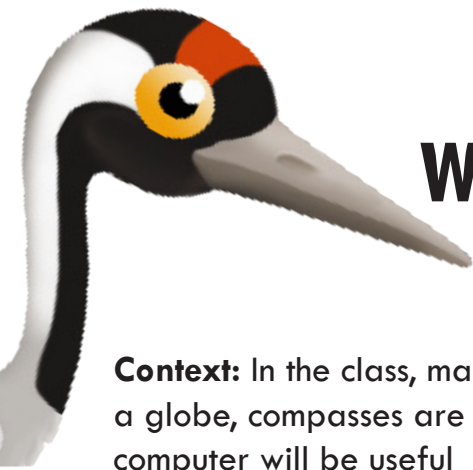


School Work Sheets



BLOCK 2:
WANDERING OUT
IN
AUTUMN





Block 2: WANDERING OUT IN AUTUMN

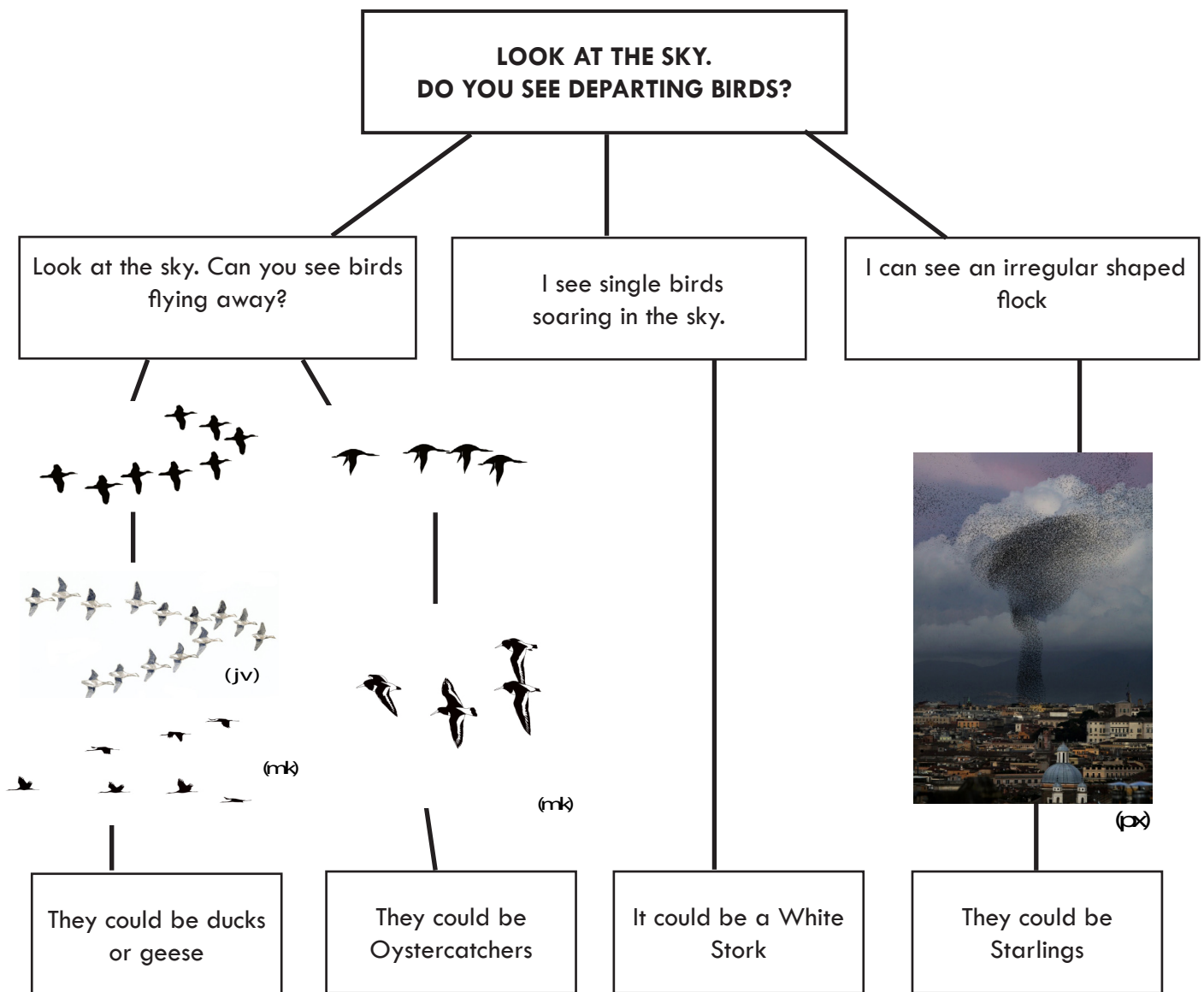
Context: In the class, maps of the world are hung along with a map of Ireland, introduce a globe, compasses are prepared in baskets, bird silhouettes are hung on the walls, a computer will be useful with internet access and a projector.

