

## Module 1: Staying Dry and Clean Lesson

### Lesson 2: Understanding and Empathy

<b>Class Level: Infants</b>	
<b>Strands:</b> 1. Materials 2. Living Things	<b>Strand Units:</b> 1.1 Materials and Change 2.1 Myself 2.2 Plants and Animals

**Safety:** All material should be safe and found in your classroom or at home. Avoid selecting sharp items.

#### **Background:**

This lesson introduces the students to some animals and plants that exhibit the wet/dry properties explored in the previous lesson. Specifically, we will look at the differences between a cat, a duck and a lily pad.

Ducks and lily pads both have small nanostructures which make their feathers and leaves repel water (and mud). A duck's bill has little teeth (like a comb) which they use to keep their feathers aligned. As a result, the structures are oriented correctly and maintain their waterproofness. In addition, ducks spread an oil through their feathers to keep the feather supple and to help maintain the feather structures. This oil is at the base of their tail; ducks spread it all over their feathers. Both of these make duck feathers very waterproof. Combing out their feathers and keeping them covered in oil is called 'preening'.

For infants and junior classes it is enough for the children to understand that the special shape of feathers allows them to be waterproof.

Cats, on the other hand, do not have this property and are notoriously unhappy in water (although there are exceptions). A cat will get soaked to the skin if in water, while a duck will stay dry.

Note: in this lesson the cat and duck become friends and try to play together. Cats are generally smaller than ducks and can live together very well (think of farm animals). Although cats may eat some small song birds, they eat animals the size of mice, they will not eat ducks.

#### **Key Learning**

Animals and plants can have structures on their feathers and leaves that make them waterproof so they do not get wet and can stay clean.

## Resources

- Teacher resources: Lollipop sticks, glue, crayons, scissors
- Videos
  - Ducks and their waterproof feathers. (2.30 minutes) <https://youtu.be/6B-8PG98NcA>
  - Cats and water (1.04 minutes) <https://youtu.be/qvdVqll-hv4>

### SunPilot Resources

- PowerPoint
- The Cat and the Duck: Images to sequence 1. duck and cat by the pond, 2. Cat trying to step onto the Lily pad. 3. Cat falling, 4. Cat on shore wet and muddy, Lily pad muddy 5. Duck splashing Lily pad to wash off the mud.
- Images for stick puppets of duck and cat.

## Key Vocabulary:

Encourage students to clap out the syllables in each new word and discuss what sound(s) they hear in each word. This will help the children remember the new vocabulary while also developing phonological awareness.

- |         |            |        |
|---------|------------|--------|
| • Preen | • Lily Pad | • Bill |
|---------|------------|--------|

## Learning Objectives/Outcomes

Science	Literacy	Other
<p><b>1. Materials</b> 1.1.1 explore the effects of water on a variety of materials 1.1.2 observe and describe materials when they are wet and when they are dry</p> <p><b>2. Living Things</b> 2.1 become aware that people have a variety of needs for growth (exercise, food, clothing, shelter)</p> <p>2.2 become aware of animals and plants of other environments</p>	<p><b>Oral language</b></p> <p>-express personal opinions, ask and answer questions to get information, develop understanding and to clarify and extend thinking in relation to duck and cat appearance/behaviour (waterproof/absorbency)</p> <p>-use sophisticated oral vocabulary (subject specific)</p> <p>-describe events and processes relating to real and imaginary contexts through drama</p> <p><b>Reading</b></p> <p>-recognise and manipulate syllables in new vocabulary words</p>	<p><b>Mathematics:</b> 1. Time. 1.1 Sequence events or stages in a story</p> <p><b>SPHE:</b> 1. Myself (feelings and emotions): 1.1 self-identify 1.1.1 making decisions. 1.1.2 being a friend 2. Myself and others (relating to others) 2.1 my friends and other people 2.1.1 discuss and examine aspects of friendship 2.1.2 relating to others.</p> <p><b>Drama:</b> 1. Drama to explore feelings, knowledge and ideas, leading to understanding 1.1 Exploring and making drama 1.2 Co-operating and communicating in making drama</p>

## LESSON OUTLINE:

### **Introduction: Ducks in water**



Show video of duck preening <https://youtu.be/6B-8PG98NcA>

Point out the comb on the duck's bill and how it is like a hair comb.

Think about ducks in water – would they like rain?

**Slide 3** Point out that duck feathers make them waterproof, so they stay dry.



**Activity 1:** Drama – teacher hot seating teacher in role as the duck – preening

Get the students to ask what the teacher is doing? Why?

Explain that your feathers are shaped in a way that allows water to roll off them. Your feathers repel water naturally – but you need to keep your feathers nicely combed and put waterproof oil onto them to make doubly sure you are waterproof, this is called preening.



**Activity 2:** Drama – scene tableau and thought tapping.  
Reverse Roles – Children now pretend to be ducks.

Teacher calls out *freeze!*

Children freeze in position.

Teacher calls on different children in the role of a 'news reporter'. Example questions for the ducks:

- Tell me what you are doing?
- What would happen if I splashed you?
- How do you stay dry in the water?



### **Group discussion – cats in water**

**Slide 4**

Show video of cats and water <https://youtu.be/qvdVqll-hv4> (1.04 min) Show images of a cat that is warm and dry – how is the cat feeling? Show image of a cat in the rain – how is the cat feeling? Ask – Would cats like rain?

