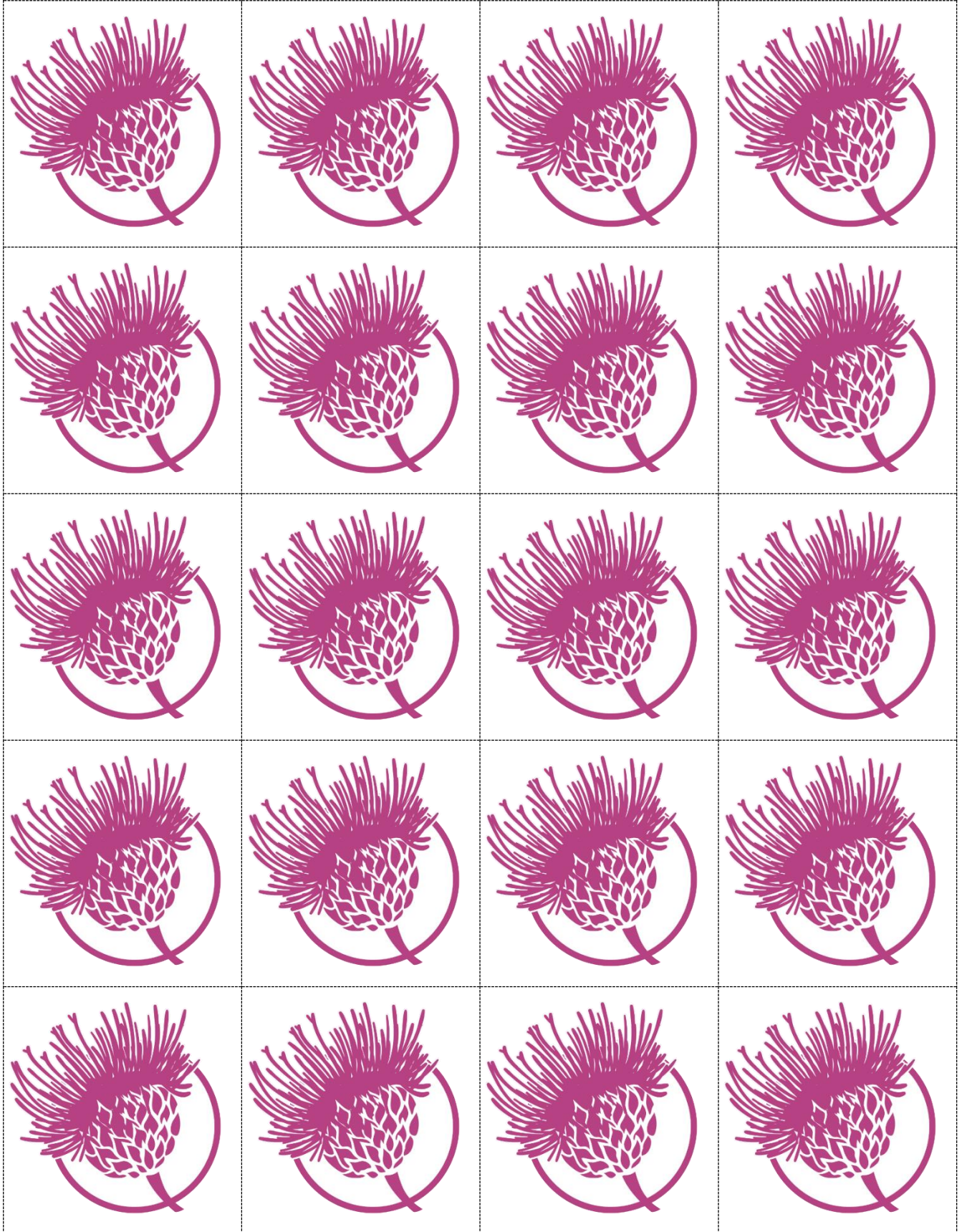
After each feeding, count how much food has each bird of the flock collected and write down the number in the corresponding place.

	„BEAK“	staples	rubber bands	toothpicks	beans	pasta	marbles
Write down here the selected „beak“ (scissors, spoon, tweezers, clothes peg, knife, etc.)!							

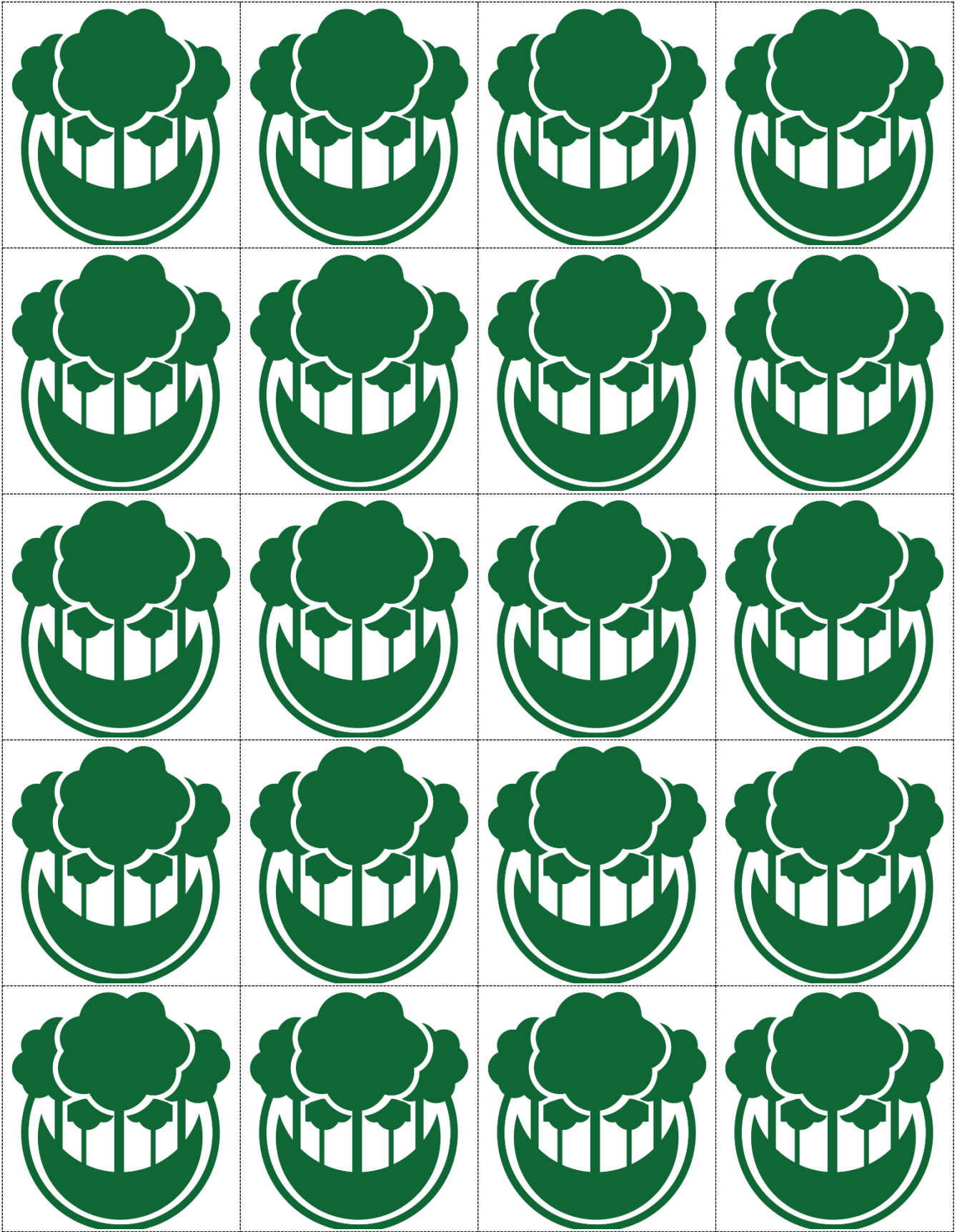
Describe the results in the box below:

