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Religiosity Eye color Twin and adoption studies have their methodological limits. For example, both are limited to the range of environments and genes which they sample. Almost all of these studies are conducted in Western, first-world countries, and therefore cannot be extrapolated globally to include poorer, non-western populations. Additionally, both types of studies depend on particular assumptions, such as the equal environments assumption in the case of twin studies, and the lack of pre-adoptive effects in the case of adoption studies. Since the definition of "nature" in this context is tied to "heritability", the definition of "nurture" has necessarily become very wide, including any type of causality that is not heritable. The term has thus moved away from its original connotation of "cultural influences" to include all effects of the environment, including; indeed, a substantial source of environmental input to human nature may arise from stochastic variations in prenatal development and is thus in no sense of the term "cultural". Please help improve this section or discuss this issue on the talk page. Individual development, even of highly heritable traits, such as eye color, depends on a range of environmental factors, from the other genes in the organism, to physical variables such as temperature, oxygen levels etc. The variability of trait can be meaningfully spoken of as being due in certain proportions to genetic differences "nature", or environments "nurture". At the other extreme, traits such as native language are environmentally determined: At a molecular level, genes interact with signals from other genes and from the environment. While there are many thousands of single-gene-locus traits, so-called complex traits are due to the additive effects of many often hundreds of small gene effects. A good example of this is height, where variance appears to be spread across many hundreds of loci. The "two buckets" view of heritability. More realistic "homogenous mudpie" view of heritability. Steven Pinker likewise described several examples: But traits that reflect the underlying talents and temperamentsâ€”how proficient with language a person is, how religious, how liberal or conservativeâ€”are partially heritable. When traits are determined by a complex interaction of genotype and environment it is possible to measure the heritability of a trait within a population. However, many non-scientists who encounter a report of a trait having a certain percentage heritability imagine non-interactional, additive contributions of genes and environment to the trait. As an analogy, some laypeople may think of the degree of a trait being made up of two "buckets," genes and environment, each able to hold a certain capacity of the trait. But even for intermediate heritabilities, a trait is always shaped by both genetic dispositions and the environments in which people develop, merely with greater and lesser plasticities associated with these heritability measures. Heritability measures always refer to the degree of variation between individuals in a population. That is, as these statistics cannot be applied at the level of the individual, it would be incorrect to say that while the heritability index of personality is about 0. To help to understand this, imagine that all humans were genetic clones. The heritability index for all traits would be zero all variability between clonal individuals must be due to environmental factors. And, contrary to erroneous interpretations of the heritability index, as societies become more egalitarian everyone has more similar experiences the heritability index goes up as environments become more similar, variability between individuals is due more to genetic factors. One should also take into account the fact that the variables of heritability and environmentality are not precise and vary within a chosen population and across cultures. It would be more accurate to state that the degree of heritability and environmentality is measured in its reference to a particular phenotype in a chosen group of a population in a given period of time. The accuracy of the calculations is further hindered by the number of coefficients taken into consideration, age being one such variable. The display of the influence of heritability and environmentality differs drastically across age groups: Some have pointed out that environmental inputs affect the expression of genes [16] see the article on epigenetics. This is one explanation of how environment can influence the extent to which a genetic disposition will actually manifest. A classic example of geneâ€”environment interaction is the ability of a diet low in the amino acid phenylalanine to partially

suppress the genetic disease phenylketonuria. Yet another complication to the nature–nurture debate is the existence of gene–environment correlations. These correlations indicate that individuals with certain genotypes are more likely to find themselves in certain environments. Thus, it appears that genes can shape the selection or creation of environments. Even using experiments like those described above, it can be very difficult to determine convincingly the relative contribution of genes and environment. A study conducted by T. The results shown have been important evidence against the importance of environment when determining, happiness, for example. In the Minnesota study of twins reared apart, it was actually found that there was higher correlation for monozygotic twins reared apart 0. Also, highlighting the importance of genes, these correlations found much higher correlation among monozygotic than dizygotic twins that had a correlation of 0. Relevant discussion may be found on the talk page. Please help improve this article by introducing citations to additional sources. December Learn how and when to remove this template message

The social pre-wiring hypothesis refers to the ontogeny of social interaction. Also informally referred to as, "wired to be social. Research in the theory concludes that newborns are born into the world with a unique genetic wiring to be social. Newborns, not even hours after birth, have been found to display a preparedness for social interaction. This preparedness is expressed in ways such as their imitation of facial gestures. This observed behavior cannot be contributed to any current form of socialization or social construction. Rather, newborns most likely inherit to some extent social behavior and identity through genetics. The main argument is, if there are social behaviors that are inherited and developed before birth, then one should expect twin foetuses to engage in some form of social interaction before they are born. Thus, ten foetuses were analyzed over a period of time using ultrasound techniques. Using kinematic analysis, the results of the experiment were that the twin foetuses would interact with each other for longer periods and more often as the pregnancies went on. Researchers were able to conclude that the performance of movements between the co-twins were not accidental but specifically aimed. Starting from the 14th week of gestation twin foetuses plan and execute movements specifically aimed at the co-twin. These findings force us to predate the emergence of social behavior: For example, the rewarding sweet taste of sugar and the pain of bodily injury are obligate psychological adaptations–typical environmental variability during development does not much affect their operation. An example of a facultative physiological adaptation is tanning of skin on exposure to sunlight to prevent skin damage. Facultative social adaptation have also been proposed. For example, whether a society is warlike or peaceful has been proposed to be conditional on how much collective threat that society is experiencing [44]. Advanced techniques[edit] Quantitative studies of heritable traits throw light on the question. Developmental genetic analysis examines the effects of genes over the course of a human lifespan. Subsequent developmental genetic analyses found that variance attributable to additive environmental effects is less apparent in older individuals, [45] [46] [47] with estimated heritability of IQ increasing in adulthood. Multivariate genetic analysis examines the genetic contribution to several traits that vary together. For example, multivariate genetic analysis has demonstrated that the genetic determinants of all specific cognitive abilities e. Similarly, multivariate genetic analysis has found that genes that affect scholastic achievement completely overlap with the genes that affect cognitive ability. Extremes analysis examines the link between normal and pathological traits. For example, it is hypothesized that a given behavioral disorder may represent an extreme of a continuous distribution of a normal behavior and hence an extreme of a continuous distribution of genetic and environmental variation. Depression, phobias, and reading disabilities have been examined in this context. For a few highly heritable traits, studies have identified loci associated with variance in that trait, for instance in some individuals with schizophrenia. Heritability of IQ Evidence from behavioral genetic research suggests that family environmental factors may have an effect upon childhood IQ , accounting for up to a quarter of the variance. Knowns and Unknowns " states that there is no doubt that normal child development requires a certain minimum level of responsible care. Beyond that minimum, however, the role of family experience is in serious dispute. On the other hand, by late adolescence this correlation disappears, such that adoptive siblings no longer have similar IQ scores. Twin studies reinforce this pattern: The most famous categorical organization of heritable personality traits were created by Goldberg in which he had college students rate their personalities on dimensions to begin, and then narrowed these

