7. After one end of the tube has been securely closed off, pour in some rice.



8. Secure both ends. Tip it slowly and enjoy the sounds of rain!

If there are no covers for your cardboard roll, create two covers using aluminium foil:

Trace and cut out two circles that are about 2cm wider in diameter than the circular openings of your cardboard roll. Place the covers over the openings and fold down the excess 2cm edges. Tape down the edges to secure them.



ne: \_\_\_\_\_

# Melodies at the Gardens!



# **Upper Primary School Programme**

# Items to bring:

- (i) A pen
- (ii) Coloured pencils for drawing of soundscape (Optional)

### AT THE CLOUD FOREST

- 1. The Falls
  - Listen to the sounds of the waterfall.
- (i) Describe the sounds made by the waterfall using sound words / onomatopoeia (e.g. splash) or adjectives.

(ii) Do you consider these sounds made by the waterfall as music? Why or why not?

(iii) Can you name any instrument that makes the sound of falling water? (Refer to page 6 on how to make this instrument at home)

# 2. Lost World - Venus Flytrap

(i) Observe the features of the Venus Flytrap. It has special modified leaves with tiny hairs. When an insect lands on it and touches its hairs, the leaves will snap shut, trapping the insect. The trapped insect will then become food for the plant!



Which musical instrument does its "snapping" action resemble?

(ii) Which family of instruments does this instrument belong to?

# 3. Lost World - Pitcher Plant

(i) Observe the features of the Pitcher Plant. It has modified leaves that resemble pitchers. The inner wall of the "pitcher" is slippery. When insects slip and fall in, they will drown in the liquid and become food for the plant! Which instrument does the shape of the Pitcher Plant resemble?



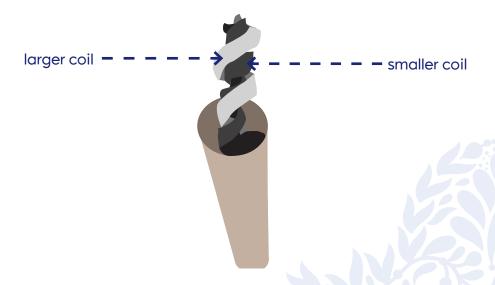
(ii) Name a type of music this instrument plays.

(iii) Would you describe the sound of this instrument as nasal or full? Why do you think it sounds this way? Does it have anything to do with the shape of the instrument?

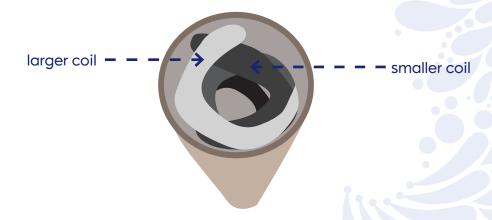
4. Place the smaller coil within the larger coil.



5. Place the two coils into the cardboard roll / tube.



6. Use glue or masking tape to secure the ends of the foil inside the tube about 1cm from opening.



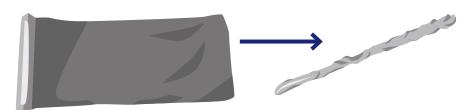
# **Hands-on Activity: Making Rainsticks**

# What you'll need:

- (i) Hand towel cardboard rolls / Badminton shuttlecock tube
   (otherwise, stick two short toilet paper rolls together to make a long cardboard roll)
- (ii) Aluminium foil
- (iii) 3 tbsp of rice
- (iv) Optional items stick, glue and construction paper

### Instructions:

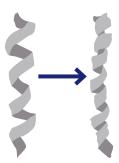
1. Tear a sheet of aluminium foil and crush it lengthwise into the shape of a long cylinder.



2. Wrap it around a long pencil to form a coil. Remove the pencil gently. The coil made should measure about the length of your cardboard roll / tube.



3. Create a second coil by repeating steps 1 and 2. This time, after removing the coil from the pencil, continue twisting the aluminium to create a tighter coil.

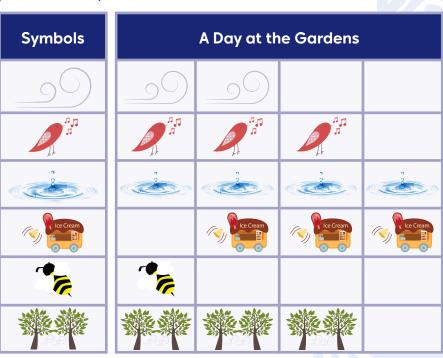


# 4. Crystal Mountain

(i) Name the sounds that you can hear in this place.Describe the feeling it gives you.



(ii) Create a soundscape based on some of the sounds that you can hear in this place. You may also add in your own sounds that fit well into the soundscape. (An example is shown below. You may perform it with some friends upon completion of your soundscape.)



# Draw your soundscape here.

Symbols	A Day at the Gardens			

### 5. Bat Sounds

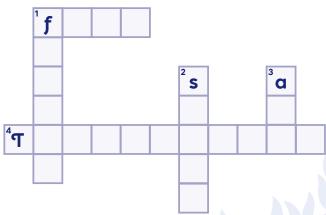
Bats use a technique called "echolocation" to hunt for prey. An echo is a reflection of sound, arriving at the listener some time after the direct sound.



- (i) Can you name some of the musical devices / effects that resemble echoing?
- (ii) Perform a short tune (e.g. Singapura) using some of the musical devices that resemble echoing.

# 6. +5 Degrees (Pitch and Temperature)





### Down

- 1. The f \_\_ \_ \_ r air molecules result in sound energy travelling faster.
- 2. When the temperature is high, an instrument will tend to play s = -p.
- 3. Warm a \_\_ \_ molecules move faster, resulting in a higher pitch.

### Across

- 1. When the temperature is low, an instrument will tend to play f \_\_ \_ \_ \_ .
- 4. T \_\_\_\_ \_ e has an important influence on pitch.