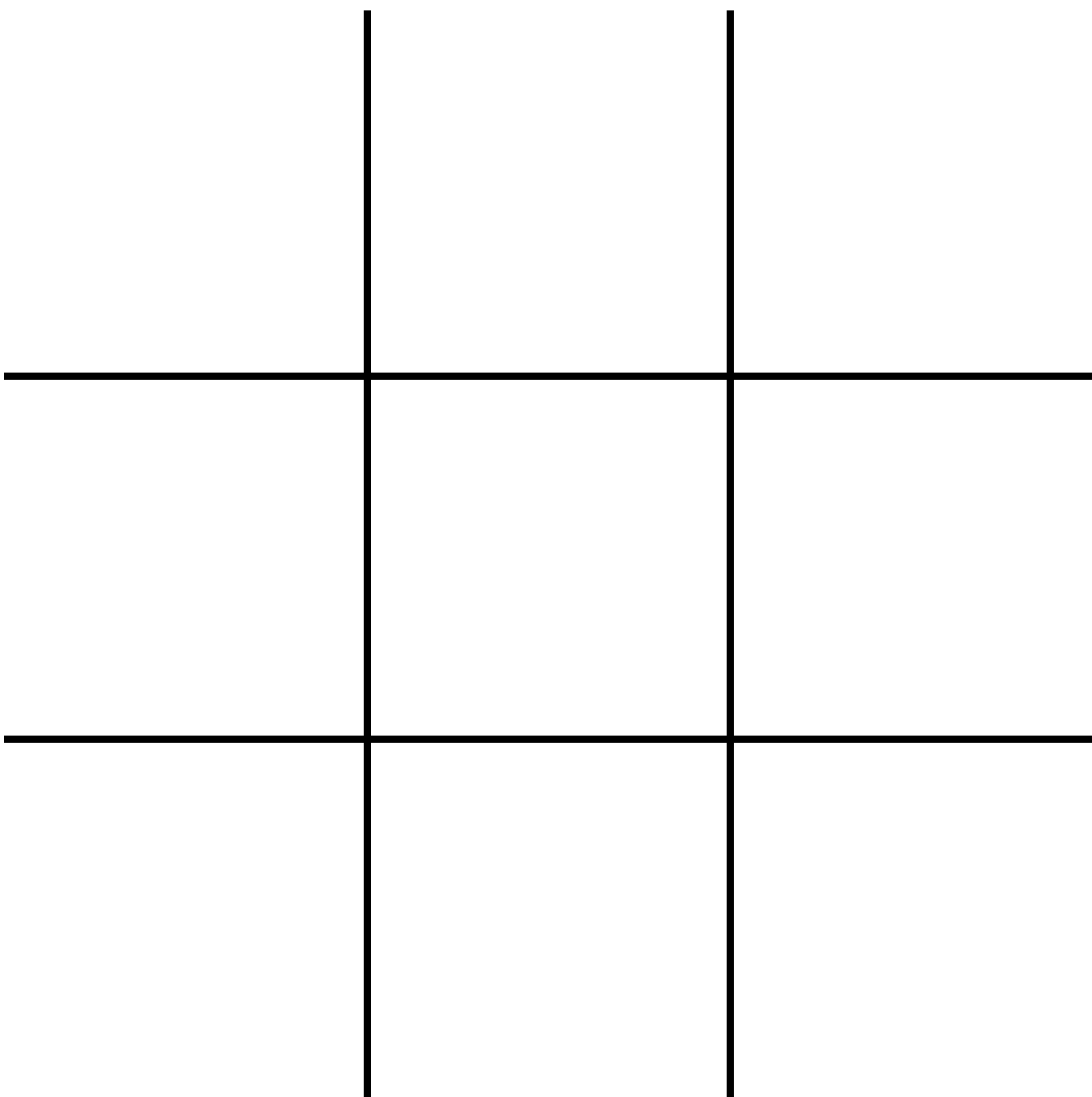
3. „Tic-tac-toe!“











Workshop 3.

MOEHRINGIA TOMMASINII and EAGLE OWL



eagle owl
(*Bubo bubo*)



carbonate rocks with
chasmophytic vegetation



Moehringia tommasinii
(*Moehringia tommasinii*)

1. „Be the protector of Moehringia tommasinii!“

The sheet with an herbarium label.

2. „Tic-tac-toe!“

The sheet with Moehringia tommasinii, climber and the eagle owl.
A tic-tac-toe template.

3. „Put me together!“

The sheet for putting together parts of *Moehringia tommasinii* into one habitat and placing it on a rock and putting an eagle owl's nest and birds on the rock.

4. „Find the owls!“

The sheet with 10 owl species for printing out.
The sheet to be completed while searching for owls.

1. Herbarium sheet.

Print the labels, cut them out and file into each herbarium sheet next to the plant.

My herbarium

Family: _____

Species: _____
(*Latin name*)

Location: _____

Habitat: _____

Collected by _____ Date: _____

My herbarium

Family: _____

Species: _____
(Latin name)

Location: _____

Habitat: _____

Collected by _____ Date: _____

My herbarium

Family: _____

Species: _____
(Latin name)

Location: _____

Habitat: _____

Collected by _____ Date: _____

My herbarium

Family: _____

Species: _____
(Latin name)

Location: _____

Habitat: _____

Collected by _____ Date: _____

My herbarium

Family: _____

Species: _____
(Latin name)

Location: _____

Habitat: _____

Collected by _____ Date: _____

My herbarium

Family: _____

Species: _____
(Latin name)

Location: _____

Habitat: _____

Collected by _____ Date: _____

My herbarium

Family: _____

Species: _____
(Latin name)