down into " The Big Five " factors of personality—Openness, conscientiousness, extraversion, agreeableness, and neuroticism. The close genetic relationship between positive personality traits and, for example, our happiness traits are the mirror images of comorbidity in psychopathology. These personality factors were consistent across cultures, and many studies have also tested the heritability of these traits. Identical twins reared apart are far more similar in personality than randomly selected pairs of people. Likewise, identical twins are more similar than fraternal twins. Also, biological siblings are more similar in personality than adoptive siblings. Each observation suggests that personality is heritable to a certain extent. Adoption studies also directly measure the strength of shared family effects. Adopted siblings share only family environment. Most adoption studies indicate that by adulthood the personalities of adopted siblings are little or no more similar than random pairs of strangers. This would mean that shared family effects on personality are zero by adulthood. In the case of personality traits, non-shared environmental effects are often found to out-weigh shared environmental effects. That is, environmental effects that are typically thought to be life-shaping such as family life may have less of an impact than non-shared effects, which are harder to identify. One possible source of non-shared effects is the environment of pre-natal development. Random variations in the genetic program of development may be a substantial source of non-shared environment. These results suggest that "nurture" may not be the predominant factor in "environment". Environment and our situations, do in fact impact our lives, but not the way in which we would typically react to these environmental factors. We are preset with personality traits that are the basis for how we would react to situations. An example would be how extraverted prisoners become less happy than introverted prisoners and would react to their incarceration more negatively due to their preset extraverted personality. Ch 19 Behavioral genes are somewhat proven to exist when we take a look at fraternal twins. When fraternal twins are reared apart, they show the same similarities in behavior and response as if they have been reared together.

Chapter 2 : Nature | Definition of Nature by Merriam-Webster

The lowest-priced item that has been used or worn previously. The item may have some signs of cosmetic wear, but is fully operational and functions as intended.

I doubt if one in a hundred begins to take in the beauty visible on even a short walk in city or country. Cooper, I only went out for a walk and finally concluded to stay out till sundown, for going out, I found, was really going in. De Puy, "Happiness in the Home: I smell of wild mint, and the tamarack swamps. The juice of alder-berries is on my lips, and the brown stain of hazel on my fingers. I am flecked with the dust of moth-wings, and powdered with the pollen from the hearts of calla-lilies. I am wind-tanned and sun-browned. Wearing the marks of the open. I reek of freedom. XVIII," At the Roots of Grasses, I love to think of nature as an unlimited broadcasting station, through which God speaks to us every hour, if we will only tune in. The winds will blow their own freshness into you, and the storms their energy, while cares will drop off like autumn leaves. Everything is simply happy. Trees are happy for no reason; they are not going to become prime ministers or presidents and they are not going to become rich and they will never have any bank balance. Look at the flowers " for no reason. It is simply unbelievable how happy flowers are. I may never place in a Dresden vase one single hothouse flower, but I may lave me in a field of yellow buttercups. People think pleasing God is all God care about. But any fool living in the world can see it always trying to please us back. Better than any argument is to rise at dawn and pick dew-wet red berries in a cup. Service " , "A Rolling Stone," I remember a hundred lovely lakes, and recall the fragrant breath of pine and fir and cedar and poplar trees. The trail has strung upon it, as upon a thread of silk, opalescent dawns and saffron sunsets. It has given me blessed release from care and worry and the troubled thinking of our modern day. It has been a return to the primitive and the peaceful. Whenever the pressure of our complex city life thins my blood and benumbs my brain, I seek relief in the trail; and when I hear the coyote wailing to the yellow dawn, my cares fall from me " I am happy. Lindbergh, Life, December 22nd The moon silvered on one side the leaves, which the shadows bronzed on the other. They called to mind, as they swayed to and fro, the rustling which a bird makes in its flight. Everything murmured and whispered Warm vapors rose from the earth, and blent with the coolness of the night. I inhaled a sort of intoxication. Nature sometimes affects the soul just as wine does the body. I love not man the less, but Nature more. This natural beauty-hunger is made manifest in the little window-sill gardens of the poor, though perhaps only a geranium slip in a broken cup, as well as in the carefully tended rose and lily gardens of the rich, the thousands of spacious city parks and botanical gardens, and in our magnificent National parks " the Yellowstone, Yosemite, Sequoia, etc. What incomes have we not had from a flower, and how unfailing are the dividends of the seasons. This is not done by jostling in the street. Am I not partly leaves and vegetable mould myself. No man can heed all of these anniversaries; no man can ignore all of them. Soon a glory of blooms to clash with the cardinals and gladden the hummingbirds! Beard " , tweet, May 10th What would the world be, once bereft Of wet and of wildness? Let them be left, O let them be left, wildness and wet; Long live the weeds and the wilderness yet. Let me be dressed fine as I will, Flies, worms, and flowers exceed me still. The moss was like velvet, and as I ran under the arches of yellow and red leaves I sang for joy, my heart was so bright and the world so beautiful. I might be master at last of a small house and a large garden, with very moderate conveniences joined to them, and there dedicate the remainder of my life to the culture of them and the study of nature. Because the Fish and Game people have never done anything to help them. Let them be left, O let them be left, wildness and wet, Long live the weeds and the wilderness yet. A Biography, translated from German by Charles T. Brooks, Adults are always so busy with the dull and dusty affairs of life which have nothing to do with grass, trees, and running streams. She unfolds her treasures to his search, unseals his eye, illumines his mind, and purifies his heart; an influence breathes from all the sights and sounds of her existence. I know the trembling of the leaves when the winds sweep through them. I know what the white clover felt as it held a drop of dew pressed close in its beauteousness. I know the quivering of the fragrant petals at the touch of the pollen-legged bees. I know what the stream said to the dipping willows, and what the moon said to the sweet lavender. I know what the stars

