



Science in My World Overview Chart



Title	Word Count	Main Content Vocabulary	Extra Content Vocabulary in Labels and Captions	Sentence Patterns	Visual Literacy	Concepts
Life Science						
Ecosystems	225	desert, ecosystem, forest, non-living, oasis, ocean, organism, pond, tropical	ant, bush, camel, coral, dunes, fish, flower, fresh, frog, grains, houses, leaves, lizard, moss, mountain, mouse, owl, person, plants, rainforest, rock, salty, sand, shark, snake, stone, tree, water, waterfall, whale	... and... are ecosystems. ... and... are living things. ... and... are non-living things.	photos, keys, arrows, table, Venn diagram	<ul style="list-style-type: none"> All living and non-living things in an area form an ecosystem. There are different kinds of ecosystems. Ecosystems can be big or small. Many living and non-living things share an ecosystem.
Habitats	251	desert, ecosystem, forest, grassland, habitat, organism, population, shelter, survive	Antarctica, Arctic, bushes, cactuses, cardinal, Easter, Australia, fish, food, fresh water, gum forest, gum leaves, ice, koala, lion, lioness, living, lizard, mangroves, nest, non-living, owl, penguins, polar bear, rabbits, rock, salt water, sand, seal, snake, stones, tern, water, whale	A habitat is... There are... and... in a habitat. Habitats give living things..., ..., and....	photos, keys, arrows, relationship chart, tree diagram	<ul style="list-style-type: none"> A place in an ecosystem where a population lives is called a habitat. Habitats have living and non-living things. A habitat gives its population everything it needs to survive. Some living things can only survive in certain habitats.
Plant Adaptations	251	adapt, adaptation, desert, habitat, rainforest, reproduce, seed, store, survive	baobab trees, cactuses, dandelion, deciduous tree, dark, Earth, epiphyte, hot, Indonesian, leaves, maple, rainforest, roots, saguaro cactus, sharp needles, shoreline, small, taiga, temperate forest, thin, tundra, trunk, waxy, wet	Plants change to... This change is called... Some plants change their... to survive.	photos, map, arrows, chart, world map, fact file	<ul style="list-style-type: none"> Different plants grow in different habitats. Some plants adapt so they can survive in their habitats. Some plants change their leaves to adapt. Some plants change their roots to adapt.
Populations and Communities	217	community, desert, ecosystem, group, living, meerkat, ocean, population, rainforest, turtle	anteaters, ants, bats, bees, beehives, beekeeper, birds, butterflies, canopy, cats, coral, dogs, dolphins, dragonflies, ducks, emergent layer, ferns, fir trees, fish, forest floor, frogs, Kalahari Desert, kingfishers, logs, monkeys, moss, people, plants, pond, sloths, snakes, snow, town, trees, understory, water, water lilies	A population is... A community is... These things live in a... community.	photos, arrows, keys, concept web, concept chart	<ul style="list-style-type: none"> Populations are groups of living things that are the same and live in the same place. All the populations that live in an ecosystem at the same time form a community. All members of a community live in the same ecosystem. Communities do not all have to live in the same part of an ecosystem