DETAILED PROBLEMS	WHY DO BIRDS MIGRATE? WHICH BIRDS LEAVE AND WHICH COME TO IRELAND FOR THE WINTER?	WHAT ROUTES DO IRISH BIRDS TRAVEL? HOW DO HUMANS AND BIRDS FIND THEIR WAY? CAN MIGRATION BE DANGEROUS TO BIRDS?
<p>Activities in the field</p>	<p>Before birds set off to their wintering grounds, they forage intensively to build fat reserves for the travel. They also gather in flocks, which will be seen during the trip (2/A/1).</p>	<p>An orientation game in the field (2/B/1) teaches children various ways of identifying directions. A game on a sensory path (2/B/2) will make children realize how to use their senses to find their way. At the end of the game, discuss with children that birds, similarly to people, have a range of ways to orient themselves in the field.</p>
<p>Class Room Observations and experiments</p>	<p>Not all birds can winter in Ireland. Section (S2 / A / 2) introduces the causes of autumn migration of birds. Section (S2 / A / 3) reflects on how the bird's food base changes with the arrival of colder weather. Presentation (S2 / A / 4) inspires pupils to observe birds in the immediate vicinity and identify species departing for the winter and arriving to us for wintering.</p>	<p>Drawing a flight path of selected migratory birds on the globe (chalk), the task should be preceded by an analysis of the map showing the migration routes of the white stork and swallow (S2 / B / 3). The presentation awakens in children the desire to explore the world (S2 / B / 4). Prepare a presentation showing the extent of a white stork expedition to wintering grounds - can it be represented to parents, or to other children at the school call or lessons? (S2 / B / 5) Talk about what poses a threat (S2 / B / 6) for birds during their migration.</p>
<p>Artistic tasks</p>	<p>Plastic works depicting the keys of departing birds.</p>	<p>On a bed sheet, we paint a fragment of a contour map of the world. We mark on it the wintering places of our birds and photos of birds.</p>
<p>Literary tasks</p>	<p>Drawing children's attention to the fact that the stork's name is different (S2 / A / 5) depending on the language of the countries on the stork migration route, therefore scientists use the common nomenclature of birds in Latin.</p>	<p>We write a letter to children living in Lebanon with a request for information about our storks.</p>
<p>Maths tasks</p>	<p>Counting birds in the key. Counting the acorns collected by the jay in the winter pantry. Repeat the concept the highest, the lowest, the middle, using the names of birds departing for the winter.</p>	<p>Other animals hid among the birds (S1 / A / 7) find them and count them.</p>
<p>Games and competitions</p>	<p>Invite children to play. Blocks and puzzle (S2 / A / 6) - they will be conducive to reflection on the life cycle of the white stork (divide the class group into teams of 8-10 people).</p>	<p>PLAYING MELODIES ON CHROMATIC BELLS (S2/B/8).</p>



OBSERVATION CARD – AUTUMN BIRD MIGRATIONS

During the walk you notice birds flying away. What pattern (type of flock) have they created on the sky?





LOOK AT THE SKY. CAN YOU HEAR BIRDS FLYING AWAY?

Yes, I can hear a loud screech.

WHITE STORK

Yes, I can hear honking

GEESE

Yes, I can hear a loud noise of a big group of birds

STARLINGS

DO YOU SEE BIRDS GETTING READY TO FLY AWAY?

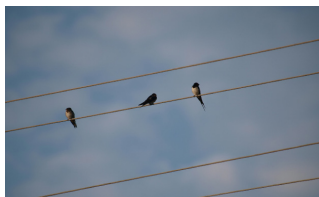
Yes, I can see a group of birds sitting on trees



(px)

ROOKS

Yes, I can see a group of birds sitting on power lines



(m)

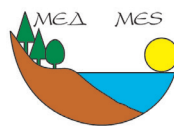
BARN SWALLOW OR HOUSE MARTIN

Yes, I can see a tall bird walking on the ground.



