




Learning Scientific Skills Outside the Classroom

Scientific Skills

Predict	Observe	Record
Country of Origin	Suggested Age Range	Suggested Theme
 UK	KS1 specialist unit Activity planned for children with severe learning difficulties.	Habitats
Location outside the classroom		Benefits of using this location
Snail habitat e.g. a wildlife garden		Children can find and collect snails and their food source
Learning Objectives – Scientific Skills		Learning Objectives – Knowledge
To predict which food the snails will eat To observe snails and use magnifying glasses for closer observation To record which food the snails ate in a tally chart jj		To know where snails obtain their food To begin to think about why snails live in certain places To recall the basic needs of what living things need to survive from previous work To identify that snails can be found in a habitat to which they are suited
Key Vocabulary		
Scientific skills vocabulary – predict, prediction, observe, record Knowledge vocabulary - habitat, live, food source, predator, trail, foot, mouth, leaf, flower, fruit, thrive, survive		
Resources / Equipment		
<ul style="list-style-type: none"> Equipment to observe snails – living snails, plastic plates/petri dishes, magnifying glasses, foods such as leaves and fruit including those found in snail habitat e.g. hosta leaves, dandelion leaves, cucumber, banana, grass, birch leaf, lettuce, cabbage Equipment to create a snail habitat - lidded glass tank with air holes in the lid, moist soil, rocks, dead wood, food sources such as leaves the snails were found on, cucumber Resources to create spaces where the snails can hide - leaves, bark, sticks 		
Teaching Activities		
<p>Discuss – What is a snail? What do they look like? How do they move and where might they live?</p> <p>Explain – The place where something lives is called its habitat. They are going to make a habitat for a snail by making a snail terrarium. A terrarium is a see-through container which will allow them to observe the snails for a few days before they put them back into their normal habitat. Explain that the snails will need some things in their terrarium to help them survive. They are going to collect some snails from their local habitat, some food for them to eat and things for them to hide under. Explain that snails need to hide so that predators, such as birds, can't find them and eat them.</p> <p>Discuss – What food could we put into the terrarium for the snails to be happy and to thrive? What could we put in that the snails could hide under?</p> <p>Activity – Go outside with the children and collect the things they need to create the terrarium – allow them to make decisions about what should go where and why. They will use these to make a terrarium in their classroom which is ready for their snails.</p> <p>Explain – Now their terrarium is ready they are going to collect some snails. Talk with the children about where they might be, for example under things or hiding from birds that like to eat them. Before they put the snails in the terrarium, they are going to observe what the snails like to eat.</p>		





Demonstrate – Show the children where they could look for snails and how to collect them by gently picking the snail up and placing it on a flat hand or on a plastic dish/petri dish. It is important to explain to the children about being gentle when handling the snails, not pulling them off things or touching the soft parts, just the shell.



Activity – On a damp morning, children go outside and look for snails (the number they collect will depend on the size of your terrarium) and look for signs of things the snails might have eaten. Children collect leaves grass, bark etc. - anything that might be snail food.

Explain – They are now going to observe what the snails like to eat using the things they have collected.

Activity – Find a clear area and give each child a plastic sheet on the ground. Choose four different foods and place them around the edge of the sheet and place a snail in the middle of the sheet.



Predict – Ask the children which food they think the snail prefers to eat. Which food will the snail go to? Why do they think this?

Activity - Children watch to see which food the snail prefers and then try a different snail to see if the same thing happens. They can use a magnifying glass to observe the snail more closely and see if they can see different parts of the snail's body.

Record – The results can be recorded as a tick list or a tally chart for speed. Individual results can be recorded when the children are back in class.

Activity – Place the snails in the terrarium with the food and ensure the children wash their hands thoroughly.

Discuss – What was their favourite food? What other foods did the snails eat? What didn't they like? Where might a snail live? Why?

Explain – Over the next few days they are going to observe the snails and see what they like to eat. They are also going to go back to the habitat where the snails were found to see what food they can find there for the snails.

Discuss – What did they find out about the snails? What food do they like to eat? Why do they live in a certain habitat?



Examples of children's work and teacher comments from country of origin



Dandelion leaves and cucumber were the snail's favourite food. The children went back to their normal habitat and saw that there were dandelion leaves outside and they found out that snails liked eating the cucumbers in the vegetable garden.



Children observed the snails moving and eating for 2 more days before releasing them. They were so fascinated by them that they often chose to have a snail out of the tank on a piece of plastic with some food just to watch them.



They discovered that the snails are more active at night and were also amazed at the slime on the tank and on the cucumber skin. They were also lucky enough to find three white snail eggs in the tank one morning and were very excited by this.

The children were sad to let the snails go so we read 'The Bog Baby' – this helped them understand that creatures need to go home. When they released them, they looked for leaves which were the same as the ones the snails liked and hid them away from birds. They also put two together so they had friends.