

CAPS CURRICULUM
Grade 4 NS and Technology

 Can use LEGO

TERM 1 – Gr. 4		
Hours	Topic	Content, concepts and skills
5¼	Living and non-living things that share our world with us	Living and non-living things: <ul style="list-style-type: none"> • Characteristics of living things, Plants and animals: feeding, growth, reproduction, breathing, excretion, sensitivity, locomotion • Non-living things: none of the above
8¾	Features of plants and animals	Features of plants and animals Basic structure of plants & Visible differences between plants Body plans of animals Visible differences between animals
7	Requirements of plants and animals	Requirements for growth of plants <ul style="list-style-type: none"> • Plants need light, water and air to grow Habitats of animals Concept of a habitat
3½	Different structures	Animal shelters <ul style="list-style-type: none"> • Identify manmade & natural structures Bk 1 pg 38- 41 • Identify shell and frame structures Bk 1 pg 38- 41 • Identify the materials different shelters are made of. • Record observations
3½	Structures - Design an animal shelter	Technology process Bk 1 pg 27 - 27 Problem scenario is provided: need for an animal shelter
		Test and practical task

28 hours in total:

TERM 2 – Gr. 4		
Hours	Topic	Content, concepts and skills
5¼	Materials	Properties of materials BK 2 pg 68-70 <ul style="list-style-type: none"> • Natural and man-made materials • Metals • Non-metals (including ceramics: glass, porcelain, pottery and polymers: plastics, rubber, fabrics) • Descriptions of materials • Uses of materials: suitability of different materials for different purposes.
7	Combinations of Materials	Combination of materials to make materials with new properties mixing materials to make new materials
5¼	Strengthening Materials	Ways to strengthen materials to be used in building structures: Bk 1 pg 42-56 <ul style="list-style-type: none"> • folding } Bk 1 pg 57-60 • tubing } • braces(gussets) and struts across corner joints (strength of a triangle) Bk 2 pg 23 and 30

3½	Phases of Substances	Solids, liquids and gases Phase changes
7	Air (Gas)	Air and Energy <ul style="list-style-type: none"> • Air is invisible but is a real substance(gas) • Air occupies space but is compressible • Wind is air moving in the same direction • Energy is transferred by moving air • Wind can do useful work because it can make things move
		Machines that use energy from moving air. Bk 2 pg 2 <ul style="list-style-type: none"> • Examples of machines (vehicles or objects) that use wind energy to do work or make things move. • The type of structure of each machine • Design windmill Bk 2 pg 96 (+Blue kit)
		Case Study Test and mid year exam

28 hours in total:

TERM 3 – Gr. 4		
Hours	Topic	Content, concepts and skills
7	Sound	Sound, energy, and music Sound is a type of energy
3½	Making sound louder	Boxes and tubes make sound louder Make and play with a tin-can telephone.
3½	Reflected sound Noise pollution	Reflection of sound Sound pollution by vehicles/machines/factories
3½	Indigenous Musical instruments	Case study: Variety of musical instruments indigenous to the local area Compare musical instruments from two different cultures.
11½	Musical instrument: Design and make a solution	Technology process <ul style="list-style-type: none"> • Identify a need or a problem • Suggest a possible solution to the problem • Design a solution, taking given specifications and constraints into account • (specifications must include shell structure and strengthening of structures) • Make an instrument that works by blowing on it or plucking its strings • Evaluate the final product using the specifications
		Test, translation task and practical task

28 hours in total:

TERM 4 – Gr. 4		
Hours	Topic	Content, concepts and skills
5¼	Finding out about space	Space exploration Listen and respond to stories/information on Moon and/or Mars exploration.
5¼	Our place in space: Objects in the sky	The Sun
5¼	Our place in space: Objects in the sky	The moon
3½	Our place in space: Objects in the sky	The Earth- the 'Blue Planet'
3½	Our place in space: Objects in the sky	The Stars
5¼	Movement	<p>Moving on land: Mechanical systems</p> <ul style="list-style-type: none"> Vehicles used for transport of people and goods on Earth. Simple mechanisms used in vehicles to enable rotary motion; wheels and axles: the development of the wheel Bk 1 61-75 <p>Moving in space: Propulsion using gas: Balloon rocket on a string</p>
		Test, practical task and end year exam

28 hours in total