

Sci-Tech Connections

Scope and Sequence

Grade 1

Sci Tech Connections Scope and Sequence - Grade 1

Name of Module	Lesson	Name of Activity	Main Concepts	Specific Expectations	Materials Required	Pacing *
<i>Me and My Senses</i>	1	I Spy ... with All My Senses	Investigates the senses and creates a new sense game for others to play.	<ul style="list-style-type: none"> • name each of the five senses • point to the sense organ for each sense and tell what it does • tell how each of our senses helps us every day 	<ul style="list-style-type: none"> • basins or boxes to put materials in • objects from around the classroom • chart paper and markers • scarves or eye covers • film canisters 	1 – 40 min. period
<i>Me and My Senses</i>	2	Pancakes for All the Senses	Identifies the location and function of each sense organ through the cooking of pancakes.	<ul style="list-style-type: none"> • name each of the five senses • point to the sense organ for each sense and tell what each does • tell how each of our senses helps us every day 	<ul style="list-style-type: none"> • bowl • spoon • pancake mix • plate • maple syrup • forks and knives • milk • butter or oil • frying pan • flipper • plastic plates 	1 – 60 min. period
<i>Me and My Senses</i>	3	Sensing Is Believing	Explores different tools that are used to enhance a sense. As well, it identifies the tools used by different occupations.	<ul style="list-style-type: none"> • picks the right tool to help you see (hear, feel, taste, smell) • describes how our senses help us • describes how our senses fool us • describes what happens when people lose one of their senses 	<ul style="list-style-type: none"> • stethoscope • earplugs • hand-held microscope • binoculars • eyeglasses • Braille cards • magnifying glasses • hearing aid • x-rays • goggles • sunglasses • camera 	1 – 40 min. period

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<i>Me and My Senses</i>	4	An Apple by Any Other Name ...	Identifies and describes ways that materials can be changed to alter their appearance, smell, and texture.	Using all of your senses <ul style="list-style-type: none"> • describe apples • describe what happens to the apples when we change them 	<ul style="list-style-type: none"> • apples • peelers for peeling • cup • salt • pot or bowls • spoons and plates for sampling • cooking facility (oven, hot plate, microwave, electric frying pan) • knives for cutting • spoon • potato mashers • sugar 	1 – 40 min. period
<i>Me and My Senses</i>	5	The Better to Hear You	Investigates if altering the size of an ear increases the capacity to hear.	<ul style="list-style-type: none"> • works with a partner safely • creates a model of an ear • designs a way to test out your model • describes why animals may need to hear differently than people 	<ul style="list-style-type: none"> • cardboard or tagboard • scissors • pencil and markers • paper • construction paper • glue 	1 – 60 min. period
<i>My Marvelous Machine</i>	6	Me ... Outside	Using movement, identifies the major parts of the human body and describes their functions.	<ul style="list-style-type: none"> • name the main parts of your body and tell what they do (why they are important) • make an outline of your body and label the parts • discuss the many things your body parts can do • create a poster or flip book about your body • share learning with others 	<ul style="list-style-type: none"> • a full-length mirror • paper for making life-sized body outlines • pencil and markers 	1 – 60 min. period

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<i>My Marvelous Machine</i>	7	Me ... Inside Out	Researches and finds out more about the inside body parts and presents the learning.	<ul style="list-style-type: none"> • name the main parts of your body and tell what they do (why they are important) • create a model of a body part • use books to find out more about how your body works • share your learning with others 	<ul style="list-style-type: none"> • chart paper • books • Post-it notes • pencils and markers • paper • construction paper • glue • Play-Doh or modeling clay 	1 – 60 min. period
<i>My Marvelous Machine</i>	8	When I was a Baby	Identifies and describes common characteristics of humans and other living animals and describes how humans and animals grow.	<ul style="list-style-type: none"> • listen to each other and discuss ideas • describe how animals are the same and different • compare changes in humans and other animals as they grow • create a growth chart of yourself 	<ul style="list-style-type: none"> • pictures of animals • pet dog or cat • children • adults 	1 – 60 min. period
<i>My Marvelous Machine</i>	9	Getting to Know Animals	Researches an animal and builds a model of the animal and its environment.	<ul style="list-style-type: none"> • listen to each other and discuss ideas • choose an animal to research • look in books to find information on animals • create a model of an animal in its environment • share your learning with others 	<ul style="list-style-type: none"> • books, CD-Roms, and other information sources about animals • paper and pencils • crayons and markers • Play-Doh or modeling clay • art materials 	2 – 60 min. periods
<i>My Marvelous Machine</i>	10	My Body Needs	Identifies the food groups and designs and creates a poster to tell others what they should eat each day.	<ul style="list-style-type: none"> • identify the five food groups • find foods in magazines • sort food into the food groups • create a simple food group guide • share work with others 	<ul style="list-style-type: none"> • old magazines • grocery store flyers • scissors • glue sticks • chart paper • markers • plasticine 	1 – 60 min. period