Show the scene of the duck in the pond with a lily pad beside it and the cat on the shore. Ask, would the cat join the duck in the pond? Why/ Why not?

**Slide 5**

**Activity 3 (Slide 6 & 7)** sequence the first four scenes (whole class on the board or in groups)



You can have the images printed or put them on a smart board and have the students sequence the events as a group. Alternatively print them out on A4 and have the students sort them at their tables. Encourage the children to use words such as 'before', 'after', and 'next'. Discuss the order the class/groups have decided on.

Show the scene of the wet and muddy cat in the water point out that the cat has made the lily pad dirty.

**Slide 8**

Act out this little scenario (text also on slide 8)

Cat: Oh dear – I got the lily pad dirty!,

Duck: not to worry– I can just splash water on it – look, it washes clean just like how people can wash their wellies when they get muddy.

Cat: Oh, so lily pads are waterproof like you?

Duck: yes, their leaves have a special shape to make the water roll off – just like my feathers. But they can't add extra waterproofing like I do when I preen.



**Activity 4 Pair drama** : role playing - groups of 2 (one student as a duck, one as a cat)

Step 1: Before they act out their stories – have the children cut out a duck or cat, they can colour them and then glue them onto lollipop sticks.

Puppet play (stick puppets) Children, in pairs, create a drama where a duck and a cat want to be friends. Where would they play? Would the cat play in the water with the duck? Could the duck climb a tree like the cat? What kind of game could they play? What would they say? What would happen if it started to rain? What kind of playing could they do?



**Wrap up (plenary)**

**Slide 10**

What did you learn about ducks and lily pads today?  
Can a cat and duck be friends?

**Modification**

- Children could play the role of ducks and cats in their play rather than using the stick puppets.

**Extension Activities**

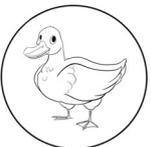
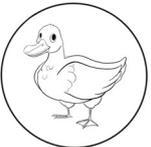
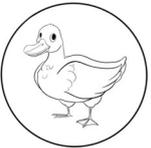
- Once the scene sequence is complete have the students develop a story about the images.
- Have the students take photos or draw images to represent their play.
- Have the students write out a script of the play either as a shared writing experience with the text dictated to the teacher or in writing pairs.
- Students could make a scene of where and how the duck and cat play.

**Assessment**

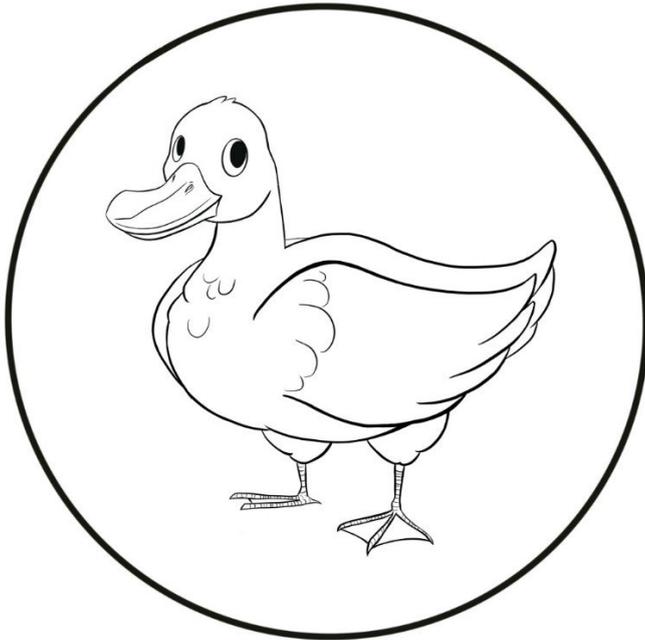
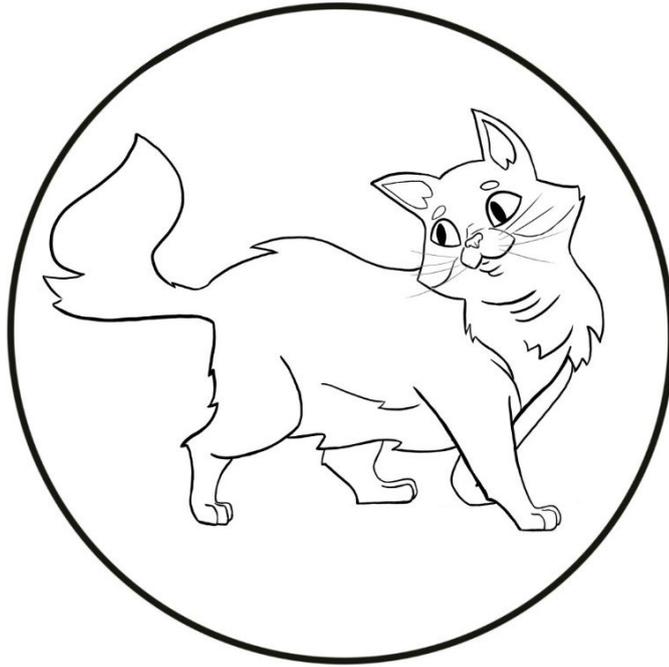
- Teacher observation
- Probing questions do students understand why the duck stays dry and the lily pad is easy to clean?

### Script Template: Extension Activity

The Cat and the Duck – will you be my friend?



**Images for Stick Puppets**



**Images for Sequence and Storytelling**