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Food Chains	264	carnivore, consumer, energy, food chain, food web, herbivore, omnivore, producer, store	air, algae, apple, bear, bird, boy, bug, cat, elephant, fish, fox, frog, giraffe, grass, grasshopper, heron, hippo, hyena, leaf, leopard, lion, mouse, owl, plant, polar bear, rabbit, rat, seal, shrimp, snake, squirrel, stored, sunlight, toad, water, wildebeest, zebra	A food chain is... A food web is... A food chain starts with a... It ends with a...	photos, arrows, diagrams, keys, flow chart, pie or circle graph	<ul style="list-style-type: none"> • A food chain is the path of food from one living thing to another. • Producers and consumers are living things in a food chain. • Herbivores, carnivores, and omnivores are consumers. • Overlapping food chains form food webs.
Animal Adaptations	218	adapt, adaptation, camouflage, habitat, hibernation, migration, mimicry, survive, wildebeest	bear, birds, black bear, butterfly, Canada geese, European hedgehog, fish, flamingos, goldenrod crab spider, groundhog, ground squirrel, hornworm moth, humpback whale, little brown bat, monarch butterflies, monkey, patterns, peacock butterfly, penguin, river, sea dragon, seaweed, snow, snow monkeys, snowshoe hare, sooty shearwater, spider, spring, summer, winter	Camouflage is... Mimicry is... Migration is... Hibernation is...	Photos, relationship chart, bar graph	<ul style="list-style-type: none"> • Some animals camouflage to adapt. • Some animals hibernate. • Some animals migrate. • Some animals mimic other animals and plants.
Structures and Mechanisms						
Inclined Planes	242	direction, force, inclined plane, machine, manufactured, natural, ramp, simple machine, slope	bank, boxes, building, curved, distance, easier, groomed, run, path, playground, ground, hill, kayak, mountain, path, rail, shortest, skateboard ramp, ski jump, slide, snowboard, straight, walkway, water slide, wheelchair access	Inclined planes are... ..., ..., and... are inclined planes.	photos, diagrams, arrows, keys, photos with key, comparison chart	<ul style="list-style-type: none"> • Inclined planes help people do work. • Inclined planes make moving and lifting things easier. • Some inclined planes are natural, some are manufactured. • People use inclined planes for fun.
Pulleys	269	chain, direction, force, groove, pulley, rope, simple, machine, wheel, work	ball, bucket, chairlift, climber, climbing wall, crane, flagpole, flags, mountain, person, sail, sailboat	Pulleys are... ..., ..., and... use pulleys	photos, diagrams, arrows, keys, flow chart, comparison chart	<ul style="list-style-type: none"> • A pulley is a wheel with a rope or chain around it. • People use pulleys to lift things. • Pulleys change the direction of a force. • Pulleys make work easier.

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Screws	216	bolt, bottle, drill, inclined plane, nut, post, screw, simple machine, thread	beauty creams, body, bone, cap, car, curled-up, detergent bottles, direction, drill bit, force, groove, handle, honey jar, jack, juice bottle, lever, lift, lower, milk bottle, neck, plank, plate, plug, push, screw cap, sharp tip, stairway, stern, turns, wheel, wood, x-ray	Screws are... ..., ..., and... have screws.	photos, diagrams, arrows, keys, photo with labels, cross section	<ul style="list-style-type: none"> • A screw is a post with threads wrapped around it. • If you unwrapped a screw, it would be an inclined plane. • People use screws to hold two or more objects together. • People use screws to lift objects.
Levers	196	bar, force, fulcrum, lever, mop, seesaw, simple machine, wheelbarrow	axle, boxes, boy, crowbar, direction, floor, girl, hand truck, inclined plane, man, mop, nail, nutcracker, oar, puck, pushes, screw, shovel, stick, wash	Levers are... ..., ..., and... are levers.	photos, diagrams, arrows, photos with labels	<ul style="list-style-type: none"> • A lever is a bar that turns on a fixed point called a fulcrum. • Levers work in different ways. • You apply force to a lever to make it work. • Levers are sometimes a part of other simple machines.
Wedges	225	back-to-back, bow, chisel, force, inclined plane, knife, simple machine, split, wedge	blade, carving, cheese, cheesecake, cleaver, direction, firewood, fritatta, hair, handle, kitchen, lemon, lettuce, meat, nail clippers, pieces, pizza, potatoes, scissors, ship, skate, sled, stone, watermelon	Wedges are... ..., ..., and... are wedges.	photos, diagrams, arrows, comparison chart, concept chart	<ul style="list-style-type: none"> • A wedge is two inclined planes back-to-back. • People use wedges to make work easier. • Wedges split things apart. Wedges cut things in two. • Wedges can be big or small.
Wheels-and-Axles	218	axle, blade, doorknob, force, latch, rod, simple machine, wheel, wheel-and-axle	car, cool, direction, drill, fans, key, metal, salad spinner, screwdriver, skateboard, skates, tap, top, tricycle, vane, wheelchair, wind turbine	Wheels are... Axles are... ..., ..., and... are wheel-and-axle simple machines.	photos, diagrams, arrows, keys, table, photo with labels	<ul style="list-style-type: none"> • Axles are rods that go through wheels. • Wheels and axles that turn together are simple machines. • Some wheels and axles are not simple machines. • Wheels and axles change the way work is done.
Matter and Energy						
Heat	247	conduction, conductor, convection, gauge, heat, insulator, radiation, temperature, thermometer	beach, bricks, camp fire, cooking, cool, flames, hair dryer, hot-air balloon, houses, hot, iron, lizard, logs, marshmallow, metal, mittens, people, pizza oven, pot, radiator, rocks, sand, soup, space, spoon, stove top, sun, towels, warm, water, waves	Conduction is... Convection is... Radiation is... Heat is...	photos, arrows, diagrams, keys, table, flow chart	<ul style="list-style-type: none"> • Heat is a form of energy. • Temperature is the measure of how hot or cold something is. • Heat moves from warm objects to cold objects. • Heat moves in different ways.