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<i>My Marvelous Machine</i>	11	Where Does It Come From?	Demonstrates through looking at his/her own lunch, the different sources of food.	<ul style="list-style-type: none"> • sort and classify your lunch into food from a plant or food from an animal • create a sequence story about food • share your learning • reflect on your learning 	<ul style="list-style-type: none"> • drawing paper • magazines • markers • crayons • glue 	2 – 40 min. periods
<i>Me and the People and Places Around Me</i>	12	Celebrating Me	Identifies objects, characteristics, people, and places that are special to each child and creates an “I” collage.	<ul style="list-style-type: none"> • identifies events, places, people, and celebrations in his/her life • makes a collage using pictures, drawings, and words • shares his/her “I” collage with others • works neatly and cleans up his/her work space 	<ul style="list-style-type: none"> • large, cutout shape of a capital “I” (about 1 m high) • a variety of magazines • scissors and glue • materials for drawing and printing • student photo 	1 – 60 min. period
<i>Me and the People and Places Around Me</i>	13	Family Ties	Creates a family tree and describes how the people in our family are important to each of us.	<ul style="list-style-type: none"> • creates a cutout family tree • uses a variety of materials to represent his/her family • shares his/her family tree with others • asks questions of others • works with care 	<ul style="list-style-type: none"> • paper doll pattern (page 20) • white paper • found materials (paper, wool or yarn, wallpaper, foil, scrap materials, etc.) • scissors 	2 – 40 min. periods
<i>Me and the People and Places Around Me</i>	14	You’ve Got to Have Friends	Describes what a friend is, who he/she can be, and what makes a good friend by designing and creating a book about friends.	<ul style="list-style-type: none"> • creates a flip book of friends • uses words and drawings to describe his/her friends • shows pride in his/her work • shares work with others • works with care and creativity 	<ul style="list-style-type: none"> • paper • construction paper (cover) • stapler • crayons or markers • Bubble Map Chart (BLM 9) 	2 – 30 min. periods
<i>Me and the People and Places Around Me</i>	15	Special Places	Designs and makes a visual presentation that describes a special place for each child. Shares thoughts about who the people are that make our special places.	<ul style="list-style-type: none"> • works with care and creativity • uses words and drawings to describe his/her special place • shows pride in his/her work • creates a presentation of his/her special place • shares work with others 	<ul style="list-style-type: none"> • drawing and painting materials • magazines • scissors • computer and software • a.v. equipment 	1 – 60 min. period

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<i>Structures All Around</i>	16	What's in a Shape?	Investigates shapes found in the children's immediate surroundings and creates a display of their learning.	<ul style="list-style-type: none"> • find geometric shapes in ordinary structures • find structures whose shape tells you what it is • keep a tally of the shapes that you see • explore and name three-dimensional figures • describe things that are the same and things that are different between a three-dimensional drawing and an object 	<ul style="list-style-type: none"> • tally sheet • paper • pencil • camera • colored construction paper • scissors • glue sticks 	2 – 40 min. periods
<i>Structures All Around</i>	17	A House Is a House	After a discussion about the similarities and differences among structures, each student designs or draws a structure that acts as a house for people or animals or objects.	<ul style="list-style-type: none"> • work with a partner • listen to story • brainstorm different structures on paper • describe how objects are the same and different, both in how they look and how they are used • tell which structures are made by humans or found in nature • make up a new structure for something • share story or model with others 	<ul style="list-style-type: none"> • A House Is a House for Me • chart paper • pictures of structures (e.g., bridges, walls, fences, stairs, etc.) • pictures of natural structures (e.g., bird's nests, honeycombs, spiderwebs, etc.) 	2 – 40 min. periods
<i>Structures All Around</i>	18	Build Me a ...	Using the story of "The Three Little Pigs" to discuss the use and purpose of different materials to build houses, groups will design and build a structure that has a specific purpose.	<ul style="list-style-type: none"> • work safely with materials and tools • look at pictures of structures and describe them • make a plan for making a structure and follow it • make a structure, tell what it is used for, and how you made it • present your structure to the class and describe its special features 	<ul style="list-style-type: none"> • pictures of a wide variety of structures • all kinds of building materials, including commercial building kits, found and recycled materials, and common classroom items such as paper, cardboard, etc. 	3 – 40 min. periods

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<i>Structures All Around</i>	20	Making It Work	Explores and investigates how objects work. Describes what gives the object the energy that enables it to do work for us.	<ul style="list-style-type: none"> • describe the different kinds of energy that make things work • describe how we use energy every day • tell what makes something work and what happens when it does • describe tools and vehicles used in structures in the community 	<ul style="list-style-type: none"> • a variety of common devices (or pictures of them) from school, work, and home (e.g., hair dryer, flashlight, balls, stapler, fridge magnets, bicycle, door handle, old door lock, pencil sharpener, corkscrew, Walkman, etc.) • flip books • magazines • scissors • glue 	2 – 40 min. periods
<i>Structures All Around</i>	21	All Our Boxes Form a ...	Starting with a box, each student designs and creates a structure that will be combined with others to form a community.	<ul style="list-style-type: none"> • make a house, describe it, and tell how you made it • describe how your structure is the same as and different from those of your classmates • tell what you used to fasten your house together • describe tools and vehicles used in your community 	<ul style="list-style-type: none"> • boxes of various sizes and shapes • “found” materials • fasteners (glue, tape, etc.) • construction paper • markers • paints and paintbrushes 	3 or 4 – 40 min. periods
<i>Me and Others</i>	22	Together is Better	Through looking at people’s needs, the students discover how the community helps us meet these needs.	<ul style="list-style-type: none"> • make a list of the the things that we all need to live • tell where we get them • tell how we get these things • find out about the community in which we live • create a structure or an object to add to the box community 	<ul style="list-style-type: none"> • boxes of various sizes and shapes • found materials • fasteners (glue, tape, etc.) • construction paper • markers • paints and paintbrushes 	2 – 40 min. periods

