

NIHERST ISTEM CLUB

ACADEMIC YEAR 2021-2022 || TERM ONE (1)

LEARNING OBJECTIVES AND REQUIRED MATERIALS/SUPPLIES

The following table details the intended learning outcomes for the term. Recommended materials and supplies are also listed. ***In the event that you are not able to provide all the materials, the member can still follow along during the session. Each member will be provided with a booklet containing instructions for each activity and supplemental information. This resource can be used to do or repeat activities independently at a later date.***

**Dare to join this exciting adventure
With sun, rain, storms and other forces of nature?
Where the thunder will roar, and lightning will strike
Ponder the question...What's the weather like?**

This term, iSTEM Club takes you on a journey as we explore different kinds of weather and climates. Indulge your curiosity as we explore the science of weather systems; encountering storms and other natural disasters, while understanding the impact of climate change. Make your own weather instruments, conduct experiments and create your own video weather report as you engage in interactive and hands-on activities. We don't need to see the future to know this term's forecast: clear skies of learning with showers of fun for everyone!

AGE GROUP	OBJECTIVES At the end of the term, members should be able to:	GENERAL MATERIALS
5-6 years	<ul style="list-style-type: none"> • Identify different weather conditions and their associated activities • Give examples of plants and animals that thrive in different climates • Understand the Water Cycle • Construct models of weather instruments • Understand storms, thunder and lightning • Demonstrate a weather forecast 	Basic stationery (pencil, ruler, scissors, tape, glue, colours, paints etc), Bristol board, paper, craft items (yarn, beads, glitter etc), pushpins, kitchen utensils and containers, straws, skewers, disposable bags, paper cups, food colouring, Cookeen (shortening), empty bottles, cardboard.
7-9 years	<ul style="list-style-type: none"> • Define the term 'weather' • Name different seasons • Explain the Water Cycle • Explore different natural disasters • Investigate air temperature and humidity • Construct models of weather instruments • Understand the role of a meteorologist and demonstrate a weather forecast • Understand Climate Change and its effects 	Basic stationery (pencil, ruler, scissors, tape, glue, colours, paints etc), thumbtacks/pushpins, Bristol board, paper, glitter, kitchen utensils and containers, matches, straws, disposable cups, food colouring, shaving cream, balloons, whistle, batteries, light bulb, flashlight, bleach, First-Aid supplies (sanitizer, gloves etc), outdoor items (stones, block of wood), hammer, empty water bottle, cardboard.
10-13 years	<ul style="list-style-type: none"> • Explain the terms 'weather' and 'climate' • Understand and demonstrate weather forecasts • Name and compare different seasons • Describe different kinds of clouds • Explain the Water Cycle and illustrate the process of precipitation • Construct models of weather instruments. • Investigate and construct models to demonstrate different natural disasters • Understand 'Global Warming' and the 'Greenhouse Effect' and relate these terms to Climate Change 	Basic stationery (pencil, ruler, scissors, tape, glue, colours, paints etc), paper, Bristol board, thumbtacks/pushpins, feathers, cotton balls, straws, disposable wares, kitchen utensils and containers, Play-Doh, wool sock, gravel/stones, cardboard, empty 2L bottle, food colouring, thermometer (optional)