

FIRST AND SECOND CLASSES - PLANTS AND ANIMALS

Teacher Guidelines:

- p. 57 - 86

Linkage:

- Environmental awareness and care – recycling materials for construction / caring for plants and animals
- Materials: Properties and characteristics e.g. rough, smooth, shiny, big, small etc Clothes we wear in different seasons and why.
- Sound: Identifying animal sounds from tapes / sounds in the environment
- Light: Light as a form of energy essential for growth of plants.

Integration:

- Language Development – English and Gaeilge
- Visual Arts: pictorial representation of observations / leaf rubbings / construction of simple bird feeders / papier mache models of plants and animals / using recyclable materials to make pots or model houses for growing plants
- Maths: Sorting activities using pictures – animals with two / four legs / wings etc seeds – rough / smooth / colour / big / small etc flowers – colour / number of petals etc Measuring growth of plants.
- Music: Identifying animal sounds from tapes
- Geography: Exploring natural environments

FIRST AND SECOND CLASSES - PLANTS AND ANIMALS

Content Objective:

- **OBSERVE, IDENTIFY AND EXPLORE A VARIETY OF LIVING THINGS IN LOCAL HABITATS AND PLANTS AND ANIMALS IN DIFFERENT ENVIRONMENTS**

identify

Common trees and other plants

Common birds and other animals

Common insects and mini-beasts of habitats such as

Forest, waste ground, hedge, pond, rocks, stream, seashore

Some suggested activities:

- Initiating observations in the outdoor environment (Exemplar 11, Teacher Guidelines p 62)
- I spy Game: Teacher prepares children in class to look for a small number of common plants and/or animals, which are then searched for, when in habitat e.g. hedge / grass / trees / under rocks / pond /

seashore etc. (Teacher Guidelines p. 65)

- Birds: Observe birds that visit the school grounds. Bird feeders / bird tables / bird boxes encourage birds to the school. Identify the common visitors and observe feeding habits. Record results.
- Minibeasts / insects: Making drawings based on close observation. Collect some minibeasts for closer observation. (Exemplar 17, Teacher Guidelines p 66)
- Using hoops to explore observe and record plants/animals in an area e.g. grassy area, old wall within the school grounds. Compare and contrast plants in sunny and shady areas, damp and dry areas. (Exemplar 14, Teacher Guidelines p. 68)
- Seasonal scavenger hunts: Teacher chooses 6/8 objects for children to spot in the schools grounds e.g. feather, green leaf, red berry, yellow flower etc. Children observe / describe some and collect appropriate items for closer observation in the classroom. Magnifying glasses could be used to spot patterns etc. Observe, describe and record. Leaf rubbings / Drawings could be displayed.

Some suggested investigations:

- Which area (habitat) has the most minibeasts? Why?
- Compare plants and animals in a shady / sunny or dry / damp area using hoops.
- Do caterpillars eat more by day or night? (Exemplar 18, Teacher Guidelines p. 80)
- Do woodlice prefer damp or dry conditions? (Exemplar 19, Teacher Guidelines p.82)
- Birds: What is the most common visitor? What do they eat? How do they eat?
- Plants: Investigate different plants and animals in a habitat within the school grounds e.g. tree, grassy area, pond, old wall etc

Some suggested designing and making:

- A wormery www.blackrock-edu.ie
- A fishing net for pond dipping.

FIRST AND SECOND CLASSES - PLANTS AND ANIMALS

Content Objective:

- **DEVELOP SOME AWARENESS OF PLANTS AND ANIMALS FROM WIDER ENVIRONMENTS**

Some suggested activities:

- Examine pictures / photos of farm / seashore / woodland habitats and list animals and plants that the children recognise. Which of these can also be found in local habitats? Why / why not?

- Visit a habitat that the children would not be familiar with locally e.g. seashore or woodland. Prior to visit ask the children to do an annotated drawing (a drawing with labels) including the various plants / animals they expect to see when they get there. After the visit compare prediction with reality and describe differences between this and another habitat studied.
- Visit a zoo, wildlife park or farm or watch suitable videos.
- Listen to animal sounds on tape/CD and identify animal verbally or by holding up relevant animal card.