(ck)

WHITE STORK





STORY

Tom lives in the countryside. On the other side of the road, in front of the entrance to his household, on the pylon there is a stork nest. There is also a nest of swallows, made of mud and straw, under the overhang of the roof. In his free time, Tom used to watch swallows building the nest and storks repairing theirs. Then he watched the birds laying eggs and then feeding their offspring. At the end of summer he had a dream of the stork chatting with the swallow.

'Ah!' sighed the stork. 'It's good that our children have grown up and are learning to fly. It gets harder to catch something nutritious to eat. Worms and snails hid away, there are fewer bugs and even a mouse is not an easy catch.'

'Yes,' the swallow agreed. 'We have the same problem. We fly with no rest, but it's still difficult to find anything. I envy a blackbird - there is plenty of fruit now. Or a goldfinch for example – wherever it lands it finds some seeds. As for us, I guess it's time to start preparing for the journey...'

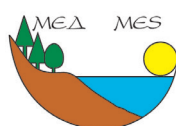
The stork clacked. 'Not only is there less food, but also days get shorter. And I cannot catch a thing in the dark.'

The next morning, Tom rushed to see how his bird neighbours are doing, but the nests were empty...

'Storks have their meeting on the nearby meadow as they usually do in the end of summer. They will leave soon' Tom thought. 'Again, we will have to wait till the next spring'.

At least swallows will wait until the summer ends! However, they are already sitting in a group on the power lines and surely chatting about the upcoming journey in their own, swallow language.

[author: Iwona Majcher]

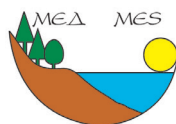




WYKREŚLANKA / WORDSEARCH POLISH

Find the ingredients of a bird diet. Highlight those that will be unavailable in the winter.

S	A	S	K	M	O	L	T	E	S	B	I	O	D	W	S
N	P	M	R	O	W	A	N	B	E	R	R	Y	Z	I	T
A	U	W	I	S	Z	D	Ż	D	E	O	W	N	I	L	A
I	U	C	H	Q	S	W	A	N	D	M	R	A	K	D	T
L	S	M	O	U	S	E	B	U	S	A	A	W	O	R	M
K	A	R	L	I	E	S	A	T	I	R	W	I	R	O	S
O	M	Y	S	T	K	F	I	S	H	Ł	E	O	Ó	S	W
S	Y	B	L	O	R	L	E	C	H	A	P	P	L	E	Ą
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STORK IN DIFFERENT LANGUAGES

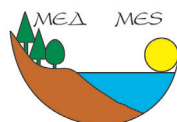
TASKS AND QUESTIONS:

1. Read the name 'stork' in languages of countries on its migration journey.
2. Maybe you can remember some of those names?
3. In some cases, you may have problems with reading them. Why?

REGION	STORK
Polska	Bocian
Czechy	Čápbílý
Słowacja	Bocian
Rumunia	Barzăalbă
Bułgaria	Белиятцъркел
Turcja	Leylek
Egipt	ضربأقلقل
Język łaciński	Ciconia ciconia

Think about it:

- Why do biologists use one unified name for species?