said when they came stealthily down and crept fondly into the tops of the trees. Keep me fit for stars and twilights, answering to the blue night-shadows. Set me free to be caressed of the sunshine and embraced of the breeze. VIII," At the Roots of Grasses, Nature holds all the answers " go outside and ask some questions " open your heart and listen to the response! Kay Quiet meditation is all that is balm Back into nature is where we find calm By "back into nature" she is actually referring to death. Feel the damp of the dew on my elbows. She inspires my solitude, and my writing and my art. She lifts me upon her welcoming wings and soars me through the sky of possibilities. She colors my day, brightens my soul, and calms my nights. She is fierce and beautiful, strong and delicate " an unrelenting Queen so generous of advice and never weary of new beginnings. In spring a colorful maiden, in winter a wise old lady, in autumn a looking-glass to my falling-leaf self, and summer a warm blossomed benefactor, comrade to the sun. A constant companion " sometimes indifferent, sometimes nuzzling me with her genial breezes and raining drops of heaven onto me. To close my windows and shut her out is error and melancholy. I hear a thousand nightingales. Spring hath sent them to awaken Earth from her morning slumber, and Earth trembles with ecstasy, her flowers are hymns, which she sings in inspiration to the sun We have allowed it to become sickly, with green and ashen hue. We do not know how to accept life Clumsy of soul, we do not know how to open our hearts like the flowers that receive the dew, nor lean like the leaves when the breeze would kiss them. There are dawns to which we never open, and singing winds to which our breasts are dumb. Then did flower, meadow, and grove dissolve into a dim immensity, and the color-grains of Nature melted away into a single broad flood, and over the glimmering flood stood the Infinite One as a sun, and in it, as a reflected sun, the human heart. Brooks, The dance of the palm trees, the oceans calling, the first rays of sun and heaven is here. She invites us to lay our eye level with her smallest leaf, and take an insect view of its plain. My misery is born under a roof, but it shall perish in the fields. The woods, the lawns, the heaths supply Lessons from Nature to the heart Nature does not for long allow a sameness of beauty to prevail. Fantastic idols may be worshipped for a while; but at length they are overturned by the continual and silent progress of Truth, as the grim statues of Copan have been pushed from their pedestals by the growth of forest-trees, whose seeds were sown by the wind in the ruined walls. A Tale, Nothing is more beautiful than the loveliness of the woods before sunrise. Most of the time we are simply not patient enough, quiet enough to pay attention to the story. It seemed as if I felt God as I never did before, and I prayed in my heart that I might keep that happy sense of nearness all my life. I know why they opened the day with coral and closed it with crimson, and set a blue canopy between. I know confidential things " I watched and I listened I saw vats where bird-songs were brewed. I saw the seasons come out of the molding room. I know the admixture. I know what they contain. Though we often view ourselves otherwise, we are nature. How cunningly she hides every wrinkle of her inconceivable antiquity under roses, and violets, and morning dew! Every inch of the mountains is scarred by unimaginable convulsions, yet the new day is purple with the bloom of youth and love. The songs of the birds are in the high branches of my being. Above, how high progressive life may go? Vast Chain of Being! From Thee to Nothing All are but parts of one stupendous Whole: Whose Body Nature is, and God the Soul. To the soul tortured by the sight of ills it cannot cure, wrongs it cannot right, and sufferings it cannot relieve, how blessed to be alone with nature, with trees living free, unfettered lives, and flowers content each in its native spot, with brooks singing of joy and good cheer, with mountains preaching divine peace and rest!

Chapter 3 : What does it mean when a barometer is rising or falling? | HowStuffWorks

What Comes Next? (Looking at Nature) by Bobbie Kalman. Crabtree Pub Co. Paperback. GOOD. Spine creases, wear to binding and pages from reading. May contain limited notes, underlining or highlighting that does affect the text.

For billions of years nature’s animals, plants, and even microbes has been solving many of the problems we are still dealing with today. Each has found what works, what is appropriate, and what lasts. Biomimicry and biomimetics come from the Greek words bios, meaning life, and mimesis, also meaning to imitate. Scientist and author Janine Benyus popularized the term biomimicry in her book *Biomimicry: Innovation Inspired by Nature*. Benyus believes that most of the problems that have ever existed have already been solved by nature. Sustainability issues are among those that can be addressed by applying the biomimicry process to a project. Utilizing an integrated design process can help open up opportunities to identify biological solutions to building problems and include the perspective of nature in the design process as it is likely that nature already offers a solution. Description Humans have always looked to nature for inspiration to solve problems. Leonardo da Vinci applied biomimicry to the study of birds in the hope of enabling human flight. He very closely observed the anatomy and flight of birds, and made numerous notes and sketches of his observations and countless sketches of proposed "flying machines". Although he was not successful with his own flying machine, his ideas lived on and were the source of inspiration for the Wright Brothers, who were also inspired by their observations of pigeons in flight. They finally did succeed in creating and flying the first airplane in Recent success stories exist in terms of how biomimicry can be applied to building design. In fact, nature regularly builds structures with functionality that human-built structures could usefully emulate. Biomimetic research, science, and applications continue to grow and are already influencing the next generation of building products and systems as well as whole building designs. For example, photovoltaic systems, which harvest solar energy, are a first step at mimicking the way a leaf harvests energy. Research is underway to create solar cells that more closely resemble nature. These cells are water-gel-based essentially artificial leaves that couple plant chlorophyll with carbon materials, ultimately resulting in a more flexible and cost-effective solar cell. For more information see this article in *Scientific American* A photovoltaic system collects energy from the sun, which was inspired by the way leaves harvest sunlight as part of photosynthesis. The bumpy surface of a lotus leaf computer graphic close up view below-left acts as a self-cleaning mechanism allowing dirt to be cleansed off the surface naturally by water, for instance, during a rain shower. Even the smallest of breezes on the plant causes a subtle shift in the angle of the plant allowing gravity to remove the dirt without the plant having to expend any energy. This same idea has been applied to the design of new building materials such as paints, tiles, textiles, and glass that reduce the need for detergents and labor and also reduces maintenance and material replacement costs. Researchers have also developed non-toxic, formaldehyde-free wood glue that is now used in hardwood, plywood, and particleboard projects. The researchers discovered how to do this by understanding how blue mussels attach firmly under the water using flexible, thread-like tentacles. The Thorny Devil, a desert lizard, gathers all the water it needs directly from rain, standing water, or from soil moisture, against gravity without using energy or a pumping device. This same concept could be applied to passive collection and distribution systems of naturally distilled water which would reduce the energy consumed in collecting and transporting water by pump action e. Damage to an organism naturally elicits a healing response. Bone is also known to detect damage to itself and can heal within range of its initial strength. This same concept has been applied to synthetic material design and contributed to the development of a self-healing polymer for use as building materials. Tiny capsules containing a healing agent are embedded in the polymer. When the material is damaged, the capsules rupture and release the healing agent, which repairs the cracks. The self-repairing capabilities of materials can contribute to reduced maintenance and material replacements costs as well as increased durability. Self-repairing materials can also be made lighter, resulting in reduced embodied energy and greenhouse gas production. Inspired by biological systems that heal themselves when damaged, a self-healing polymer, created at the Beckman Institute, University of Illinois is being applied to the development of a structural