Location: _____

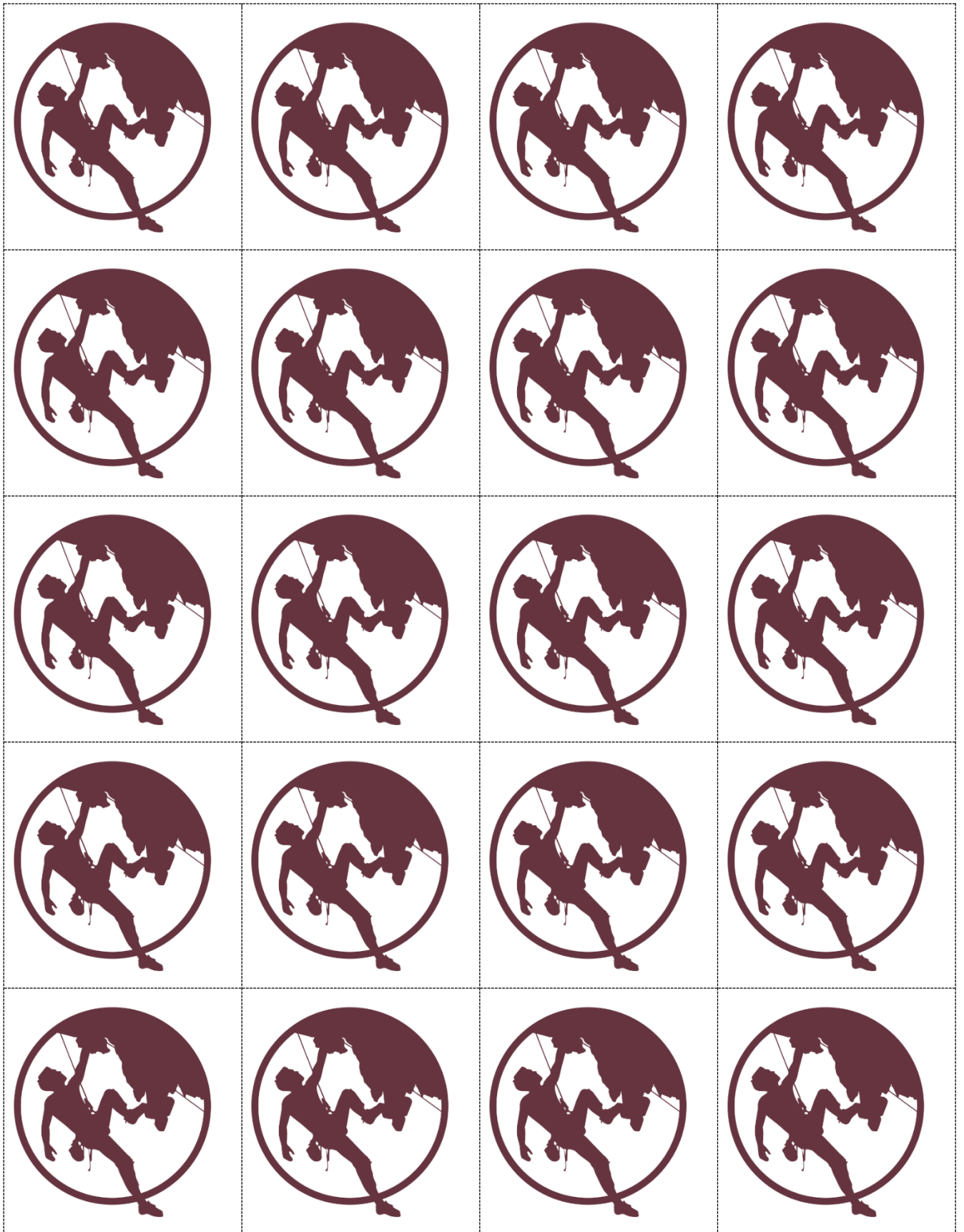
Habitat: _____

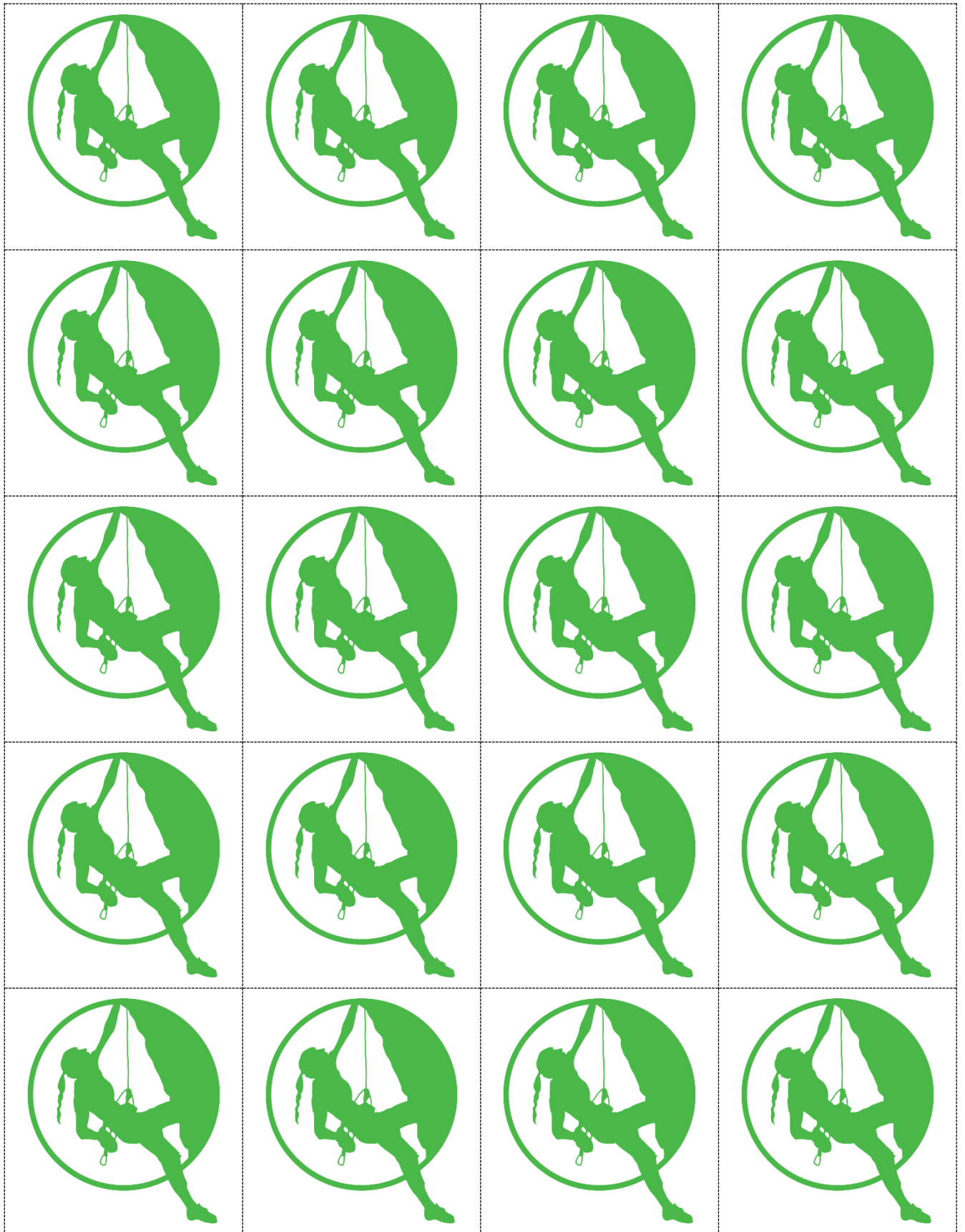
Collected by _____ Date: _____

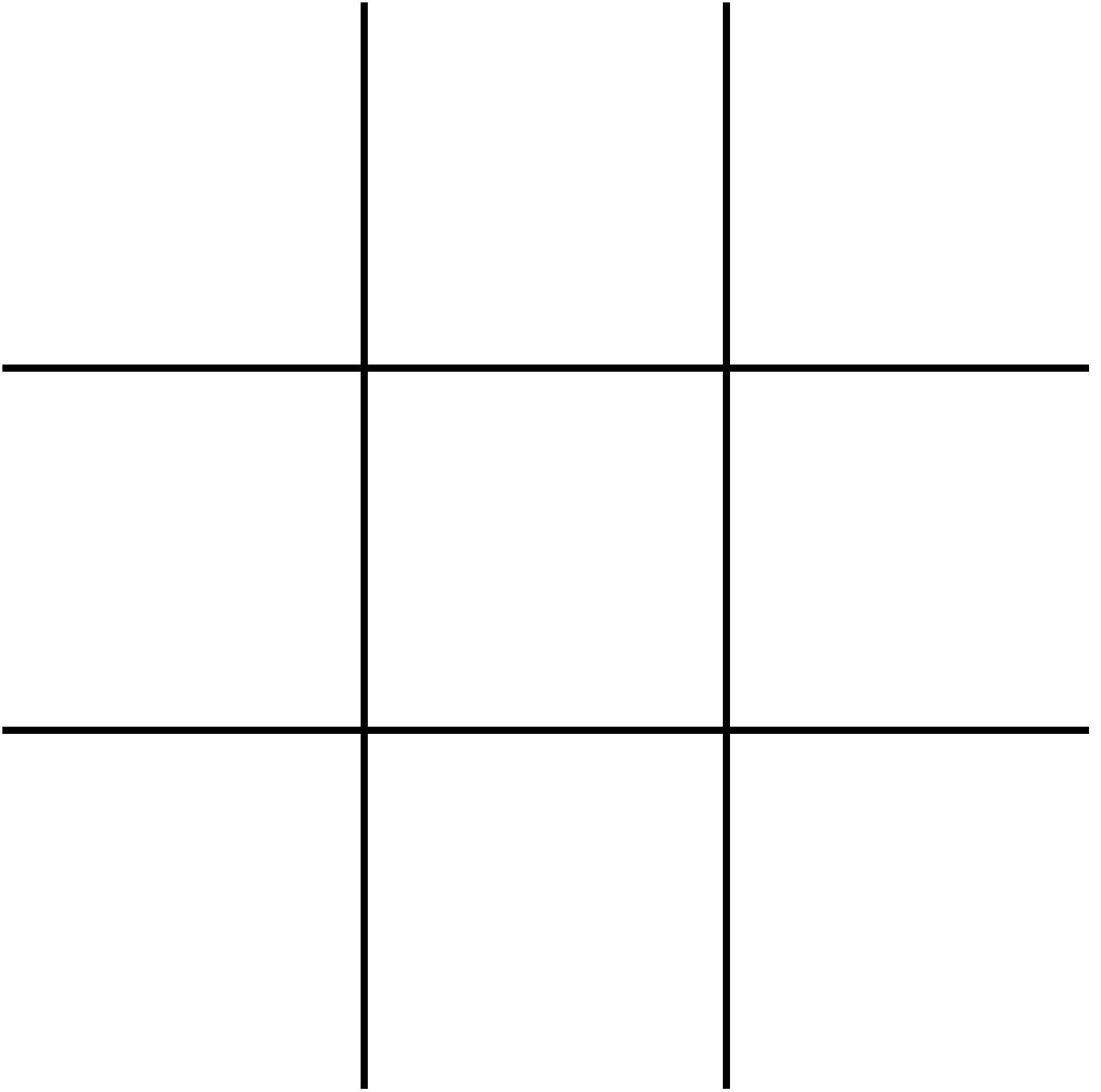
2. „Tic-tac-toe!“







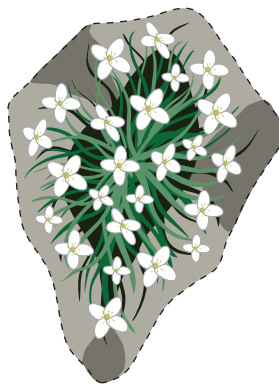
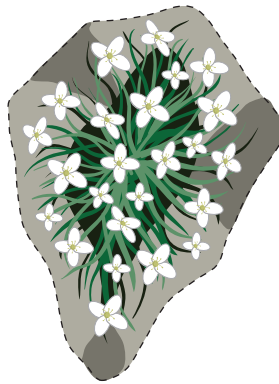
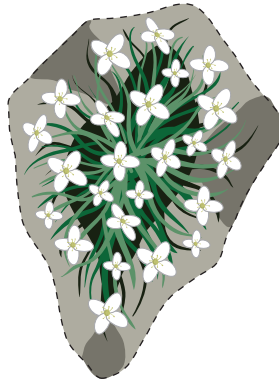
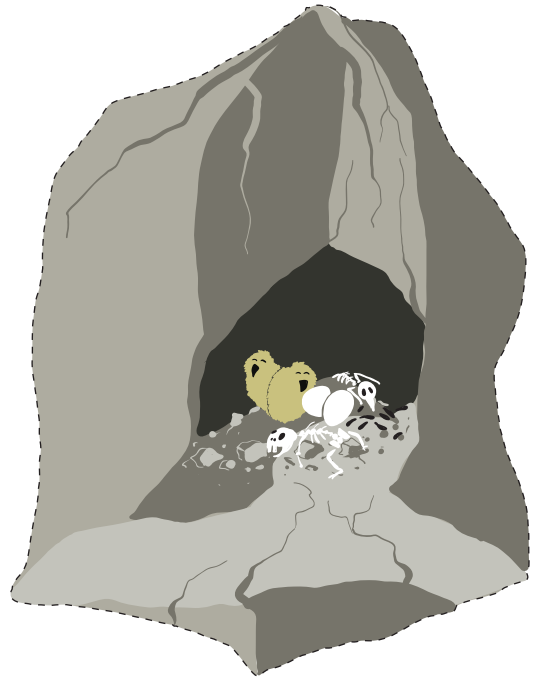




3. „Put me together!“

Cut out the parts and put together the model of a chasmophyte habitat with *Moehringia tommasinii* and an eagle owl's nest according to the template!





4. „Find the owls!“

Print each owl on a separate sheet, then fold over the dotted line, glue the pieces together and then cut so that there is no white edge visible around the owl photo. Hang it on a string or lay it on the floor, table, shelf, etc., when hiding the owls for the search.



