

#### Teachers Notes



#### Each team of 3 will need: (Teachers need to handpick teams)

2 a plastic bin liner
25 straws per team
pack of blue tak
1 A5 cardboard base
pieces of paper

In total, each class will have 8 teams

- 4 bin liners
- 200 paper straws

#### Milestone/Sticky Knowledge:

- Understand that humans make an impact on the environment which can have positive or negative consequences.
- Can recognise how buildings and settlements are constructed to take the environment into consideration (to withstand earthquakes, monsoons etc)

#### Medium Term Plan

The aim of this session is to get the children to think about the Power of nature and how a structure can survive. There will be a design challenge in groups of 3.

The structure will be placed on the Nixon roof for 3 days and nights.

The children will need to think about how the design

Please can you teach this lesson later in the week -after the Tuesday assembly

The Big Question is...

# How can we harness the power of nature?



# Year 4 Topic Design Challenge



# Create a structure which can withstand the power of nature for 3 days and nights in Singapore.

Resources:

Paper Straws Blue tak

½ a bin liner baq (plastic)

1 A5 cardboard base

Scissors

2 pieces of paper -recycled from the printer

Rules:

- You can not use any other resources.
- It must fit on the cardboard base
- It needs to be transported from the classroom to the testing zone
- Each person in the group must have a role
- You only have 30 minutes to create your structure

# It will be left on the Nixon Building Roof for 3 days and 3 nights



What do you think your team need to consider when designing your structure?

Global Guardians will take them to the Nixon Building once created



## What is the Power of Nature?



Draw as many examples as you can think of...
(2 minutes)





### What is the Power of Nature?











Which affect Singapore?







# Design Ideas and Designs



Use your table to generate questions and design sketches

Questions to think about when building your structure



Design Sketches

Take a photo of your sketches and ideas

#### Rules:

- You can not use any other resources apart from what is in your packs and scissors to cut
- It must fit on the cardboard base
- It needs to be transported from the classroom to the testing zone
- Each person in the group must have a role
- You only have 30 minutes to create your structure



#### Time to Create



Create a structure which can withstand the power of nature for 3 days and nights in Singapore.

Resources:

Paper Straws

Blue tak

1/2 a bin liner bag (plastic)

1 A5 cardboard base

Scissors

2 pieces of paper -recycled from the printer

30:00

#### Rules:

- You can not use any other resources.
- It must fit on the cardboard base
- It needs to be transported from the classroom to the testing zone
- Each person in the group must have a role
- You only have 30 minutes to create your structure

DON'T FORGET TO WRITE YOUR NAMES & CLASS ON!



## Take a 'Before' Photo





Keep all 8 structures somewhere safe in your class. They will be collected and taken to the Nixon on Thursday or Friday!