polymeric building material, such as cladding, with the ability to self-heal cracks. Application The Biomimicry Institute, a not-for-profit organization that promotes learning from and then emulating natural forms, processes, and ecosystems to create more sustainable and healthier human technologies and designs, suggests that the design team look at nature as "model, measure, and mentor. One can become more familiar with these examples by broadening and deepening an inner awareness of nature. Ask Nature, developed by the Biomimicry Institute, is a free, open source, online project designed to inspire innovation and technologies that create conditions conducive to life. To utilize the tool and apply this broader method of thinking into a building project, begin by asking: How would nature solve green building challenges? How does life make things? How does life make the most of things? How does life make things disappear into systems? The Biomimicry Guild, in collaboration with other organizations, developed a practical design tool called the Biomimicry Design Spiral that uses nature as a model. This tool outlines guidance using the following steps to apply the tool effectively and systematically to the creative process. Below are listed the basic steps in that process. Identifyâ€”Develop a Design Brief of the human need. Ask "How does Nature do this function? Abstractâ€”Find the repeating patterns and processes within nature that achieve success. Emulateâ€”Develop ideas and solutions based on the natural models. Nature as measure is embedded in the evaluate step of the Biomimicry Design Spiral. For more detailed information on this process, see The power of the Biomimicry Design Spiral. As noted by Biomimicry 3. Examples Esplanade Theater The Esplanade Theater and commercial district in Singapore, designed by DP Architects and Michael Wilford, hosts an elaborate building skin which influenced the look and function of the interiors, inspired by the multi-layered Durian plant with its formidable thorn-covered husk. The Durian plant uses its semi rigid pressurized skin to protect the seeds inside, just as the building exterior is part of an elaborate shading system that adjusts throughout the day to allow sunlight in but protects the interiors from overheating. Researchers initially scanned a termite mound and created 3-D images of the mound structure, which revealed construction that can influence human building design. A termite mound left which inspired the design of the Eastgate Centre in Zimbabwe right. Dives in Misericordia Church In the early s, scientists at the Italcementi Group in Bergamo, Italy, produced a self-cleaning concrete that keeps buildings from tarnishing from pollutants in the atmosphere. Photocatalytic particles in the cement oxidize the pollutants coming into contact with the hardened concrete surface, that help to maintain the original surface appearance, a very white concrete, over time. The idea was inspired in part by self-cleaning plants and contributes to the reduction of maintenance and repair costs to the building. This church near Rome, Italy, designed by Richard Meier, incorporates self-cleaning concrete, one of the first to use the technology. Emerging Issues Research and analysis continues to grow in this field with more species documented from which to draw inspiration. Below are a few of the recent studies that are continuing to influence design, engineering, science, and technology. Spiders can create web silk as strong as the Kevlar used in bulletproof vests. Engineers could potentially use such a materialâ€”if it had a long enough rate of decayâ€”for suspension bridge cables, artificial ligaments for medicine, and many other purposes. See The Biomimicry Institute for more information and the latest research at biomimicry. Recently, researchers from ETH Zurich, the Swiss Federal Institute of Technology, have been incorporating biomimetic characteristics to structural engineering problems in an adaptive deployable tensegrity bridge tensional integrity based on a synergy between balanced tension and compression components. The bridge can carry out self-diagnosis and self-repair utilizing a machine learning algorithm. Relevant Codes and Standards While many codes, standards, and regulations serve as a starting point for establishing sustainability goals and targets, it is possible that by first seeking the sources of inspiration and examples from nature, the design community may improve upon these standards and create models that go beyond any of those outlined below.

Chapter 4 : Looking at Nature | Awards | LibraryThing

Though the eight books in the "Looking at Nature" series can theoretically be read in any order, What Comes Next? should likely be left until last as it is certainly the most sophisticated and demanding in its contents. As the book's title suggests, Kalman provides some type of sequence, and the child is to identify what comes next in that.

In writing *Nature*, Emerson drew upon material from his journals, sermons, and lectures. A new edition also published by Munroe, with Emerson paying the printing costs, his usual arrangement with Munroe appeared in December of 1849. This second edition was printed from the plates of the collection *Nature; Addresses, and Lectures*, published by Munroe in September 1849. The second edition of this collection was published in Boston in 1850 by Phillips, Sampson, under the title *Miscellanies; Embracing Nature, Addresses, and Lectures*. *Nature* was published in London in 1850 in *Nature, An Essay. And Lectures on the Times*, by H. A German edition was issued in 1851. Emerson prefaced the prose text of the first edition of *Nature* with a passage from the Neoplatonic philosopher Plotinus. The second edition included instead a poem by Emerson himself. Both present themes that are developed in the essay. The passage from Plotinus suggests the primacy of spirit and of human understanding over nature. *Nature* is divided into an introduction and eight chapters. In the Introduction, Emerson laments the current tendency to accept the knowledge and traditions of the past instead of experiencing God and nature directly, in the present. He asserts that all our questions about the order of the universe "about the relationships between God, man, and nature" may be answered by our experience of life and by the world around us. Each individual is a manifestation of creation and as such holds the key to unlocking the mysteries of the universe. Nature, too, is both an expression of the divine and a means of understanding it. Emerson identifies nature and spirit as the components of the universe. He defines nature the "NOT ME" as everything separate from the inner individual "nature, art, other men, our own bodies. In common usage, nature refers to the material world unchanged by man. Art is nature in combination with the will of man. Emerson explains that he will use the word "nature" in both its common and its philosophical meanings in the essay. At the beginning of Chapter I, Emerson describes true solitude as going out into nature and leaving behind all preoccupying activities as well as society. When a man gazes at the stars, he becomes aware of his own separateness from the material world. The stars were made to allow him to perceive the "perpetual presence of the sublime. They never lose their power to move us. We retain our original sense of wonder even when viewing familiar aspects of nature anew. Emerson discusses the poetical approach to nature "the perception of the encompassing whole made up of many individual components. Our delight in the landscape, which is made up of many particular forms, provides an example of this integrated vision. Unlike children, most adults have lost the ability to see the world in this way. In order to experience awe in the presence of nature, we need to approach it with a balance between our inner and our outer senses. Nature so approached is a part of man, and even when bleak and stormy is capable of elevating his mood. All aspects of nature correspond to some state of mind. Nature offers perpetual youth and joy, and counteracts whatever misfortune befalls an individual. The visionary man may lose himself in it, may become a receptive "transparent eyeball" through which the "Universal Being" transmits itself into his consciousness and makes him sense his oneness with God. In nature, which is also a part of God, man finds qualities parallel to his own. There is a special relationship, a sympathy, between man and nature. But by itself, nature does not provide the pleasure that comes of perceiving this relationship. The way we react to nature depends upon our state of mind in approaching it. In the next four chapters "Commodity," "Beauty," "Language," and "Discipline" Emerson discusses the ways in which man employs nature ultimately to achieve insight into the workings of the universe. In Chapter II, "Commodity," he treats the most basic uses of nature "for heat, food, water, shelter, and transportation. Although he ranks these as low uses, and states that they are the only applications that most men have for nature, they are perfect and appropriate in their own way. Moreover, man harnesses nature through the practical arts, thereby enhancing its usefulness through his own wit. Emerson quickly finishes with nature as a commodity, stating that "A man is fed, not that he may be fed, but that he may work," and turns to higher uses. The two together offer a unified vision of many separate objects as a pleasing whole