Eurasian eagle-owl

(*Bubo bubo*)

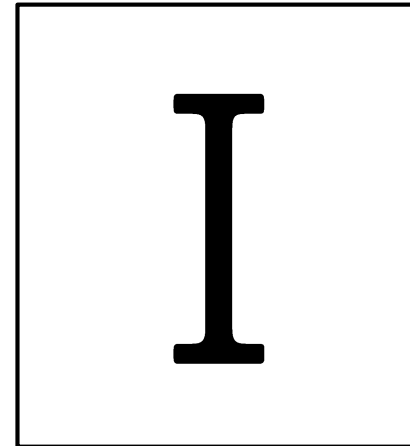
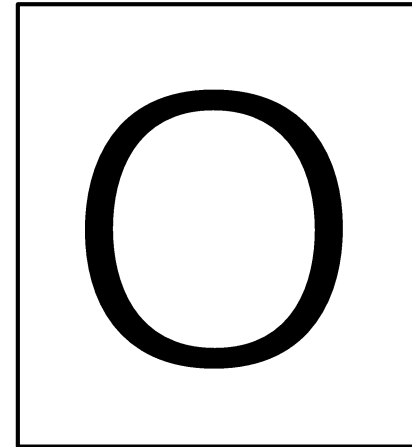




Photo: Tim Ellis

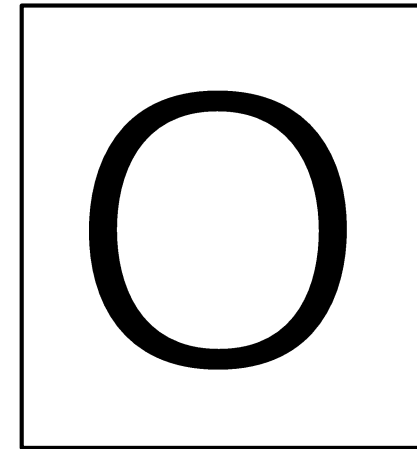
Eurasian scops owl

(Otus scops)



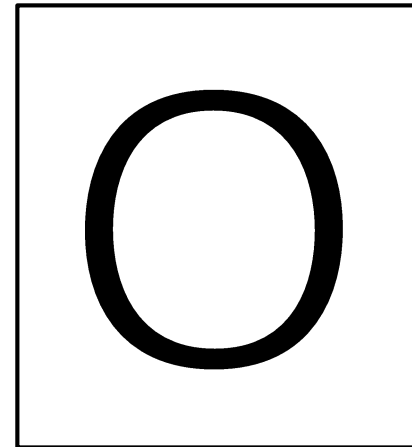


Tawny owl
(*Strix aluco*)





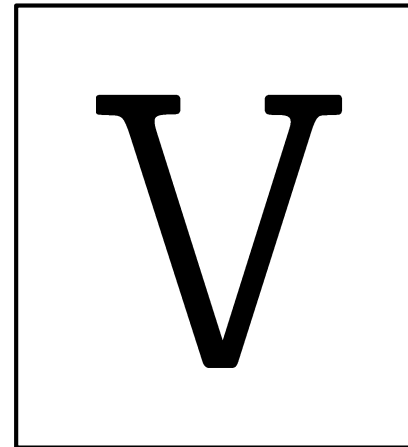
Long-eared owl
(*Asio otus*)





Boreal owl

(*Aegolius funereus*)





Ural owl
(*Strix uralensis*)

S



Pygmy Owl

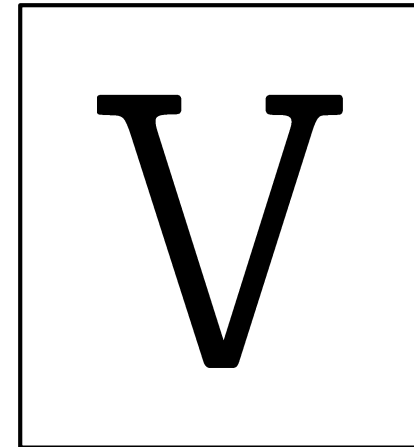
(*Glaucidium
passerinum*)

L



Short-eared owl

(Asio flammeus)





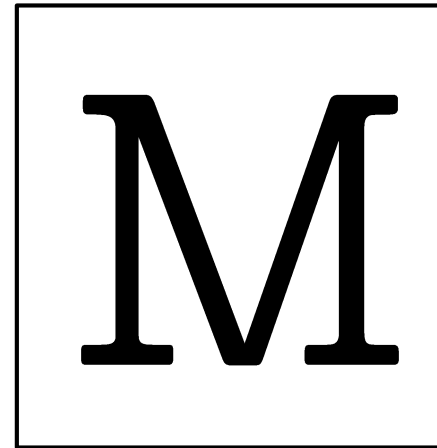
Barn owl
(*Tyto alba*)

E



Photo: Louise Greenhorn

Sivi ćuk
(*Athene noctua*)



Find the owls!