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Sound	193	energy, intensity, pitch, pluck, sound, sound waves, travel, vibrate, vibration	air, apart, baby, band, barking, beating, birds, cat, cheering, close, cymbal, disco, dog, drum, ear, guitar, high, instruments, jet, keyboard, lion, low, music, people, phone, pool, purr, rain, ringing, roar, rumbling, singer, singing, string, thumb, traffic, truck, voices, water, waterfall, whisper, whistle, window	Sound is... Intensity is... Pitch is...	photos, keys, arrows, graduated scale, flow chart	<ul style="list-style-type: none"> • Things vibrate to produce sound. • Sound travels on sound waves. • Pitch is how high or low a sound is. • Intensity is how loud or soft a sound is.
Magnets	240	attract, iron, magnet, magnetic field, magnetic force, opposite, pole, repel, solid	air, alarm, bolts, bracelet, cellphone, clip, coins, crane, credit card, compass, computer, cutlery, door, Earth, electric, fridge, glass, grater, guideway, junkyard, keys, Maglev train, magnetite, microphone, motors, MRI, scanner, nails, naturally, north, nuts, paper, paper clips, pen, quartz, south, steel, strongest, washers, weakest	Magnets have... Magnets pick up... ... and... have magnets in them.	photos, arrows, diagrams, procedure, explanation	<ul style="list-style-type: none"> • Magnetic things attract objects that have iron and steel in them. • Magnets have poles. • Magnets have a magnetic field. • People use magnets in many ways.
Light	203	energy, light, opaque, reflection, refraction, shadow, shiny, translucent, transparent	bends, broken, disco, fire, fireworks, green, headlight, lighthouse, lightning, line, match, rainbow, red, stained glass, stick, straight, street lamp, sun, swan, train, wall, water droplets, waterfall, white, window, yellow	Reflection is when... Refraction is when... Shadows happen when...	photos, arrows, diagrams, photos with key, comparison chart	<ul style="list-style-type: none"> • Light is energy that lets you see things. • Light moves in straight lines. • Light can bounce off objects. • Light bends when it moves through certain things.
Energy	201	coal, electricity, energy, heat, kinetic energy, potential energy, solar cell, solar energy, stored	apple, ball, boy, calculator, coal mine, diver, gas, girl, hammer, house, meat, natural gas, oil, panel, pizza, power station, robot, roller coaster, sandwich, soup, steam, stove, street light, sun, tree, water, wind, wires, wood	Energy is... Potential energy is... Kinetic energy is...	photos, diagrams, arrows, keys, outcomes chart, pie or circle graph	<ul style="list-style-type: none"> • Energy is something that can cause things to move or change. • There are different forms of energy. • Kinetic energy is the energy of movement. • Potential energy is stored energy.

