		City Challenge	Report C	Card	
The C	City Challenge	Happy Socks Team and Bird Ho	ouses		
Them	e	4. From waste disposal to Resou	ırce Efficiency -	- Circular Economy at the City Scale	
School/Summer School		ZŠ a MŠ Hradec Králové, Úprkova 1	Teacher(s) / Disciplines	Eva Kottová – Biology, chemistry, Ch Jitka Marecková – Biology, chemistry Aleš Hladík - Czech language, citizenship and family education	
	Problem (The What- question)			ect was our school garden, which is open to ne surrounding area spend quite a lot of	
The planning phase	Relevance (The Why question)	We chose this space because of the high number of visitors and also because nothing new has been done here for a long time. We also wanted to increase the biodiversity of the place and to use research to bring information about the importance of greenery in the city.			
	Expectation / Hypothesis	Our goal was to equip the garden with bird houses for different bird species, repair and modify the insect hotel so that the insects would be pleased to stay with us. The aim of the research was that the results help us to set everything up correctly.			
	Methods (The How- question <sup>1</sup> )	<ol> <li>Discussion with the team - who, what, how, why</li> <li>Research - took place in 2 phases - theoretical, in the form of on-line workshops with an expert consultant from the Charles University - Josef Laštovička and practical, after returning to school after COVID break, we measured temperatures in different places in the garden.</li> <li>Presentation of the results to the public, other pupils and teachers</li> <li>Open event - with the help of other pupils and parents - installing bird boxes, repairing educational signs on the trail, refurbishing the insect hotel</li> </ol>			
	Participants <sup>2</sup> (The Whoquestion)	3 teachers throughout the project + 4 more during events 12 pupils throughout + 60 at events 10 parents Expert from the Charles University			
	Activity 1 (e.g. literature, book review)	Establishment of the Happy Soc set up an instagram project, who https://www.instagram.com/ pu	ere they contribu		
phase <sup>3</sup>	Activity 2 (e.g. gather data / information)	Workshops with our scientific consultant were held online, 6 o how to do online map research using <a href="https://www.sentinel-hub">https://www.sentinel-hub</a>			
The implementation phase <sup>3</sup>	Activity 3		a shady woodlaa	se 3 different locations - a concrete surface and and measured temperatures using a	
The imp	Activity 4	Comparison of results - we comsentinel-hub.	pared what we i	measured and what we found with the	
	Activity 5			ird houses, repair of signboards on our the insect hotel. With the presence and	

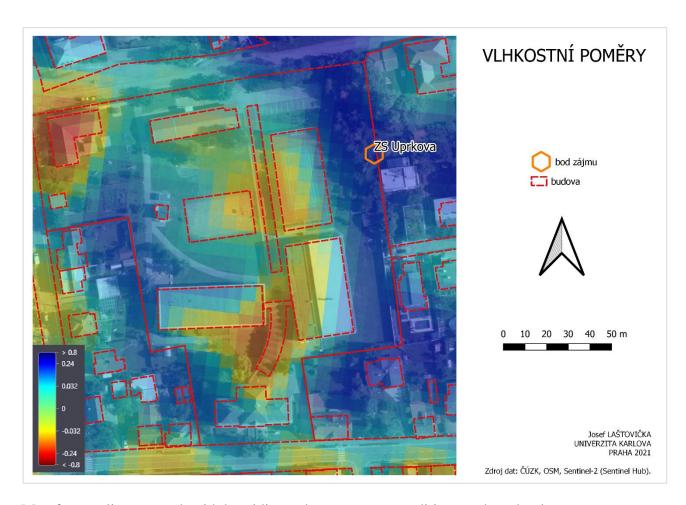
<sup>&</sup>lt;sup>3</sup> Please provide support if possible through pictures, sketches, charts, student reflection or such

 $<sup>^{\</sup>rm 1}$  Please provide the keywords regarding both, the teaching approach and the research approach  $^{\rm 2}$  E.g. the science team members

## PULCHRA PROJECT 1st City Challenge

	City Challenge solution	Construction and placement of 6 bird boxes, one of which will be equipped with a camera for online monitoring of bird life on the school website in spring 2022 repair of 5 educational sign boards  Presentation of research results renovation of the insect hotel
eporting	Group or class (e.g. reports, posters etc)	
The documentation and reporting phase	School (e.g. school web page, school newspaper)	school website information in the school magazine instagram <a href="https://www.instagram.com/">https://www.instagram.com/</a> pulchra_uprkova_/
The docume	Public (e.g. meeting, news media)	Meeting with the public at the Open Event

Room for additional explanations (some feedbacks on main problemes found and related solutions, or other observations are very appreciated)



Map from online research with humidity and temperature conditions at the school

TEPLOTA VE MĚS	<u>STĚ</u>
zš: Úprkova	The second secon
Datum: 3.6. 2021	
	vi. P Johanna V. 1 Chabrianna B. 1 amelie
Úkol: odhadněte teplotu zemského p	ovrchu na dvou odlišných lokalitách ve městě
Lokalita 1	Lokalita 2
Název místa: Lerih	Název místa: Tranvolá plocha
Adresa: Zamossi	Adresa: Upraova 1
	unci.
Odhad teploty	Odhad teploty
Odhad teploty  12°C - finda	
	Odhad teploty Anarona sai peraha - 20°C
12°C - Jucka  Úkol: změřte teplotu zemského povi  Teplota naměřená termokamero	Odhad teploty  Aranna Naí pleocha - 20° C  rchu na vybraných místech
Úkol: změřte teplotu zemského povi Teplota naměřená termokamero Analos - 12,9°C (Mysok Josephan Irália - 17°C	Odhad teploty Aranna Nai plevalna - 20°C  rchu na vybraných místech
Úkol: změřte teplotu zemského povi Teplota naměřená termokamero Analon - 12,9°C (Mysor Josepha Ananoka Jesopha Ananoka Jesopha Ananoka Jesopha	Odhad teploty  Aranna Na pleoche - 20°C  rchu na vybraných místech  na snáva)  - 21°C
Úkol: změřte teplotu zemského povi Teplota naměřená termokamero Analon - 12,9°C (Mysor Josepha Ananoka Jesopha Ananoka Jesopha Ananoka Jesopha	Odhad teploty Avarance Lai pleache - 20°C  rehu na vybraných místech  od snáva)  - 21°C  ploměrem  poolad mára Nava Nurske - 21°C  C

Research - Temperature Measurement Worksheet



Open event - manufacturing of birdhouses