Letter:

1.

2.

3.

4.

5.

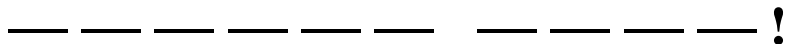
6.

7.

8.

9.

10.



Find the owls!



Letter:

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.



Workshop 4.

GRIFFON VULTURE



griffon vulture
(*Gyps fulvus*)

1. „Tic-tac-toe!“

The sheet with a speedboat, “poisoned sheep” and griffon vulture for tic-tac-toe.
A tic-tac-toe template.

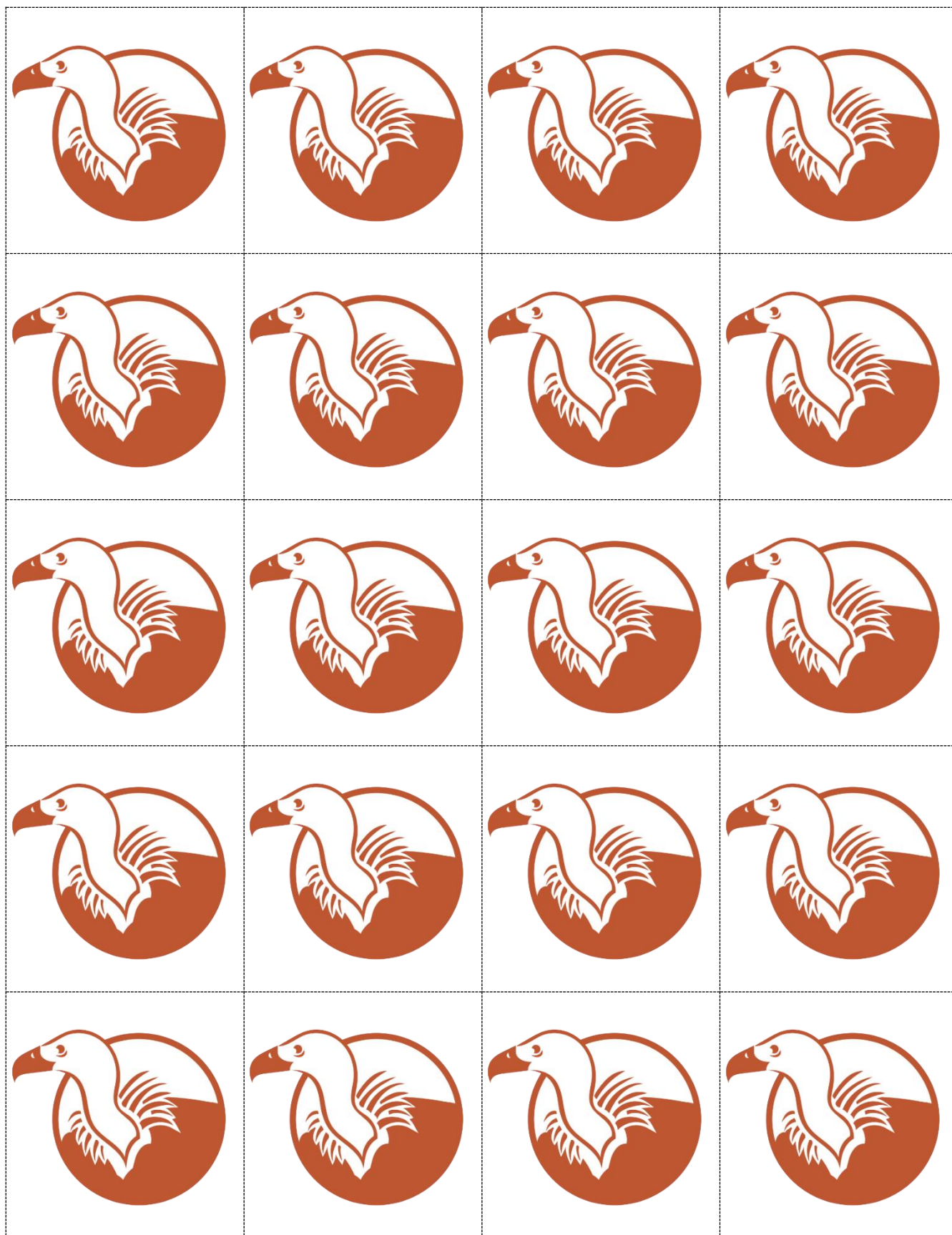
2. „Spot the similarities/differences!“

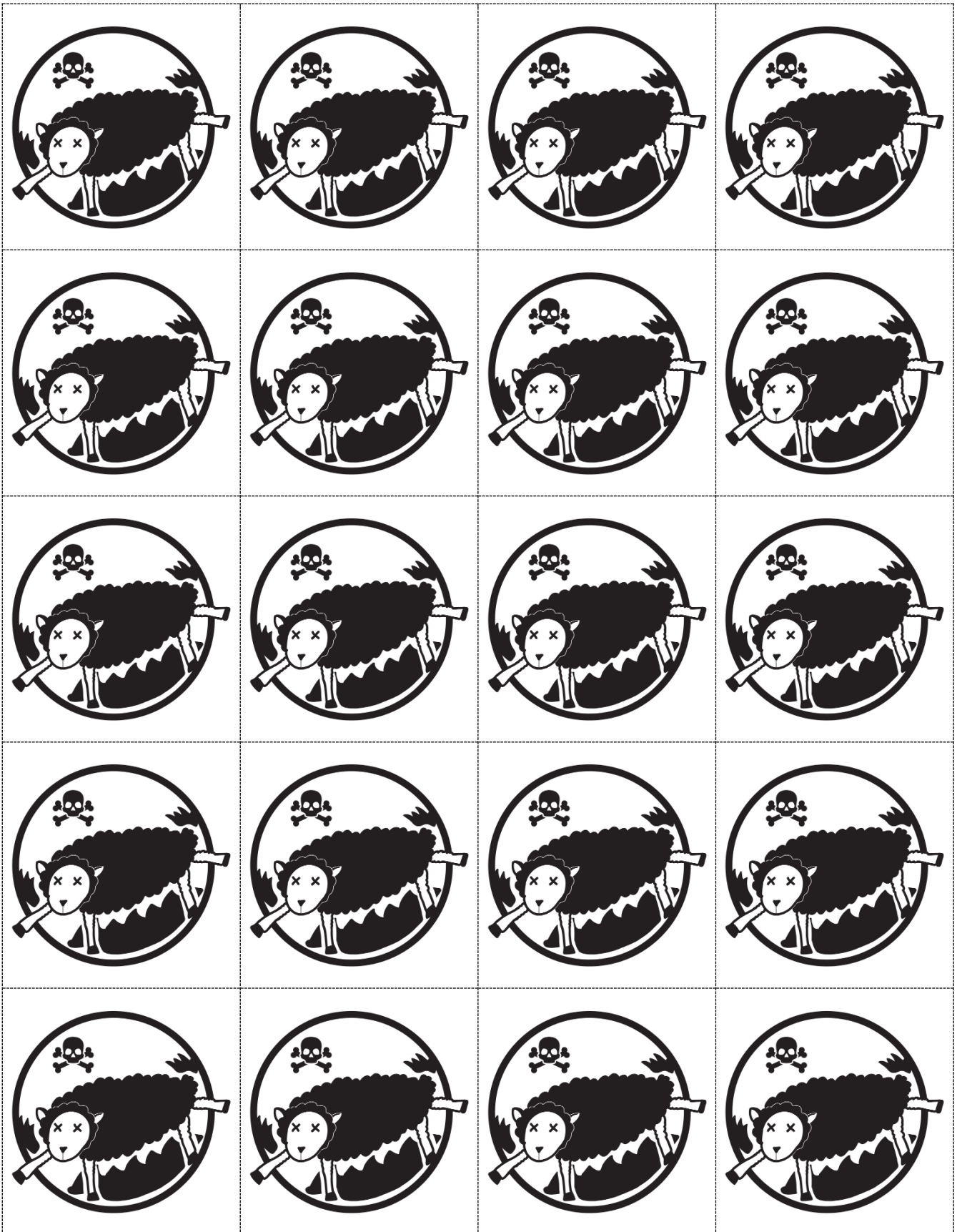
The sheet with 16 sheep with a certain number of differences to be spotted.
The sheet with 16 griffon vultures with a certain number of differences to be spotted.