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<i>Me and Others</i>	23	People in the Neighborhood	Investigates the people who work in the community to help us and what they do to meet our needs.	<ul style="list-style-type: none"> • name jobs that people do in our community • describe how they help us • tell some of the things they need to do their jobs • name the places where they work • create a list of questions to ask someone about his/her job • write a well organized speech about what you have learned • speak clearly and loudly 	<ul style="list-style-type: none"> • paper • pencils • books about jobs • parents and other people from the community 	2 – 40 min. periods
<i>Me and Others</i>	24	R and R	Identifies and describes the rules, rights (privileges), and responsibilities of the home for each family member.	<ul style="list-style-type: none"> • know what is meant by a responsibility and a right • tell, draw, or write the responsibilities of each member of your family • tell, draw, or write what rights each member has and why • describe what happens when someone doesn't do what is expected of him or her 	<ul style="list-style-type: none"> • chart paper • markers or crayons 	3 – 40 min. periods
<i>Me and Others</i>	25	Getting Along	Identifies and describes the rules in the home, at school, and in the community. Explains the consequences of disobeying a rule and discusses how rules can be changed.	<ul style="list-style-type: none"> • show that you understand the need for rules and for responsibilities • tell about rules that you have at home • tell about rules and responsibilities at school • tell about rules and responsibilities in your community • describe what happens when someone disobeys the rules 	<ul style="list-style-type: none"> • paper plates • sticks • yarn • construction paper • crayons or markers • glue • tape • scissors 	3 – 40 min. periods

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<i>My Natural World</i>	26	Recycle Cycle	Explores, sorts, and classifies different uses for recycled materials. Designs and builds a recycled creation.	<ul style="list-style-type: none"> • work as a group • work safely with materials and tools • discuss what kinds of things can be recycled • use recyclable things to create an object or model • tell your plan for creating your recycled object or model • present your recycled object or model to your classmates 	<ul style="list-style-type: none"> • a variety of materials that can be reused (e.g., glass, tin cans, cloth, paper, plastic jugs, cardboard, etc.) • fasteners (glue, thread, paper clips, staples, tape, string, buttons, etc.) 	2 – 40 min. periods
<i>My Natural World</i>	27	Where Did It Go?	Explores and investigates the recycling of materials through composting.	<ul style="list-style-type: none"> • work as a group • work safely with materials and tools • bury different bits of garbage to find out what happens over a period of time • keep a record of your findings • present findings to class • create a poster to tell others about garbage and what happens to it 	<ul style="list-style-type: none"> • plastic containers or baby food jars • soil • water • samples of human-made garbage (e.g., chip wrapper, piece of Styrofoam tray, etc.) • samples of natural garbage (e.g., piece of banana peel, leaf from a plant) • tape • markers • chart paper 	1 – 40 min. period over time
<i>My Natural World</i>	28	All My Life's a Cycle	Designs and creates a sequence puzzle to show changes over a period of time.	<ul style="list-style-type: none"> • work carefully and keep a clean work space • tell how living things change from day to day • tell how living things change because the seasons change • create a sequence puzzle for others • present your puzzle to others and try classmates' puzzles 	<ul style="list-style-type: none"> • paper • Bristol board • markers or crayons • scissors • envelopes 	2 or 3 – 40 min. periods

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<i>My Natural World</i>	29	A Season for Everything	Creates a frieze that compares the characteristics of the four seasons.	<ul style="list-style-type: none"> • work as a group • work safely with materials and tools • discuss what kinds of things you could do for each season • create a frieze folder to show the seasons • use a variety of recycled materials in frieze • compare the four seasons 	<ul style="list-style-type: none"> • chart paper (half piece) • markers or crayons • construction paper • pieces of fabric • cotton batting • variety of recycled materials • scissors • glue 	3 – 30 min. periods
<i>My Natural World</i>	30	As the World Turns	Explores how a shadow changes throughout the day and relates these changes to the earth's turning.	<ul style="list-style-type: none"> • tell that the sun gives us light • describe how to make a shadow • track a shadow and predict where it will go • describe how the shadow changes • tell why a shadow changes 	<ul style="list-style-type: none"> • chart paper (if done inside) • markers or sidewalk chalk • tape • non-standard units for measuring 	5 - 15 min. periods in day

* Timing will vary based on student's new inquiries from original investigation and how many activities from Connecting the Curriculum are introduced.