Some suggested investigations:

Some suggested designing and making:

FIRST AND SECOND CLASSES - PLANTS AND ANIMALS

Content Objective:

- **RECOGNISE AND DESCRIBE THE PARTS OF SOME LIVING THINGS**
*root, leaf, stem of plants,
trunk and branches of trees,
head, leg, wing, tail, skin covering of animal*

Some suggested activities:

- Examine a broad bean straight from the packet. Soak overnight and note any changes. Take the skin off and discuss with the children what is inside. Draw a picture of opened bean. Place another soaked bean seed in a see through jar (between the jar and some damp blotting paper). Observe and record growth labelling the stem / root / leaf etc.
- Take the children outside to observe a tree. Describe the trunk / the branches / the twigs. (Maybe some roots could be visible at the bottom of the tree) Observe and draw the different parts. Bark rubbings / leaf rubbings and paintings could be displayed.
- Dig up and carefully wash several large weeds (if possible with different root systems). Ask children to draw and label the parts and to explain their purpose.
- Complete a plant / animal / bird parts matching game (i.e. a drawing with separate labels – head / leg / wing / tail etc). Older classes could make these.
- Observe various animals e.g., woodlice / worm / snail / ladybird etc. Note shape / colour etc. Describe body parts e.g. head / tail / note skin type / shell etc. Compare similarities and differences. (Exemplar 15, Teacher Guidelines p. 71.)

Some suggested investigations:

- Do plants need leaves? Why?
- Investigate how different animals move. Why are some slow and

some fast movers? Does it depend on what they eat?

- Do roots push down? – plant some seeds in an eggshell filled with damp compost. Observe and record.
- How could you find out the age of a tree?

Some suggested designing and making:

- Plant and animal figures - papier mache models of plants and animals
- A matching game for tree / animal / plant parts.

FIRST AND SECOND CLASSES - PLANTS AND ANIMALS

Content Objective:

- **RECOGNISE THAT TREES ARE PLANTS**

Some suggested activities:

- Distribute pictures of plant and animal life. Group into plant and animal sets. Discuss similarities and differences. Discuss what plants need to grow / survive. Relate these plant processes to trees.
- Collect some acorns, beechnuts or sycamore seeds. Plant the seeds and match the seed to a tree on a tree poster. Observe and record growth.

Some suggested investigations:

- Investigate growing conditions for autumn seeds and saplings e.g. do they need light and water to grow?

Some suggested designing and making:

- Design your own tree using any medium e.g. papier mache / autumn leaves / fabric etc

FIRST AND SECOND CLASSES - PLANTS AND ANIMALS

Content Objective:

- **GROUP AND SORT LIVING THINGS INTO SETS ACCORDING TO CERTAIN CHARACTERISTICS**

hibernation

migration

farm animals

animals and plants that provide food

Some suggested activities:

- Look at pictures of various animals. Discuss various animal categories e.g. farm / domestic / wild / those that hibernate / those that migrate to warmer countries etc. Do you see them in winter? Why? Sort them into groups according to these categories.
- Sort plants and animals into groups using cards with pictures of animals and plants on them. The different categories into which they will sort the animals or plants can be agreed beforehand e.g. animals with two legs and animals with four legs / flowers with yellow and white petals etc. Hoops are useful for this activity.
- In various habitats look for animals with or without legs / shells / wings / feelers etc. Put different types of animals with similar characteristics together in groups. (Exemplar 15, Teacher Guidelines p.70). Record results.
- Sort set of plant and animal pictures into groups – plant / animal / not sure. Discuss differences between plant and animals. Further sort pictures into animals or plants found at the seashore / farm / woodland / bog etc
- Discuss animals that provide food e.g. cows / goats etc Plants that provide food for us and for animals eg. grass / berries / flowers / potatoes etc.

Some suggested investigations:**Some suggested designing and making:****FIRST AND SECOND CLASSES- PLANT AND ANIMAL LIFE****Content Objective:**

- **APPRECIATE THAT LIVING THINGS HAVE ESSENTIAL NEEDS FOR GROWTH**

Some suggested activities:

- Observe how different animals feed e.g. place a snail / slug in a clear plastic container smeared with some banana and watch from underneath how they eat.
- Observe birds feeding in winter from bird tables/ bird feeders etc. Why do they need extra food when it is cold and frosty?

Some suggested investigations:

- What does a plant need to grow e.g. sunflowers, cress, grassheads, daffodils etc? Investigate whether they need light, water, air etc.
- What food do ants / woodlice / snails / earthworms like to eat?
- Do caterpillars eat more at night than during the day? (Teacher Guidelines p. 80)
- What food do birds like to eat? Place a few different types of food on

the bird table and observe what is their favourite food.

Some suggested designing and making:

- A bird feeder using recyclable materials e.g. juice cartons / orange nets
- A bird cake for the bird table in winter - lard balls filled with oats / cooked rice / nuts etc
- Grassheads using lawn seed, compost (or sand or soil) and pop socks. Use elastic bands or buttons for eyes / ears.