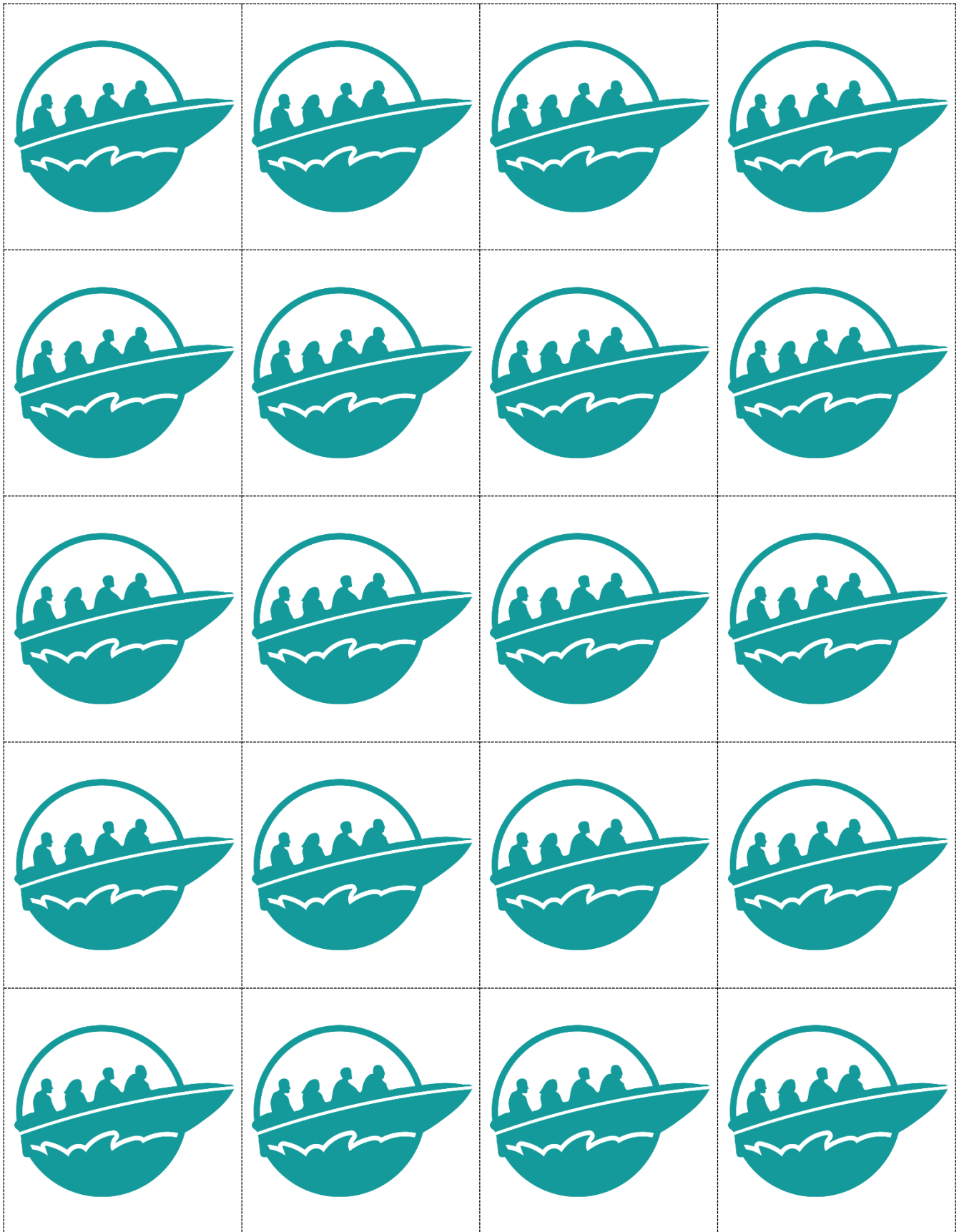
3. „Mmm... look look, something smells nice!“

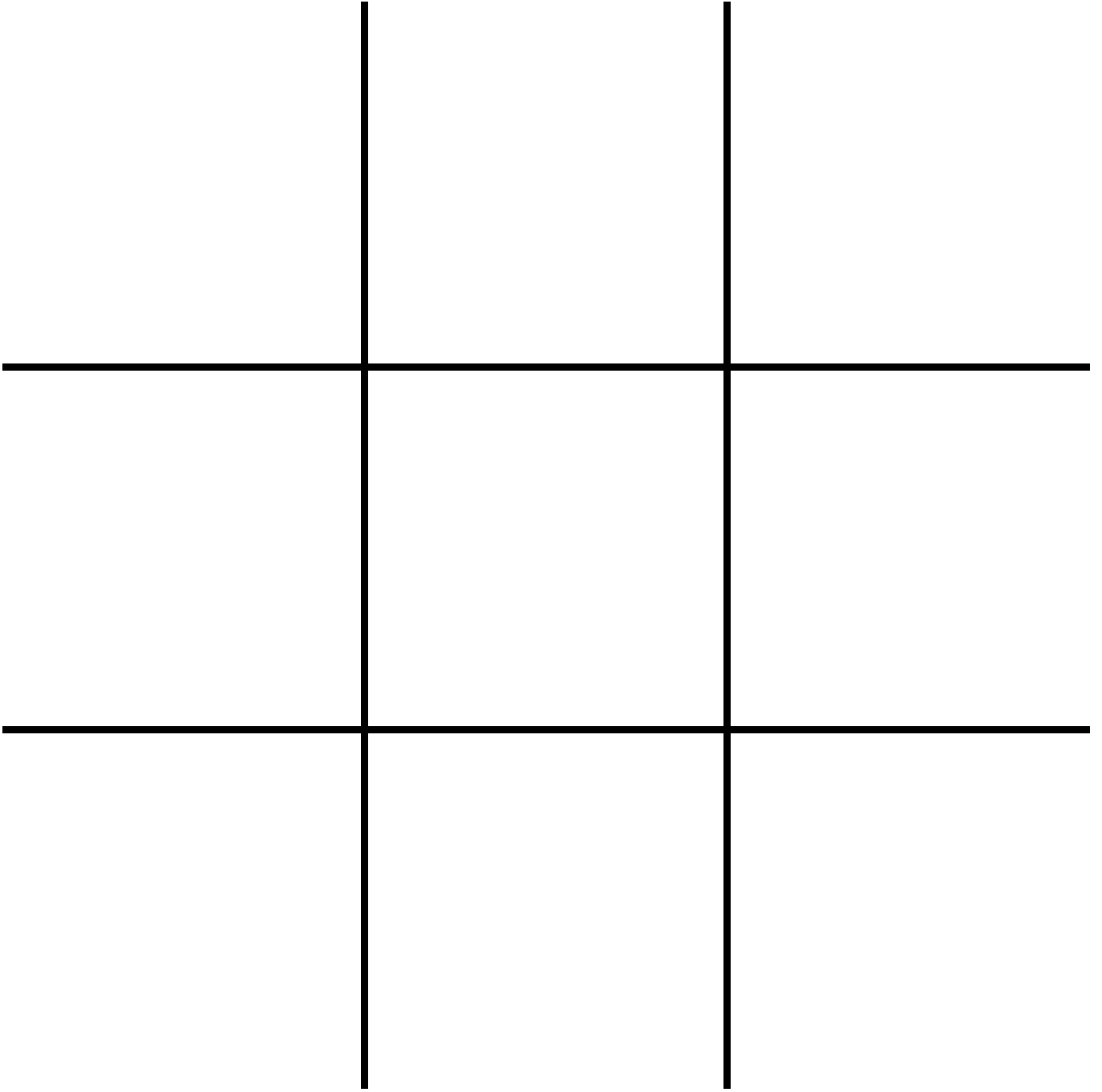
The template for scent cards.
The sheet to be completed while determining the scents.

