

Lesson Plan

Discovering nature around us

School: IC "Libero Andreotti"	Teacher: Elisa Franceschini
Title : the world of snails	Time : about 40 days from the end of February to half April
Subject : <i>Italian , Science, Art, PE</i>	
Aim: Learn about the life of snails; Taking care of a living being; Develop exploratory attitudes; Explore and manipulate different materials; Encourage the active participation of each pupil.	
Key CS elements: decomposition, pattern recognition, abstraction, practicing algorithms	
Age group : preschool, 6 year olds	
Learning situations: class, school garden, gym and multipurpose hall.	Activity type : laboratory activity, brainstorming, cooperative learning
Resources : <ul style="list-style-type: none"> •Containers of various sizes to accommodate the snails •Magnifying glasses •Camera •Sheets, felt-tip pens •Das, nut shells, toothpicks, corn flour, glue vinyl, various containers 	
Learning development:	
1.DECOMPOSITION (breaking a problem down into a smaller part) Answer some easy questions about snails (before and after watching a photo) about snails : <u>Physical appearance :</u> What are snails like?	

What is the difference between a slug and snail?

What color are they?

Are they long or short?

characteristics: Do they have feet?

What do they have on their backs?

Where do they live?

2. PATTERN RECOGNITION (looking for similarity and trend within a problem)

In the school garden children search for snails (previously provided by teachers). They are free to search and explore in the meadow according to the:

- color;
- shape;
- length;
- physical appearance.

3. ABSTRACTION (focusing on the important part of a problem, filtering out unnecessary details)

The children bring snails about 10 inside the classroom and they are free to speak and observe them every day;

- The children will production of free drawings on the experience living in the school garden;
- They will draw snails;
- They will create model of snail;
- They will fill out mind map about snails;
- They will play snail-shaped goose game
- They will act like snails in an obstacle game;
- They will create manipulative products and produce structured graphics based on different viewing moments;
- They will represent the various actions of the snails and record individually the experience through a summary scheme proposed;

4. ALGORITHM DESIGN (create a step by step sequence of instruction to solve the problem)

Children will.

1. Answer some questions on snails;
2. look at some photos; .
3. Identify the main characteristics:
4. Search for the snails in the garden;
5. Bring the snail inside the school;
6. Find a suitable house for them;
7. Take care and feed the snails;
8. describe snail daily routine;
9. imitate snail behavior creating an obstacle course;
10. create manipulative products and produce structured graphics based on different viewing moments;
11. represent the various actions of the snails and record individually the experience through a summary scheme proposed;
12. they will free the snail in the garden again;

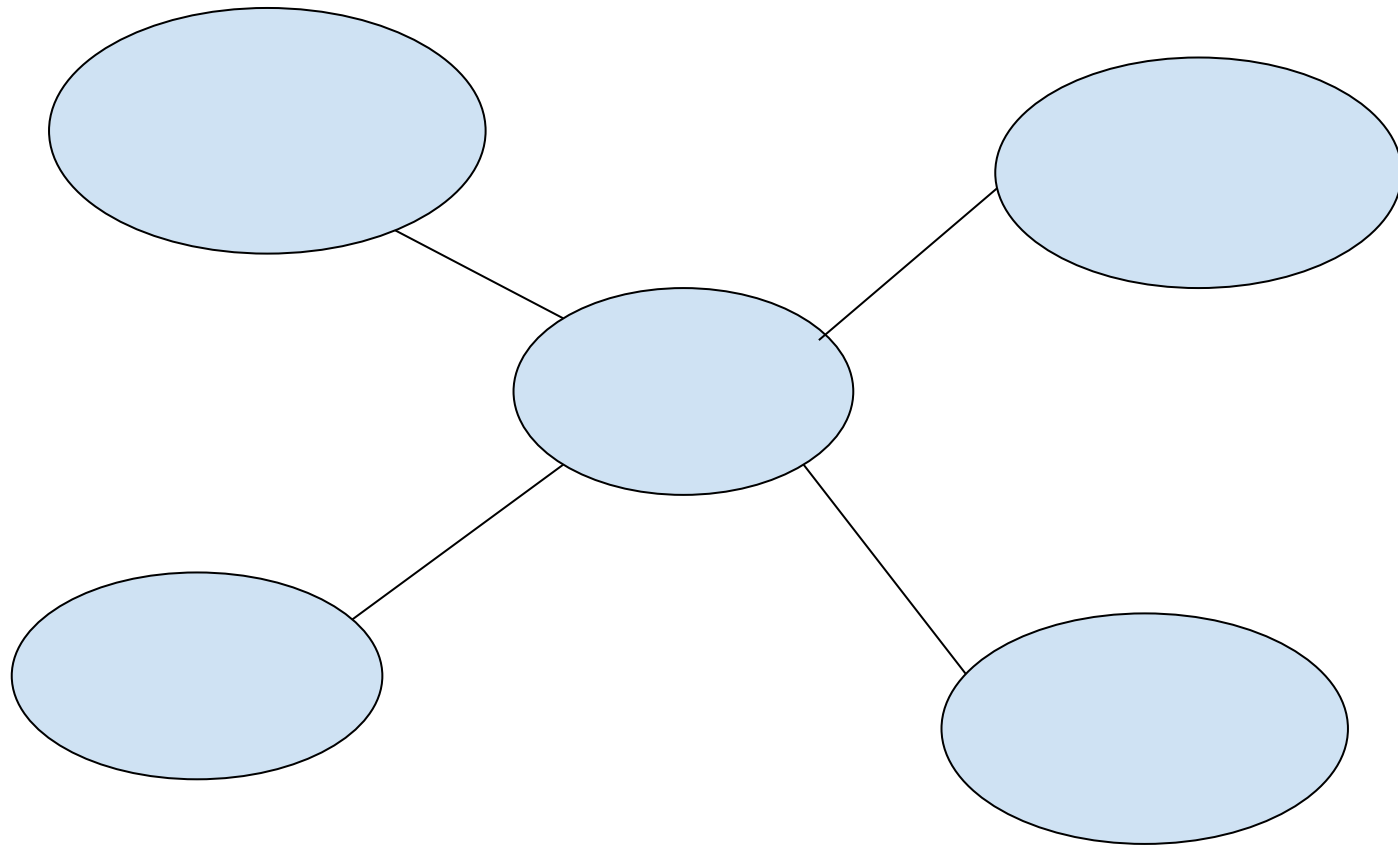
Assessment: starts from the observation of the daily work of the students together with the snails: their wish to take care of them and passion in register snails' smallest change everyday.