“a well-colored and shaded globe,” a landscape “round and symmetrical. Emerson presents three properties of natural beauty. First, nature restores and gives simple pleasure to a man. It reinvigorates the overworked, and imparts a sense of well-being and of communion with the universe. Nature pleases even in its harsher moments. The same landscape viewed in different weather and seasons is seen as if for the first time. But we cannot capture natural beauty if we too actively and consciously seek it. We must rather submit ourselves to it, allowing it to react to us spontaneously, as we go about our lives. Secondly, nature works together with the spiritual element in man to enhance the nobility of virtuous and heroic human actions. There is a particular affinity between the processes of nature and the capabilities of man. Thirdly, Emerson points out the capacity of natural beauty to stimulate the human intellect, which uses nature to grasp the divine order of the universe. The love of beauty constitutes taste; its creative expression, art. Man apprehends wholeness in the multiplicity of natural forms and conveys these forms in their totality. The poet, painter, sculptor, musician, and architect are all inspired by natural beauty and offer a unified vision in their work. Art thus represents nature as distilled by man. Beauty, like truth and goodness, is an expression of God. But natural beauty is an ultimate only inasmuch as it works as a catalyst upon the inner processes of man. He first states that words represent particular facts in nature, which exists in part to give us language to express ourselves. He suggests that all words, even those conveying intellectual and moral meaning, can be etymologically traced back to roots originally attached to material objects or their qualities. Although this theory would not be supported by the modern study of linguistics, Emerson was not alone among his contemporaries in subscribing to it. Over time, we have lost a sense of the particular connection of the first language to the natural world, but children and primitive people retain it to some extent. Not only are words symbolic, Emerson continues, but the natural objects that they represent are symbolic of particular spiritual states. Human intellectual processes are, of necessity, expressed through language, which in its primal form was integrally connected to nature. Emerson asserts that there is universal understanding of the relationship between natural imagery and human thought. An all-encompassing universal soul underlies individual life. In language, God is, in a very real sense, accessible to all men. In his unique capacity to perceive the connectedness of everything in the universe, man enjoys a central position. Man cannot be understood without nature, nor nature without man. In its origin, language was pure poetry, and clearly conveyed the relationship between material symbol and spiritual meaning. Emerson states that the same symbols form the original elements of all languages. And the moving power of idiomatic language and of the strong speech of simple men reminds us of the first dependence of language upon nature. But because we have lost the sense of its origins, language has been corrupted. The man who speaks with passion or in images “like the poet or orator who maintains a vital connection with nature” expresses the workings of God. Finally, Emerson develops the idea that the whole of nature “not just its particulate verbal expressions” symbolizes spiritual reality and offers insight into the universal. He writes of all nature as a metaphor for the human mind, and asserts that there is a one-to-one correspondence between moral and material laws. All men have access to understanding this correspondence and, consequently, to comprehending the laws of the universe. Emerson employs the image of the circle “much-used in Nature” in stating that the visible world is the “terminus or circumference of the invisible world. Man may grasp the underlying meaning of the physical world by living harmoniously with nature, and by loving truth and virtue. Emerson concludes “Language” by stating that we understand the full meaning of nature by degrees. Nature as a discipline “a means of arriving at comprehension” forms the subject of Chapter V, “Discipline. The ultimate result of such lessons is common sense. Emerson offers property and debt as materially based examples that teach necessary lessons through the understanding, and space and time as demonstrations of particularity and individuality, through which “we may know that things are not huddled and lumped, but sundered and individual. The wise man recognizes the innate properties of objects and men, and the differences, gradations, and similarities among the manifold natural expressions. The practical arts and sciences make use of this wisdom. But as man progressively grasps the basic physical laws, he comes closer to understanding the laws of creation, and limiting concepts such as space and time lose their significance in his vision of the larger picture. Emerson emphasizes the place of human will “the expression of human power” in harnessing nature. Nature is made to serve man. We take what is useful from it in forming a sense of the

universe, giving greater or lesser weight to particular aspects to suit our purposes, even framing nature according to our own image of it. Emerson goes on to discuss how intuitive reason provides insight into the ethical and spiritual meanings behind nature. Moreover, the uses of particular facets of nature as described in "Commodity" do not exhaust the lessons these aspects can teach; men may progress to perception of their higher meaning as well. Emerson depicts moral law as lying at the center of the circle of nature and radiating to the circumference. Each object is a microcosm of the universe. Through analogies and resemblances between various expressions of nature, we perceive "its source in Universal Spirit. Emerson builds upon his circle imagery to suggest the all-encompassing quality of universal truth and the way it may be approached through all of its particulars. Unity is even more apparent in action than in thought, which is expressed only imperfectly through language. Action, on the other hand, as "the perfection and publication of thought," expresses thought more directly.

Chapter 5 : How Nature Can Make You Kinder, Happier, and | GGM

How do series work? To create a series or add a work to it, go to a "work" page. The "Common Knowledge" section now includes a "Series" field. Enter the name of the series to add the book to it.