1. „Tic-tac-toe!“





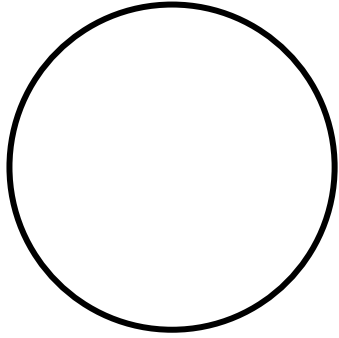




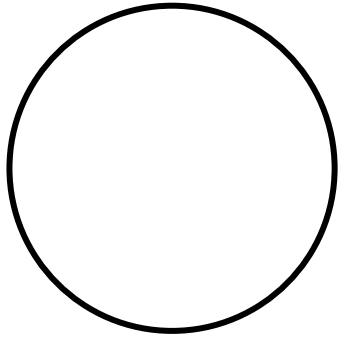
2. „Spot the similarities/differences!“

Spot the two identical pictures of griffon vultures and sheep in the attached sheets! There are 16 griffon vultures / sheep in total, out of which 8 pairs of griffon vultures and sheep are identical.

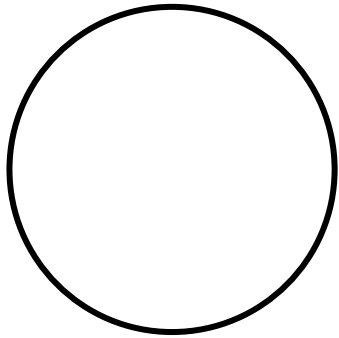
3. „Mmm... look, look, something smells nice!“ – Which scent am I?
The template for scent cards.



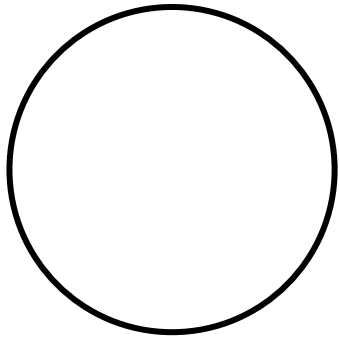
scent 1



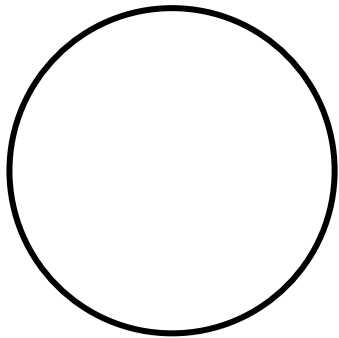
scent 2



scent 3



scent 4



scent 5

The sheet for detecting unknown scents.

Write down which scent I am! ↩

1. _____

2. _____

3. _____

4. _____

5. _____

Write down which scent I am! ↩

1. _____

2. _____

3. _____

4. _____

5. _____

Write down which scent I am! ↩

1. _____

2. _____

3. _____

4. _____

5. _____

Write down which scent I am! ↩

1. _____

2. _____

3. _____

4. _____

5. _____

Workshop 5. Why is nature endangered?

BE THE PROTECTOR OF NATURE 2 (human activity)



1. „Insects need a hotel too!!“

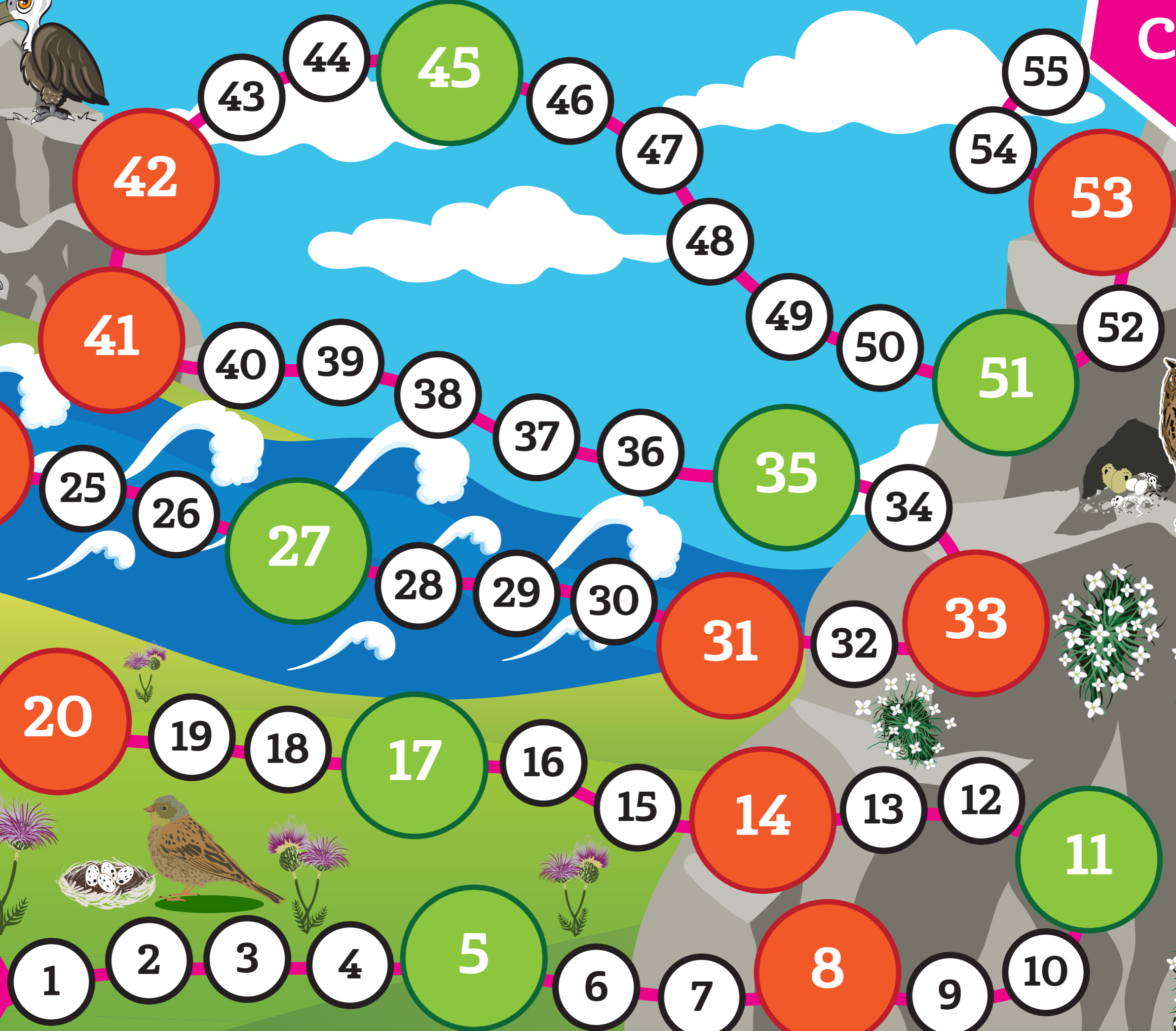
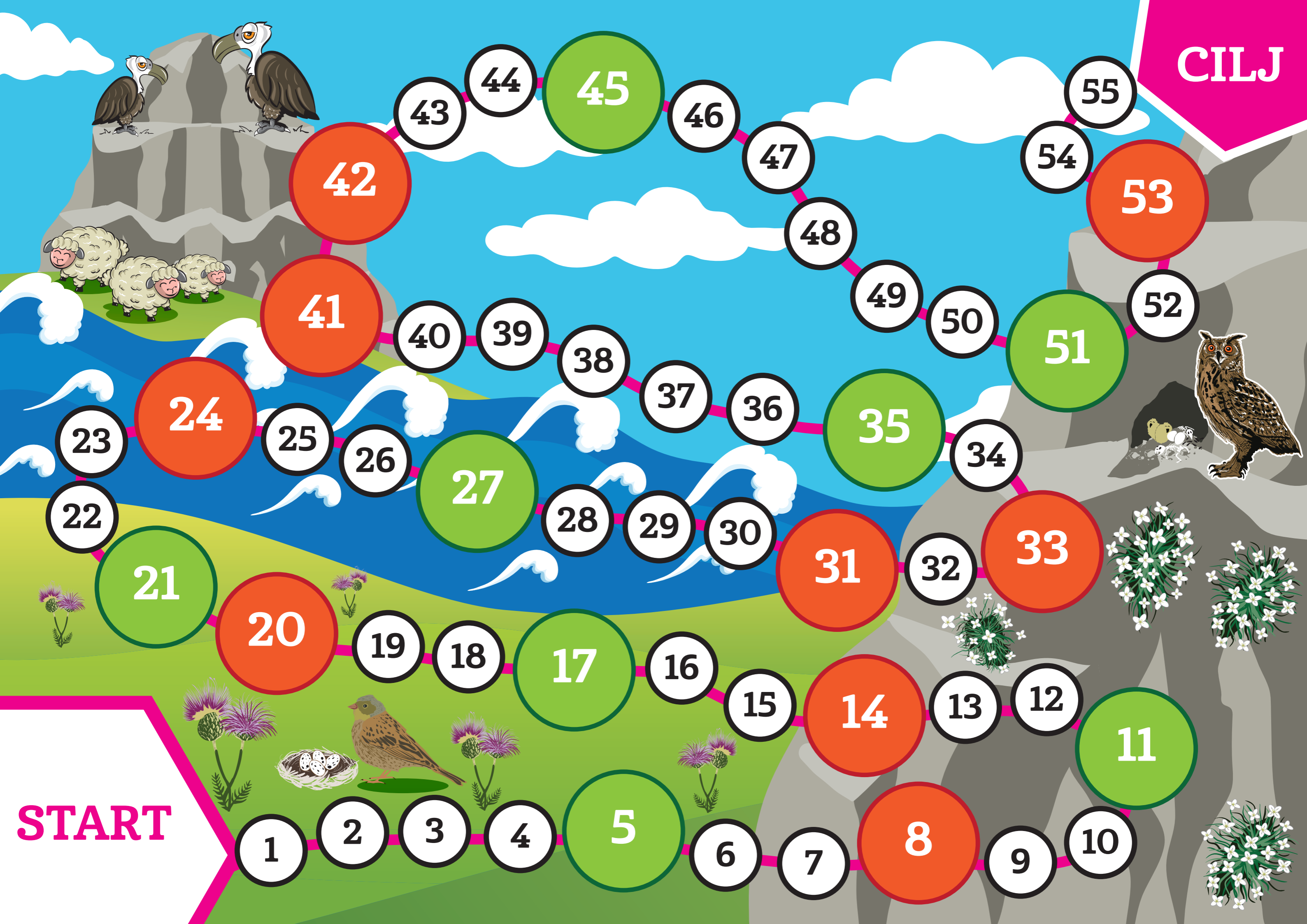
The participants receive the insect hotel.