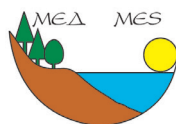
THE LIFE OF A STORK

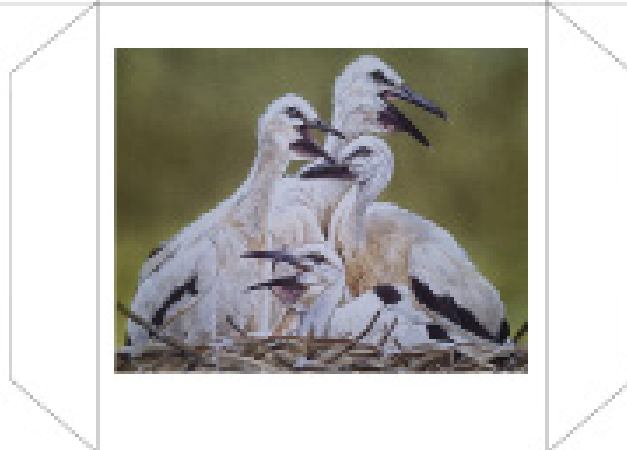
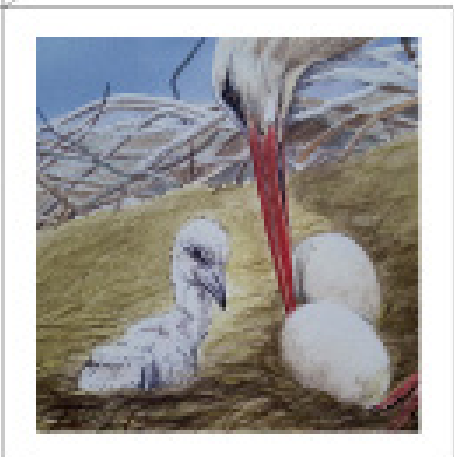
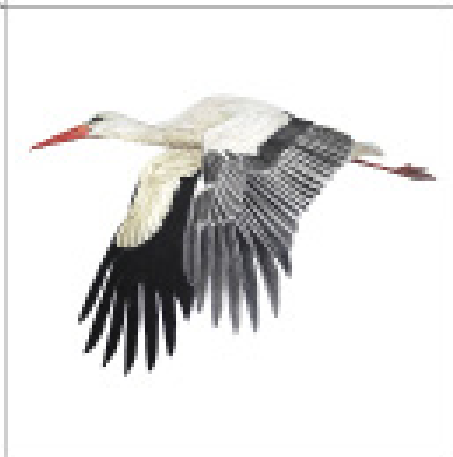
WHAT YOU NEED:

- Box template to cut out
- Scissors
- Glue or thin double-sided adhesive tape

TASK AND QUESTIONS:

1. Work in groups. Each member makes one box.
2. Cut out the box template.
3. Fold along the dashed lines.
4. Stick the box with glue or tape, so that you get a box (as in the picture).
5. Using the boxes make a picture story about the life of a stork.
6. Present your story to your class/group.



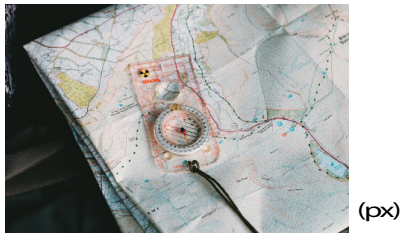




OUTDOOR GAME

Design an outdoor game for your pupils. The game can be a paper chase game. In tasks include activities developing orientation and the sense of direction.

COMPASS



(px)

The red (darker) arrow always shows the North. You put the compass on your palm and watch the direction the arrow points at.

MOSS ON THE TREE/ROCK

Moss can always be found on the north side of the growing tree trunk or a separate rock.

THE CUT DOWN TREE

Rings that you see on the cut down tree section are closer to each other on the north side.

ANTHILL

North



South

(im)

other: GPS, a map

Think how kids can use their senses in the game. Design a task involving the sense of sight, smell or touch. For example, in the 'School Of Smell' kids will learn to distinguish the smell of mint from other smells (you can use bottles with essential oils) and afterwards they use this ability to find the right way during the game. By using the sense of sight you can guide children between places where e.g. blue flowers grow.



GAME PLAY - HOW TO GENERATE INTEREST

PLAN CLASSES ON A SUNNY DAY AT NOON!

Preparation: set out the area in the field of play by drawing the boundary with sticks driven into the ground.

Compasses - it's best for every child to have their own compass.

In the field of view of children, place something coloured, for example, a clump of flowering plants. Have a person to help with an inflated balloon and something to burst the balloon.

Within the boundary, hide treasures, plan the route so that the children wander in the right directions to find treasures.

Below is a fragment of the proposal.

1. 1. Start the classes with a stick driven into the ground.

Ask the children to compare the direction in which the shadow of the stick falls with the direction of their own shadows.

Ask the pupils what has caused the shadow and how it formed, why it is moving etc.

2. Ask the children to hold compasses in their hands and watch the direction of the arrow change as they move about.

Talk about this direction as the NORTH direction.

The opposite direction is SOUTH.

You can have a discussion with the children about the polar directions of the earth and their knowledge of earth's movements.

3. Divide children into groups - giving each group a slightly different task.

Determine the north direction using a compass.

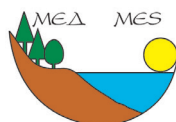
Take 5 steps north, take 10 steps West and here you will find a treasure etc. you can make it as easy or as difficult as you wish.

4. Find something blue and go in that direction. Talk about how children knew where to go (eyesight), etc

5. On your signal ask someone to burst your inflated balloon on your - the children will probably turn to see the direction the bang came from. (Dispose of balloon carefully!)