I NQUIRY Fundamentally, the various scientific disciplines are alike in their reliance on evidence, the use of hypothesis and theories, the kinds of logic used, and much more. Nevertheless, scientists differ greatly from one another in what phenomena they investigate and in how they go about their work; in the reliance they place on historical data or on experimental findings and on qualitative or quantitative methods; in their recourse to fundamental principles; and in how much they draw on the findings of other sciences. Still, the exchange of techniques, information, and concepts goes on all the time among scientists, and there are common understandings among them about what constitutes an investigation that is scientifically valid. Scientific inquiry is not easily described apart from the context of particular investigations. There simply is no fixed set of steps that scientists always follow, no one path that leads them unerringly to scientific knowledge. There are, however, certain features of science that give it a distinctive character as a mode of inquiry. Although those features are especially characteristic of the work of professional scientists, everyone can exercise them in thinking scientifically about many matters of interest in everyday life. Science Demands Evidence Sooner or later, the validity of scientific claims is settled by referring to observations of phenomena. Hence, scientists concentrate on getting accurate data. Such evidence is obtained by observations and measurements taken in situations that range from natural settings such as a forest to completely contrived ones such as the laboratory. To make their observations, scientists use their own senses, instruments such as microscopes that enhance those senses, and instruments that tap characteristics quite different from what humans can sense such as magnetic fields. In some circumstances, scientists can control conditions deliberately and precisely to obtain their evidence. They may, for example, control the temperature, change the concentration of chemicals, or choose which organisms mate with which others. By varying just one condition at a time, they can hope to identify its exclusive effects on what happens, uncomplicated by changes in other conditions. Often, however, control of conditions may be impractical as in studying stars, or unethical as in studying people, or likely to distort the natural phenomena as in studying wild animals in captivity. In such cases, observations have to be made over a sufficiently wide range of naturally occurring conditions to infer what the influence of various factors might be. Because of this reliance on evidence, great value is placed on the development of better instruments and techniques of observation, and the findings of any one investigator or group are usually checked by others. But they tend to agree about the principles of logical reasoning that connect evidence and assumptions with conclusions. Scientists do not work only with data and well-developed theories. Often, they have only tentative hypotheses about the way things may be. Such hypotheses are widely used in science for choosing what data to pay attention to and what additional data to seek, and for guiding the interpretation of data. In fact, the process of formulating and testing hypotheses is one of the core activities of scientists. To be useful, a hypothesis should suggest what evidence would support it and what evidence would refute it. A hypothesis that cannot in principle be put to the test of evidence may be interesting, but it is not likely to be scientifically useful. The use of logic and the close examination of evidence are necessary but not usually sufficient for the advancement of science. Scientific concepts do not emerge automatically from data or from any amount of analysis alone. Inventing hypotheses or theories to imagine how the world works and then figuring out how they can be put to the test of reality is as creative as writing poetry, composing music, or designing skyscrapers. Sometimes discoveries in science are made unexpectedly, even by accident. But knowledge and creative insight are usually required to recognize the meaning of the unexpected. Aspects of data that have been ignored by one scientist may lead to new discoveries by another. Science Explains and Predicts Scientists strive to make sense of observations of phenomena by constructing explanations for them that use, or are consistent with, currently accepted scientific principles. The credibility of scientific theories often comes from their ability to show relationships among phenomena that previously seemed unrelated. The theory of moving continents, for example, has grown in credibility as it has shown relationships among such

diverse phenomena as earthquakes, volcanoes, the match between types of fossils on different continents, the shapes of continents, and the contours of the ocean floors. The essence of science is validation by observation. But it is not enough for scientific theories to fit only the observations that are already known. Theories should also fit additional observations that were not used in formulating the theories in the first place; that is, theories should have predictive power. Demonstrating the predictive power of a theory does not necessarily require the prediction of events in the future. The predictions may be about evidence from the past that has not yet been found or studied. A theory about the origins of human beings, for example, can be tested by new discoveries of human-like fossil remains. This approach is clearly necessary for reconstructing the events in the history of the earth or of the life forms on it. It is also necessary for the study of processes that usually occur very slowly, such as the building of mountains or the aging of stars. Stars, for example, evolve more slowly than we can usually observe. Theories of the evolution of stars, however, may predict unsuspected relationships between features of starlight that can then be sought in existing collections of data about stars. Scientists Try to Identify and Avoid Bias When faced with a claim that something is true, scientists respond by asking what evidence supports it. But scientific evidence can be biased in how the data are interpreted, in the recording or reporting of the data, or even in the choice of what data to consider in the first place. Bias attributable to the investigator, the sample, the method, or the instrument may not be completely avoidable in every instance, but scientists want to know the possible sources of bias and how bias is likely to influence evidence. Scientists want, and are expected, to be as alert to possible bias in their own work as in that of other scientists, although such objectivity is not always achieved. One safeguard against undetected bias in an area of study is to have many different investigators or groups of investigators working in it. Science Is Not Authoritarian It is appropriate in science, as elsewhere, to turn to knowledgeable sources of information and opinion, usually people who specialize in relevant disciplines. But esteemed authorities have been wrong many times in the history of science. In the long run, no scientist, however famous or highly placed, is empowered to decide for other scientists what is true, for none are believed by other scientists to have special access to the truth. There are no preestablished conclusions that scientists must reach on the basis of their investigations. In the short run, new ideas that do not mesh well with mainstream ideas may encounter vigorous criticism, and scientists investigating such ideas may have difficulty obtaining support for their research. Indeed, challenges to new ideas are the legitimate business of science in building valid knowledge. Even the most prestigious scientists have occasionally refused to accept new theories despite there being enough accumulated evidence to convince others. In the long run, however, theories are judged by their results: When someone comes up with a new or improved version that explains more phenomena or answers more important questions than the previous version, the new one eventually takes its place.

Chapter 6 : - What Comes Next? (Looking at Nature) by Bobbie Kalman

This Is Your Brain on Nature. is definitely looking relaxed. "I'm more in tune with nature," he goes on. "The art of healing comes from nature, not from the physician." In

A rainbow of colors. Colors come from sunlight. We can see the colors of sunlight in rainbows. The colors in rainbows are red, orange, yellow, green, blue, and purple. Our food comes in a rainbow of colors, too. What color is a tomato? What color is an orange? What color are bananas? What color are blueberries? What color are grapes? From *What Color Is It?* This linking of language arts with science [or nature study] could prove useful in kindergarten classes while parents of pre-kindergartners might choose to purchase individual volumes. For each of the colours, examples are drawn from nature. Consequently, red is illustrated with photos of, among other things, strawberries, tomatoes, peppers and apples. *Is It Big or Small?* In some instances, Kalman also includes the comparative and superlative forms of a word, such as tall, taller, tallest. The photo of an angelfish that appears at the top of p. Which animals are short and small? Words dealing with spatial relationships are the stuff of *Where Is It?*. Like the previous book, *Where Is It?* Each shape is then developed in its own chapter with examples again being drawn from nature. The book also includes 3-D shapes, specifically cubes, cylinders and cones. Vocabulary related to the sense of touch provides the primary focus for *How Does It Feel?* The words will only have real meaning to just those children who have already experienced that particular touch sensation. The book also deals with what the mouth and tongue can feel and provides a little quiz. Be prepared to accept answers that differ from those provided in the answer key. The book concludes by introducing the idea of sets and asks readers to either complete a set of four "somethings" or to say which thing does not belong within a set of four. The final two books in the series depart from vocabulary building. *Is It the Same or Different?* Things in our world may look different. Look closely at the things around you. Some things may be the same in some ways, but they may look different in other ways. Examples include two "critters" that both drink nectar from a flower and both share the name hummingbird; however, the one that is an insect has the word "moth" appended to its name. Though the eight books in the "Looking at Nature" series can theoretically be read in any order, *What Comes Next?* In general, the concepts that the child must apply have been met in one of the other books in the series. For example, on the "Big and small" pages, the reader is shown photos of an elephant, a tiger and a hippo and is told that "The elephant is the biggest. To comment on this title or this review, send mail to cm.umanitoba. Reproduction for personal use is permitted only if this copyright notice is maintained. Any other reproduction is prohibited without permission.

Chapter 7 : News - Looking at nature is good for your brain. Here's why - The Weather Network

Our products come straight from nature, simple as that. Whether you choose or products you rest assured that the snack you are enjoying comes directly from the natural world around you.