2. „Don't stomp on me, man!“

Participants receive the template of the „*Don't stomp on me, man!*“ game.

„Don't stomp on me, man!“

START



„Don't stomp on me, man!“

Game rules:

Determine the order in which you roll the dice. The game starts by tossing a dice and moving for that number on the board. (If number 6 is thrown, it is not thrown twice.). If you stop on the big green or red field, read the rules where it will say what to do. To reach the finish you must throw the exact number!

Good luck and make sure you don't stomp on something! 😊

5	Hey! A bike is a great thing, kudos for riding it only on permitted trails! Plants and animals that live here are grateful to you! Move 4 squares forward!
8	Ouch! Where are you going with that bike?! Outside the trail? Unfortunately, you've run over several single-flowered sawworts in the grass! Go back 4 squares and be more careful next time!
11	You'd come here to climb, but you noticed that climbing was forbidden here. The place is swarming with <i>Moehringia tommasinii</i> Marches! You've told your climbing buddies to go to the other part of the rock where climbing is allowed, and you've all agreed. Great job! Move 4 squares forward!!
14	Hey! What kind of climbing is that?! You've pulled out several <i>Moehringia tommasinii</i> Marches to help yourself?! No, no – just keep on practising, and they won't get into your way! Let this be your lesson – get off the rock and go back 5 squares!
17	Hiking is great! Thanks for minding the plants and the animals while walking along the hiking trails! Single-flowered sawwort is intact, and you may move 2 squares forward!
20	Oh dear, oh dear, oh dear! Why are you running in the middle of the grass outside the trail when it clearly says that there's a protected species here!? The ortolan bunting is nesting here at this time of the year, and now you've scared it off! What will happen to the eggs and the little nestlings if their mommy doesn't return soon?! Get back on the trail, go 4 squares back, and mind the rules next time! This way, plants, animals and people will be able to live together in peace! 😊!
21	You're cycling just the way you should – on the trail where it's allowed! And since you are minding the nature and the rules how to behave in it, the ortolan bunting is peacefully sitting on its eggs. Praiseworthy! Speed up a bit and move 2 squares forward!
24	Do you know that the griffon vulture has only one nestling per year, and that's not even every single year?! If you get too close to them with your speedboat, the little birds might get scared, fall off the cliff and into the sea, and drown! Next time choose a more conscientious agency for watching griffon vultures! Go back 5 squares!

27	Great job! You are close enough to see the griffon vultures with your speedboat, but far enough not to disturb them! The parents are peacefully sitting on the egg, and there is no danger that the egg or the little bird could be eaten by a raven because the people in the boat have scared off the griffon vulture parents so they had to fly off the nest for a while! Kudos for choosing conscientious agencies! Move 3 squares forward!
31	You still haven't learnt? Have you been picking <i>Moehringia tommasinii</i> Marches again? Being unconscientious should be punished. Next time really do try to be more careful. And now go 3 squares back.
33	And it also seems that your friend hasn't learnt his lesson to mind the nature ☹ ... Sad. <i>Moehringia tommasinii</i> Marches grows only on five locations in the world, and on some it is already extinct. If all the climbers pull out what's left of it, it will disappear from the face of the Earth, and no one will ever see it again. Let's have some respect toward other living beings on Earth. As a lesson – this time go 5 squares back. ☹
35	Congratulations! You are one conscientious and thoughtful climber! You're climbing in the area where climbing is allowed, and you're not pulling out the plants you find on the rock! You prefer to practise your strength and skills, so you don't really need to do that, kudos! Move 5 squares forward!
41	Oh dear... We do agree, griffon vultures are magnificent, noteworthy birds, but they are also wild animals and afraid of people. Don't pursue them or try to approach the cliffs where they nest, or the feeding grounds where they feed, this can cause great harm to them. And how would you feel if a griffon vulture peeked into your bed or plate? You'd better use a pair of binoculars and telephoto lenses for observing and photographing. Or visit the rescue centre in Beli on the island of Cres where you can see them up close in a controlled environment, and you will also be able to help them. But for now... Go back 5 squares and try to finally learn this lesson. Thank you.
42	Oh, you've scared me! Wow, look at you fly! I admire all of you paragliders, but please, stay away from the cliffs where griffon vultures nest! You have the entire sky at your disposal, which you share with other birds, so leave this part where the nests are to the griffon vultures, thank you! Go back 6 squares!
45	My, my, what a lovely parachute you have! And you fly so high! And so far away from griffon vultures' nests! They even observe you with curiosity from a safe distance while they sit peacefully in their nests! How commendable! Here's a little gust of wind for you – move 4 squares forward!
51	Hiking – marvellous! What's on that rock... Something's moving... It's an eagle owl! It has a nest here on the rock! When you spotted it, you went quiet and away from the spot. Kudos to you, you know how to behave in nature so that you, animals and plants can live together in peace! Move 2 square forward.
53	Well, aren't you something? You heard an owl and immediately went on to find it... Didn't it even occur to you that its screeching was a sign to stay away? Nest disturbances are very detrimental to the eagle owl, our largest owl. Because of the disturbances, it can leave the nest, and all the eggs and the nestlings, which then don't hatch or die. Learn your lesson and go back 3 squares! And be more careful next time!

Workshop A: carbonate rocks with chasmophytic vegetation

Workshop B: Eastern sub-Mediterranean dry grasslands

Family workshops are a combination of other workshops, with longer duration and more activities.