Talk to your children about it, thanks to eyesight they found the indicated color and thanks to hearing they heard the balloon burst. Pay attention to the fact that they turned in the direction from which the noise of the bursting balloon came.

6. At the end of the class, explain to the children that the birds, like humans, use their senses to navigate the world using various elements of nature and natural phenomena (weather, temperature and magnetic fields).





THE SENSORY PATHWAY

You can design a 'sensory pathway' on the school territory where children use their various senses.

1. Sense of Touch

A straight path limited by e.g. planks filled with various materials such as: stones, sand, cones, grass, water, bark, tree branches, balls, chestnuts, beans, sticks so that they make different 'sections'.

You can also prepare non-transparent bags filled with those materials and ask kids to guess what they are.

The Sensory Pathway can also be made by sticking various materials to the stripe of floor-covering using the Hot Glue.

1. Sense of Smell

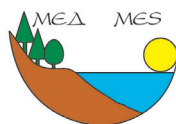
Gather various herbs and plant them along the marked path.

You can put a chosen herb in the bag and ask kids to find it on the path.

2. Sense of Hearing

Listening closely to surrounding sounds, then talking about them and pointing where they came from.

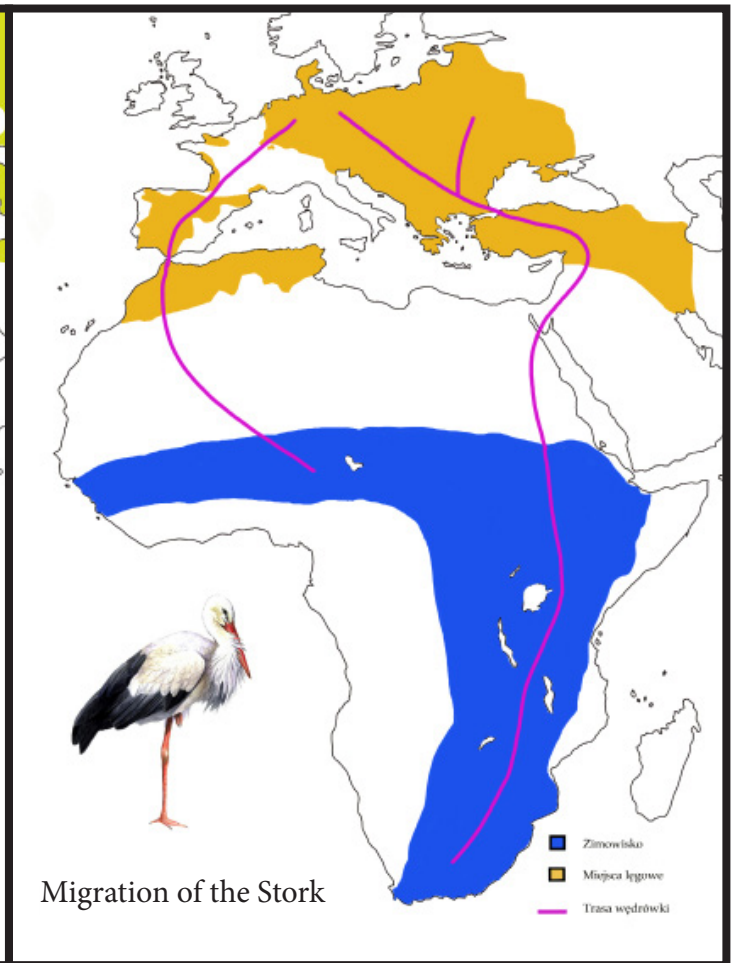
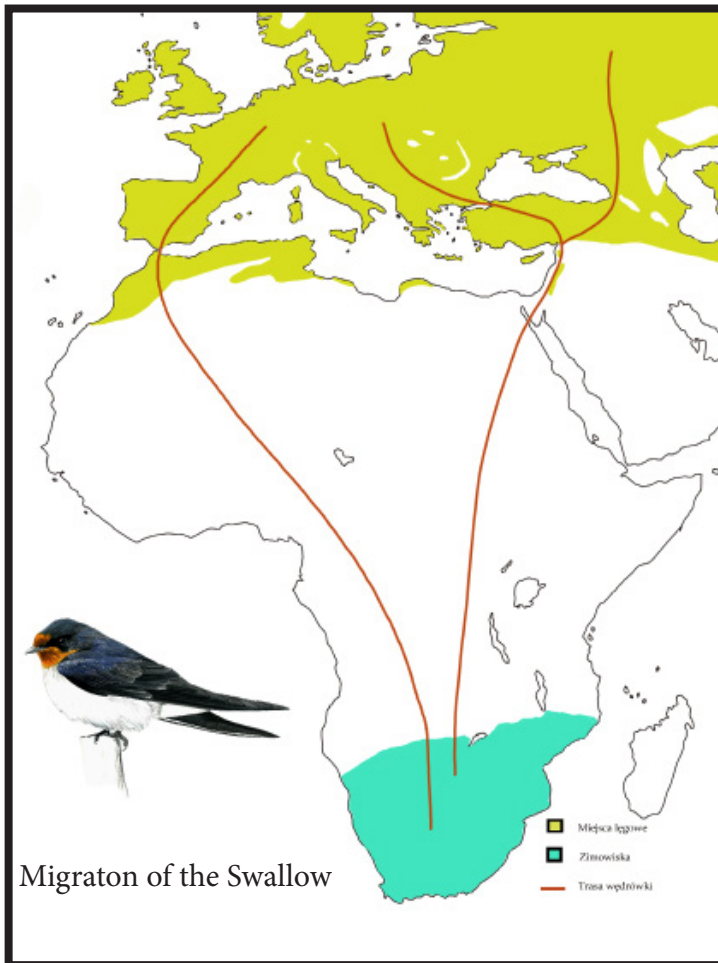
3. As the class ends talk with the kids about the way birds (and people) orientate using their senses and elements of the environment.