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Motion	220	carving, circle, curve, direction, distance, motion, opposite, position, speed	arms, back and forth, basketball player, bike, bird, body, boy, circular, dancer, dog, Earth, face, fastest, flying, geese, girl, head, hurdlers, kite, line, Mercury, Neptune, people, riding, running, shortest, sign, skier, soaring, straight, swinging, up and down, walking, zigzag	Motion is... Distance is... Speed is...	photos, equation, arrows, diagrams, keys, bar graph, chart	<ul style="list-style-type: none"> • Motion is the change of position of something. • Distance is how far it is from one place to another. • Objects can move fast or slow. • Objects can change speed and direction.
Earth and Space						
Minerals	174	contain, gemstone, identify, material, mineral, powder, scientist, silicon chip, technology	amazonite, bananas, beans, blade, blood, bones, broccoli, building, calcite, cable, calcium, carbon, cheese, citrus fruit, computer, copper, diamond, dried fruits, eggs, emerald, fruit, glass, gold, grains, halite, heavy, iron, lentils, limestone, magnesium, malachite, marble, meat, milk, mining, muscles, muscovite, nuts, opal, pencil, platinum, rock, ruby, salmon, salt rock, sand, sandstone, saw, scratch, shiny, silica, silicon chip, silver, steel, talc, talcum powder, teeth, tomatoes, tuna, turquoise, yogurt	You find minerals... People use minerals for... Some minerals are...	photos, arrows, chart, scale, mind map	<ul style="list-style-type: none"> • Minerals are non-living things. • There are many different kinds of minerals. • There are ways of identifying minerals. • People use minerals for different things.
Fossils	210	era, extinct, form, fossil, ice, mineral, sediment, sedimentary rock, tree sap	animal, ate, back, beak, bones, Cenozoic, dinosaur, distance, Earth, fish, footprint, front, frozen, hardens, height, history, leaves, legs, length, log, megalodon, Mesozoic, minerals, neck, Paleozoic, petrified wood, plant, rock, scientists, Southern Hemisphere, shape, size, sticky, time scale, tooth, tree sap, tyrannosaurus rex, wing	Fossils are... Some fossils form... Fossils can tell you...	photos, arrows, time scale, cross-section diagrams, photos, arrows, time scale, cross-section diagrams	<ul style="list-style-type: none"> • Fossils are the remains of living things that died a long time ago. • Fossils are formed over many years. • Plant fossils are not as common as animal fossils. • People can learn things from fossils.

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The Moon	299	crescent, eclipse, lunar cycle, Moon, natural, orbit, satellite, waning, waxing	ball, communication satellite, crescent, dark, Earth, faces, first, full, half, Hubble telescope, international space station, month, new, quarter, reflects, rock, shadow, solar, spaceship, third, walk	The Moon is... The Moon has... The lunar cycle is...	photos, arrows, diagrams, montage, table	<ul style="list-style-type: none"> • The Moon is Earth's natural satellite. • The Moon orbits Earth every 29.5 days. • The Moon has phases. • When the Moon is in certain positions, eclipses happen.
Rocks	215	igneous rock, layer, magma, metamorphic rock, mineral, pressure, rock, resource, sedimentary rock	Africa, alike, Arizona, Asia, boulders, carved, Canada, Central America, coal, concrete, cooled, core, crust, cycle, Europe, fish, fossil, grains, Grand Canyon, granite, heat, Hopewell Rocks, India, inner, lava, living, magma, mantle, marble, mudstone, non-living, obsidian, outer, Pacific, park, patterned, plants, roof tiles, sand, sandstone, shale, slate, statue, surface, trees, upper, volcanoes	Igneous rocks are... Sedimentary rocks are... Metamorphic rocks are...	photos, arrows, keys, diagrams, cross sections, diagram, montage	<ul style="list-style-type: none"> • Rocks are non-living things. • Earth is mostly made of rocks. • There are different types of rocks. • People use rocks in many different ways.
The Weather	205	equator, extreme, front, polar region, predict, pressure,	You can get around my town... Lots of people...	Weather is... Extreme weather is... ... and... and... are kinds of weather.	photos, arrows, maps, charts, icons, mind map	<ul style="list-style-type: none"> • Weather is what's happening in the air outside. • Clouds and satellite photos tell people about the weather. • Weather scientists can predict the weather. • Different types of weather can be measured.
Earth	280	axis, calendar, Earth, orbit, oxygen, planet, rotate, season, solar system	animals, autumn, birds, daily, daytime, deciduous trees, fall, insects, fish, land, North Pole, plants, people, Mars, Mercury, Moon, monthly, nighttime, Northern hemisphere, revolution, South Pole, Southern Hemisphere, spring, summer, Sun, tilted, time zones, Venus, water, weather, winter, yearly	Earth is... Earth has... Earth takes...	chart, diagrams, diagram with key, flow chart, photos, fact file, mind map	<ul style="list-style-type: none"> • Earth is a planet in the solar system. • Earth orbits the Sun every 365 days. • Seasons are caused by Earth orbiting the Sun. • Day and night are caused by Earth rotating on its axis.