But what is it about nature and the entities that make it up that cause us, oftentimes unwillingly, to feel or declare that they are beautiful? Often it is merely the perception of these things itself which gives us pleasure, and this emotional or affective response on our part seems to be crucial to our experience of beauty. So in a way there is a correlate here to the intrinsic value of nature; Emerson says: In fact, one might even think that this experience of beauty is one of the bases for valuing nature – nature is valuable because it is beautiful. Emerson seems to think that beauty in the natural world is not limited to certain parts of nature to the exclusion of others. The inhabitants of the cities suppose that the country landscape is pleasant only half the year. To the attentive eye, each moment of the year has its own beauty, and in the same field it beholds, every hour, a picture which was never seen before, and which shall never be seen again. Nature can reveal its beauty in all places and at all times to the eye that knows how to look for it. We can hear Emerson wrangle with himself on this very point in the words of this journal entry: At night I went out into the dark and saw a glimmering star and heard a frog, and Nature seemed to say, Well do not these suffice? Here is a new scene, a new experience. Ponder it, Emerson, and not like the foolish world, hanker after thunders and multitudes and vast landscapes, the sea or Niagara. Emerson says that nature is beautiful because it is alive, moving, reproductive. In nature we observe growth and development in living things, contrasted with the static or deteriorating state of the vast majority of that which is man-made. More generally, he writes: He cites natural structures as lacking superfluities, an observation that in general has been confirmed by the advancement of biology. Furthermore, he says that whether talking about a human artifact or a natural organism, any increase of ability to achieve its end or goal is an increase in beauty. So in Emerson we might find the resources for seeing evolution and the drive to survive as a beautiful rather than an ugly process, governed by laws that tend to increase reproductive fitness and that we can understand through observation and inquiry. And lastly, Emerson points to the relation between what we take to be an individual and the rest of nature as a quality of the beautiful. Nothing is quite beautiful alone: All of these qualities of beauty seem to go beyond the mere impression of sensible forms that we started with, and what they require is what also served as the basis of truth and goodness in nature. Think for instance of the geometric structure of a crystal, or snowflake, or nautilus shell. Or consider the complexity of the fact that the reintroduction of the wolf in Yellowstone National Park changed the course of the rivers due to a chain reaction of cause and effect through the food web, a process called a trophic cascade. There is thus an emotional or affective component in the beauty of the intellect just as there is in the immediate beauty of perception. If we destroy the natural world, we take away the things that we can marvel at and experience awe towards in these two ways. And this experience of the beautiful through the intellect may reinforce our attributing value to nature here as well, but a deeper kind of value, the intrinsic value I talked about in the last essay. Here it is not only that nature is valuable because it is beautiful, but nature is beautiful because it possesses intrinsic value, grounded in its intelligible structure. Thus we see a close parallel between goodness and beauty in nature. We can find an objective basis for goodness and beauty in nature, namely its intelligible structure, but also see that nature is valuable and beautiful for us, with the particular apparatus that nature has given us for navigating our way through the world. So that which is the basis of truth in nature and provides it with intrinsic value is also that which makes it beautiful. Emerson himself ties these three aspects of nature into one package himself: He should know that the landscape has beauty for his eye, because it expresses a thought which is to him good: And this view of nature includes an inherent call to protect that which is true, good, and beautiful. Let us continue to be awe-struck, like the child on the seashore, or clambering up a tree. Let us hold onto that experience, and fight for the environment that makes it possible, both for the child in each of us, and for those that come after us. His series "Emerson and the Environment" is part of a larger project which was awarded a Student Sustainability Grant. Fellow Michael Popejoy explores the relation between the thought of alumnus Ralph Waldo Emerson and current

concern for the environment.

Thursday, May 28, , AM - When it comes to increasing productivity in workers it's as easy as looking out the window. Taking time to look at nature can have great psychological benefits.

How feeling awe can make you healthier. In a study , he and his colleagues showed that hikers on a four-day backpacking trip could solve significantly more puzzles requiring creativity when compared to a control group of people waiting to take the same hike—in fact, 47 percent more. Although other factors may account for his results—for example, the exercise or the camaraderie of being out together—prior studies have suggested that nature itself may play an important role. One in *Psychological Science* found that the impact of nature on attention restoration is what accounted for improved scores on cognitive tests for the study participants. This phenomenon may be due to differences in brain activation when viewing natural scenes versus more built-up scenes—even for those who normally live in an urban environment. In a recent study conducted by Peter Aspinall at Heriot-Watt University, Edinburgh, and colleagues, participants who had their brains monitored continuously using mobile electroencephalogram EEG while they walked through an urban green space had brain EEG readings indicating lower frustration, engagement, and arousal, and higher meditation levels while in the green area, and higher engagement levels when moving out of the green area. This lower engagement and arousal may be what allows for attention restoration, encouraging a more open, meditative mindset. He is currently repeating his earlier study with a new group of hikers and recording their EEG activity and salivary cortisol levels before, during, and after a three-day hike. Nature may help you to be kind and generous. Whenever I go to places like Yosemite or the Big Sur Coast of California, I seem to return to my home life ready to be more kind and generous to those around me—just ask my husband and kids! Now some new studies may shed light on why that is. In a series of experiments published in , Juyoung Lee, GGSC director Dacher Keltner, and other researchers at the University of California, Berkeley, studied the potential impact of nature on the willingness to be generous, trusting, and helpful toward others, while considering what factors might influence that relationship. As part of their study, the researchers exposed participants to more or less subjectively beautiful nature scenes whose beauty levels were rated independently and then observed how participants behaved playing two economics games—the Dictator Game and the Trust Game—that measure generosity and trust, respectively. After being exposed to the more beautiful nature scenes, participants acted more generously and more trusting in the games than those who saw less beautiful scenes, and the effects appeared to be due to corresponding increases in positive emotion. In another part of the study, the researchers asked people to fill out a survey about their emotions while sitting at a table where more or less beautiful plants were placed. Afterwards, the participants were told that the experiment was over and they could leave, but that if they wanted to they could volunteer to make paper cranes for a relief effort program in Japan. Results showed that the presence of more beautiful plants significantly increased the number of cranes made by participants, and that this increase was, again, mediated by positive emotion—perhaps by inspiring awe, a feeling akin to wonder, with the sense of being part of something bigger than oneself—which then leads to prosocial behaviors. Support for this theory comes from an experiment conducted by Paul Piff of the University of California, Irvine, and colleagues, in which participants staring up a grove of very tall trees for as little as one minute experienced measurable increases in awe, and demonstrated more helpful behavior and approached moral dilemmas more ethically, than participants who spent the same amount of time looking up at a high building. Being outdoors gives us energy, makes us happier, helps us to relieve the everyday stresses of our overscheduled lives, opens the door to creativity, and helps us to be kind to others. No one knows if there is an ideal amount of nature exposure, though Strayer says that longtime backpackers suggest a minimum of three days to really unplug from our everyday lives. Nor can anyone say for sure how nature compares to other forms of stress relief or attention restoration, such as sleep or meditation. Both Strayer and Bratman say we need a lot more careful research to tease out these effects before we come to any definitive conclusions. Results like these should encourage us as a society to consider more carefully how we preserve

our wilderness spaces and our urban parks. Do you think this article will influence your opinions or behavior?