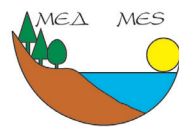


MIGRATION MAPS OF BARN SWALLOW AND STORK

Read the legend of the map and check what route the white stork and swallow go on their way to wintering grounds.



(11)



Publikacja została zrealizowana przy wsparciu finansowym Komisji Europejskiej. Publikacja odzwierciedla jedynie stanowisko jej autorów i Komisja Europejska oraz Narodowa Agencja Programu Erasmus+ nie ponoszą odpowiedzialności za jej zawartość merytoryczną. PUBLIKACJA BEZPŁATNA



WHITE STORK – THE TRAVELLER

Here is the letter left by the Stork:

Dear kids!

Days are getting shorter and colder. It becomes harder to find some food. I heard from my cousin, that when the summer ends here, Spring begins in Africa, and it offers all my favourite treats. There is no other way – I decided to set off. I will get to know other countries. Which ones? I don't know yet but I know one thing – I'm not planning to travel near the sea. There is nothing better than using the thermal columns while flying. They push me high up and then let me slowly spread my wings and glide... until I get to the next thermal column. Ah! If only I had a travel guide, I would have more courage to begin the journey. Maybe you can help me to do it safely? I plan to be back in the Spring.

My advantages as a traveller:

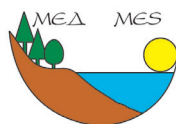
- I'm strong.
- I have huge wings.
- I can defend with my beak.
- I've been eating good food in Poland, so I'm healthy and full of energy.
- I can travel long distances.

What you need:

- a map of the Stork's journey
- A PC or a laptop with the Internet connection
- Turkey and Egypt travel guides
- Travel agency folders
- Chatting with grown-ups
- maybe your own experiences?

Tasks and Questions:

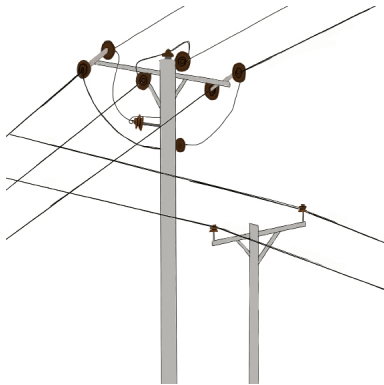
1. Plan 3 stops on the Stork's journey: in Turkey, Egypt and Zambia
2. Talk with each other and find out if anyone had been in those countries.
3. Make 3 groups, each representing one of the countries. Make sure that in each group there is a person who had been in that country.
4. Each group makes a 'guide-box', including various information – photos, ethnic clothes, animals, plants etc.
5. Warn the stork about any possible dangers that it could face on the way.