FIRST AND SECOND CLASSES - PLANTS AND ANIMALS

Content Objective:

- **EXPLORE, THROUGH THE GROWING OF SEEDS, THE NEED OF PLANTS FOR WATER AND HEAT**

Design, make or adapt a suitable container for growing seeds

Some suggested activities: See below

Some suggested investigations:

- What helps seeds to grow? (Exemplar 20, Teacher Guidelines p. 84)
- Do seeds germinate better in warm or cold conditions?
- Plant four pots of bean seedlings, observe growth and investigate what happens when one gives plants different amounts of water.
- Plant four pots of bean seedlings, observe growth and investigate what happens when one places them in areas of differing temperatures.
- Does it matter if we plant seeds upside down?

Some suggested designing and making:

- Various plant pots using recyclable materials eg. foil / juice cartons / shoeboxes / eggshells etc

FIRST AND SECOND CLASSES - PLANTS AND ANIMALS

Content Objective:

- **INVESTIGATE HOW PLANTS RESPOND TO LIGHT**

Some suggested activities:

- Observe and describe grass in a small area. Cover some grass with a shoebox and leave for a few days. What changes occur – colour etc? Remove the shoebox and check the grass in a few days. Record

results.

- Grow several bean seedlings or other seeds in shoebox houses with chimneys and windows. Ask the children to explain why the seeds grow out the windows/chimneys.

Some suggested investigations:

- Do plants need light to grow? Plant four pots of bean seedlings and place them in different amounts of light at different distances from a window. Observe and record results.

Some suggested designing and making :

- Model houses made from shoeboxes with chimneys and windows.

FIRST AND SECOND CLASSES - PLANTS AND ANIMALS

Content Objective:

- **UNDERSTAND THAT SEASONAL CHANGES OCCUR IN LIVING THINGS AND EXAMINE THE CHANGES IN PLANT AND ANIMAL LIFE DURING THE DIFFERENT SEASONS**

Some suggested activities:

- Adopt a tree –a class assume responsibility for one or two trees in the school grounds. Record pictorially or using a digital camera how the tree undergoes change during the year. Measurements such as girth, leaf spread can also be noted. Children can predict how they expect the tree will look in 2 months, 4 months.
- Go on regular walks outside to observe and record seasonal changes in the hedge / stream / farm / seashore etc. Discuss observations: weather, clothes we wear, length of day, buds, leaves on trees, flowers in the garden in spring, summer and autumn, number of minibeasts, insects, bees to be observed, young lambs etc I spy game (Teacher Guidelines p.64). Record observations in simple form.
- Plant hyacinth and crocus bulbs in autumn under conical black paper hats and observe how they change.
- Sorting seasonal images into groups. Selecting which images best suit the present time of year. In some cases these images can also be placed in order e.g. seasonal changes to a tree / bird activity e.g. nest building / feeding / migration etc
- Discuss seasonal activities e.g. holidays, Christmas, Easter, Starting school etc. Talk about the seasons these activities take place.

Some suggested investigations:

- Seasonal changes in the hedge / lawn / grass / flowers / trees / seashore etc Record pictorially, playing I spy game or using digital camera.

Some suggested designing and making:

FIRST AND SECOND CLASSES - PLANTS AND ANIMALS

Content Objective:

- **BECOME FAMILIAR WITH THE LIFE CYCLES OF COMMON PLANTS AND ANIMALS**

Some suggested activities:

- Observe caterpillars in the classroom in a suitable home. Record pictorially the changes they undergo.
- Place pictures in sequence of plants and animals at various growth stages e.g. caterpillar, pupa, butterfly or bean seedling before and during the growing cycle. Frogs / chickens / cats etc could also be discussed and pictures of various stages placed in sequence.
- In autumn collect and plant seeds e.g. acorns, conkers, beechnuts etc, and watch how they germinate in the spring. Observe and record growth.

Some suggested investigations:

- Do beans grow faster than peas?

Some suggested designing and making:

- Make a caterpillar observatory (www.blackrock-edu.ie) using recyclable materials e.g. Use an old shoebox stood up on one end and cover the open side with clear plastic punched with air holes. Keep a small jar of water, with holes punched in the lid, inside the shoebox. Watch out for caterpillars on leaves in the hedge. Stand the leafy twig (with caterpillar) in the jar inside the shoebox. Keep changing the twig and water until the caterpillar pupates. Free the butterfly as soon as possible outside.