Chapter 9 : CM Magazine: Looking at Nature.

The woods do that to you, they always look familiar, long lost, like the face of a long-dead relative, like an old dream, like a piece of forgotten song drifting across the water, most of all like.

He is all that he sees; all that flows to him from a thousand sources He is the land, the lift of its mountain lines, the reach of its valleys. Mary Austin We inter-breathe with the rain forests, we drink from the oceans. They are part of our own body. You came out of it, like a wave from the ocean. You are not a stranger here. Alan Watts One touch of nature makes the whole world kin. Thomas Hardy Shall I not have intelligence with the earth? Am I not partly leaves and vegetable mould myself? No matter who you are, where you live, or what kind of life you lead, you remain irrevocably linked with the rest of creation. Deep inside, we still have a longing to be reconnected with the nature that shaped our imagination, our language, our song and dance, our sense of the divine. Benyus If there is one thing clear about the centuries dominated by the factory and the wheel, it is that although the machine can make everything from a spoon to a landing-craft, a natural joy in earthly living is something it never has and never will be able to manufacture. Henry Beston There is something of the marvelous in all things of nature. Aristotle The world is mud-luscious and puddle-wonderful. Helen Keller I am in love with this world. I have climbed its mountains, roamed its forests, sailed its waters, crossed its deserts, felt the sting of its frosts, the oppression of its heats, the drench of its rains, the fury of its winds, and always have beauty and joy waited upon my goings and comings. John Burroughs In those vernal seasons of the year, when the air is calm and pleasant, it were an injury and sullenness against Nature not to go out and see her riches, and partake in her rejoicing with heaven and earth. John Milton And forget not that the earth delights to feel your bare feet and the winds long to play with your hair. Kahlil Gibran I thank You God for most this amazing day: Behold the miracle of the earth With all the wonder of a child. Edna Jaques Healing Through Nature The indescribable innocence of and beneficence of Nature,--of sun and wind and rain, of summer and winter,--such health, such cheer, they afford forever! John Muir The best remedy for those who are afraid, lonely, or unhappy is to go outside, somewhere where they can be quite alone with the heavens, nature and God. Because only then does one feel that all is as it should be and that God wishes to see people happy amidst the simple beauty of nature. I firmly believe that nature brings solace in all troubles. Anne Frank In the woods, we return to reason and faith. There I feel that nothing can befall me in life, - no disgrace, no calamity leaving me my eyes, which nature cannot repair. You become one with it No place for greed or anger there. Pha Pachak Away from the tumult of motor and mill I want to be care-free; I want to be still! Guest Discovering Wisdom in Nature She unfolds her treasure to his search, unseals his eye, illumines his mind, and purifies his heart; an influence breathes from all the sights and sounds of her existence. Alfred Billings Street Believe one who knows: Trees and stones will teach you that which you can never learn from masters. It is my principal teacher, and I try to open my whole being to what it has to say. Wynn Bullock If there is any wisdom running through my life now, in my walking on this earth, it came from listening in the Great Silence to the stones, trees, space, the wild animals, to the pulse of all life as my heartbeat. Vijali Hamilton There is in all visible things an invisible fecundity, a dimmed light, a meek namelessness, a hidden wholeness. This mysterious unity and integrity is wisdom, the mother of us all, "natura naturans. It rises up in wordless gentleness, and flows out to me from the unseen roots of all created being. Thomas Merton Come forth into the light of things, let Nature be your teacher. Look deep into nature and you will understand everything. Albert Einstein To look at any thing, If you would know that thing, You must look at it long John Moffitt You only need sit still long enough in some attractive spot in the woods that all its inhabitants may exhibit themselves to you by turns. Henry David Thoreau One should pay attention to even the smallest crawling creature for these too may have a valuable lesson to teach us. Black Elk I begin to see an object when I cease to understand it. His eyes are, by nature, open to the glories of the stars, the beauty of the flowers, and the mystery of life. Search As a child, one has that magical capacity to move among the many eras of the earth; to see the land as an animal does; to experience the sky from the perspective of a flower or a bee; to feel the earth quiver and breathe beneath us; to know a hundred different smells of mud and listen unselfconsciously to the

soughing of the trees. Valerie Andrews Must we always teach our children with books? Let them look at the stars and the mountains above. Let them look at the waters and the trees and flowers on Earth. Then they will begin to think, and to think is the beginning of a real education. David Polis Wisdom begins in wonder. Socrates If you wish your children to think deep thoughts, to know the holiest emotions, take them to the woods and hills, and give them the freedom of the meadows; the hills purify those who walk upon them. Rachel Carson Now I see the secret of the making of the best persons. It is to grow in the open air, and to eat and sleep with the earth. Walt Whitman Inviting Nature in Through Gardening The garden is where you take the time in your life to tune in and listen. It just takes being still long enough, opening your heart, opening your spirit up to what the plants have to tell you. Gabriel Howearth To cultivate a garden is. Christian Bovee Of all the wonderful things in the wonderful universe of God, nothing seems to me more surprising than the planting of a seed in the blank earth and the result thereof. Celia Thaxter I used to visit and revisit it a dozen times a day, and stand in deep contemplation over my vegetable progeny with a love that nobody could share or conceive of who had never taken part in the process of creation. It was one of the most bewitching sights in the world to observe a hill of beans thrusting aside the soil, or a rose of early peas just peeping forth sufficiently to trace a line of delicate green. Nathaniel Hawthorne My spirit was lifted and my soul nourished by my time in the garden. It gave me a calm connection with all of life, and an awareness that remains with me now, long after leaving the garden. Nancy Ross All through the long winter, I dream of my garden. On the first day of spring, I dig my fingers deep into the soft earth. I can feel its energy, and my spirits soar. Helen Hayes Connecting With Other Beings I want to realize brotherhood or identity not merely with the beings called human, but I want to realize identity with all life, even with such beings as crawl on earth. With bats, weasels, worms I rejoice in the kinship. Even the caterpillar I can love, and the various vermin. George Washington Carver I frequently tramped eight or ten miles through the deepest snow to keep an appointment with a beechtree, or a yellow birch, or an old acquaintance among the pines. John Muir The purpose of life is undoubtedly to know oneself. We cannot do it unless we learn to identify ourselves with all that lives. The sum-total of that life is God. Alan Watts About Us.