DANGERS ALONG THE WAY

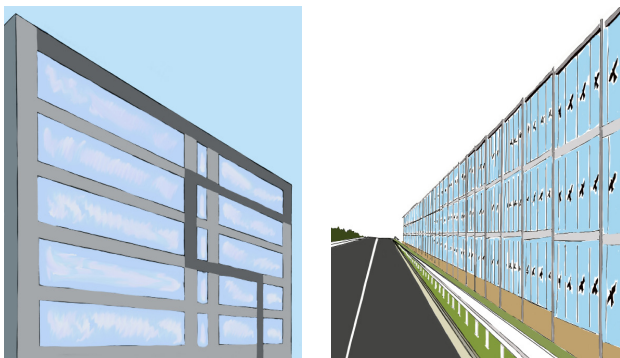
Prepare plates with chosen dangers. Present them to the kids and start the discussion. It's important to emphasize on what they can do to help birds.



ELECTRICITY POWER LINES



HUNTERS

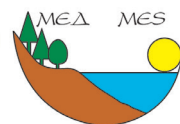


WINDOW GLASS AND ROAD ACOUSTIC BARRIERS

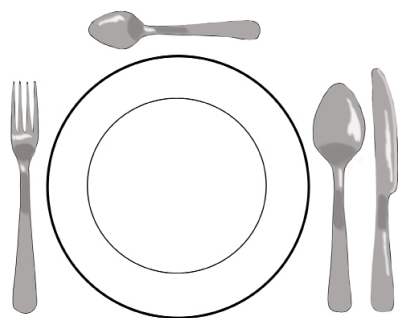


RAPID WEATHER CONDITIONS

(mk)



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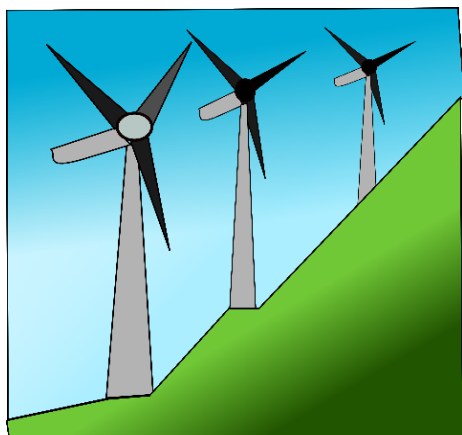


NOT ENOUGH FOOD

(mk)



PREDATORS

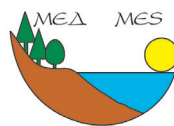


WIND FARMS



REDUCING NUMBERS OF PLACES TO REST SAFELY

(px)





BIRD RECORD BREAKERS

1. During autumn migrations birds travel long distances. Daily they travel:

barn swallow – 100km

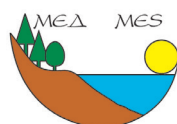
barn swallow record breaker – 300km

stork – 200km

stork record breaker – 500km

How long does it take them to reach the destination in Africa, if it is 6000km away from their nest?

2. The journey to Africa takes a swallow 6 weeks. If it sets off on Monday, on what day of the week will it arrive at its destination. How many Wednesdays will there be during the flight?





WHAT MELODY IS BEING PLAYED ON THE ENERGY WIRES?

What you need?

Chromatic ringtones (cymbal)

Tasks and questions:

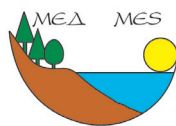
Swallows gathering before the departure sat on energy wires and accidentally composed a certain melody. Try to play it on chromatic bells.

- Do you know what the melody is?



muzyka Ludwig van Beethoven
słowa Fryderyk Schiller
przekład Konstanty Ildefons Gałczyński

"Oda do radości!"





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This material has been prepared as part of the project; We live in harmony with nature. Educational program for teachers of pre-school and primary education.

The project involved selected non-governmental organizations involved in the protection of birds associated as part of the international BirdLife International federation. In addition to the National Society for Bird Protection, which ran the project, others involved include the Spanish Ornithological Society (SEO), the Slovak Ornithological Society (SOS), the Macedonian Ecological Society (MES), the Czech Ornithological Society (CSO) and BirdWatch Ireland (BWI). The University of Gdańsk became the substantive partner of the project responsible for creating materials for teachers.

BirdWatch Ireland is a non-governmental organization with a public benefit status, dealing with the protection of wild birds and the places where they live. The aim of the organisation is to preserve the natural heritage for the benefit of present and future generations. BWI is the Irish partner of the global federation of bird protection societies - BirdLife International. societies - BirdLife International.