Expected results: students will be confident in living nature and experiment with an exciting method of learning to apply for other projects.

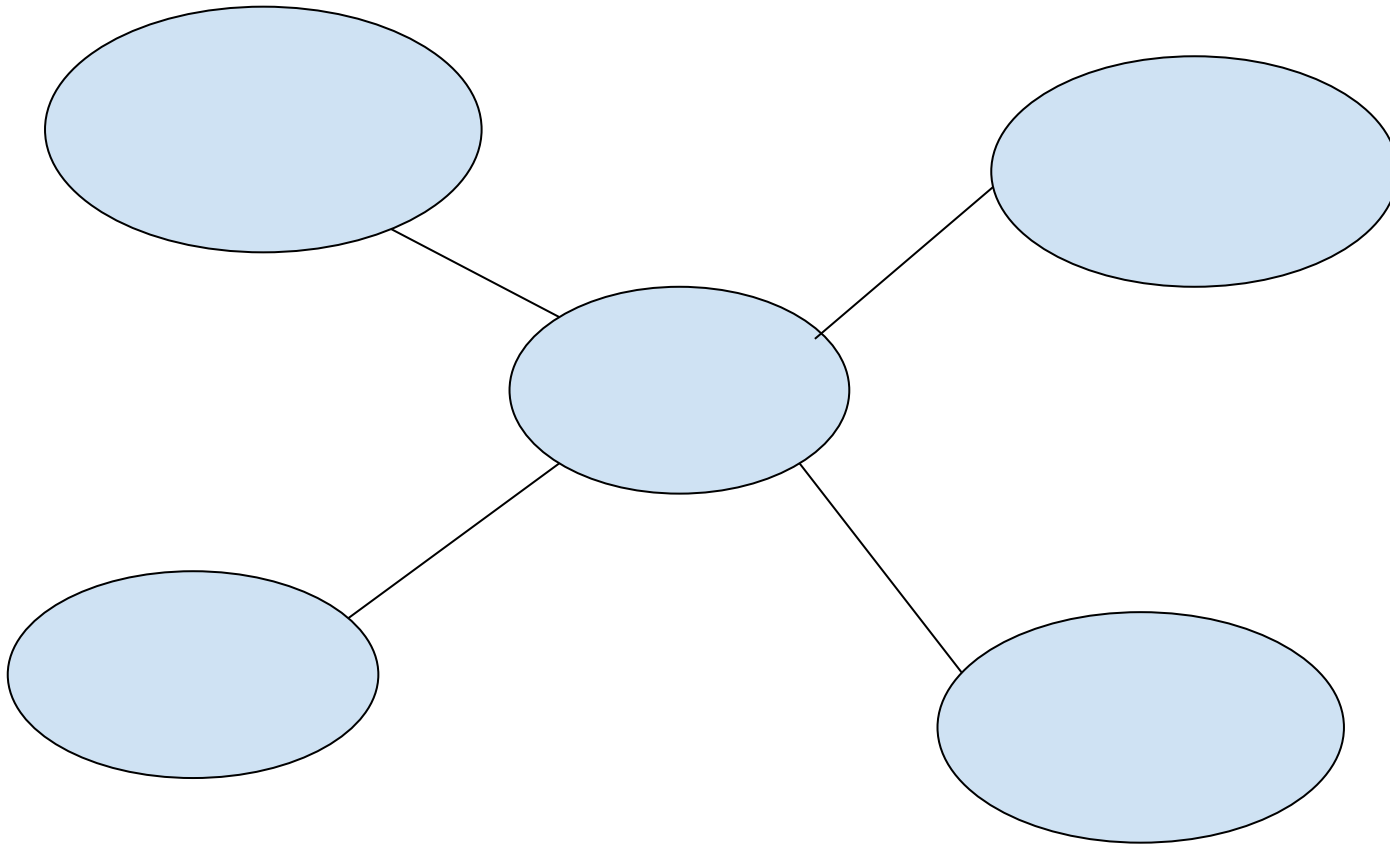
Notes: The project was born from the necessity to approach young pupils to scientific knowledge through the use of computational thinking.

Attachment: 3 exercise cards

WHAT DOES THE SNAIL HAVE ?
(draw inside the circle)











WHAT DOES THE SNAIL EAT ?
(draw inside the circle)



WHAT DOES THE SNAIL DO ?

(draw inside the rectangle)

							
the snail	makes excrement	eats	drools	crawls	sleeps	drinks	go inside

--	--	--	--	--	--	--	--