

Alfadinobet Teacher's Guide by L.C. Sugar

The pages of the Alfa-dino-Bet are rich with learning and teaching opportunities for family and professional teachers to use to expand younger people's knowledge of our universe. A multitude of Science, language, Social studies, art and math topics for discussion and exploration are found. These can be used by all ages – from Preschool to Prehistoric.

Letter A (or alpha) - 1st letter of the alphabet and helps to name our sequence of letters
ALPHAbet

Shading – Is shaded in ABC's – which is another name for the alphabet. Hidden letter A on horn.

Math: How many A's are on his head, B's? C's?

How many white A, B, & C's are under the ground?

Dinosaur – Triceratops -study of dinosaurs with three horns

Plant life – What Triceratops would possibly eat. Herbivore vs. Omnivore or Carnivore

Insects – insects were around when the dinosaurs were. They carry things from one place to another. They live underground. An ant farm could be an outgrowth of this – what do the ants eat and drink.

Artwork: Hokusai – famous Japanese print maker – study Hokusai and his views of Mount Fuji. Create your own – what in your landscape would be the Mt. Fuji? Study Japan.

Study waves/ surfing/ insects that can walk on water.

Plants – Aloe – What plants help us humans

Language - Spanish - *Triceratops is furious, but he is afraid, He is an A when he stopped, I don't know what scared him.* The words furioso and furious are cognates and come from the same language background. What words are from different languages?

Letter B (or beta) names the last part of the alphabet name

Shading: Sun since the sunflower features in this letter and ornitholestes has a sunny personality. Hidden letter B on chest.

Personal Growth – What is a personality? What flower or plant would you shade yourself with? Why?

Dinosaur – Ornitholestes – His name means egg robber, but this is a result of a misunderstanding.

Plant Life – Life cycle of the sunflower. (Flowers did not exist in dinosaur times but came shortly after but since the letter B is a sunny character, the sunflowers are appropriate) Books on life cycles of plants, Grow seeds in small clear plastic containers filled with damp yarn as a class project to witness the life cycle personally. Study Sunflowers. What do we use sunflowers for? How do they help animals and humans?

Artwork: Millet's The Gleaners. Show the painting of people harvesting and farming. Select other art work that shows farming – Bruegel, Van Gogh, Grand Wood, etc. Also Van Gogh's Sunflower paintings could be studied and copied, along with his use of complementary colors.

Insects: Bees. Study the life cycle of the bee. Pollination, Bee products, honey and beeswax. Make candy or candles

Sun – Study how the sun helps plants and humans to grow and be healthy.

Rain – cycle of water and rain.

Language – *Ornitholestes has faith that she can be a B, with her tail in her mouth, touching toe to toe* Fe means faith – Santa Fe means holy faith Boca is mouth and several cities have this in their name – Boca Raton – Mouse mouth! Vocabulary – fragile and agile.

Math: Study the symmetry of the sunflower – Fibonacci sequence. Count various things on the page

Letter C Hidden letter C in lower leg

Shading – Circles and Smiling faces – since C is very happy the faces are positive and negative in shading – whites- positive shapes, blacks the mouth and eyes are negative shapes. And the letter C is more than half of a circle. The text also curves in a C shape.

Personal Awareness – What makes you laugh? What makes other people laugh? When is laughing good, when isn't it.

Dinosaur – Scelidosaurus – ribbed reptile – has ribs on his spine.

Plant Life – This plant doesn't have seeds like the sunflower, the babies grow on the end of the leaf, fall off and plant themselves. Chlorophytum-These are fun house plants. On the right side is a Christmas cactus, which is also a fun plant to watch grow! – Also if bad insects are in the soil they can eat the roots and cause problems for plants – Repot your houseplants every year. And some plants don't need to live in soil – they live in water.

Round circular berries also carry seeds.

Artwork – The Scream by Munch. Faces can have all kinds of expressions. Draw faces that are happy, sad surprised, etc. Make the faces yourself. Also when laughing with people, everyone is happy – Like Scelidosaurus- but if you laugh at them, they may want to scream. Also you could study portrait drawing and painting, proportions, eyes, mouths, etc. Munch was from Norway. Study Norway.

Math – How many worms are making C's?

Language- *Scelidosaurus is the letter C, when he hears a joke, and starts to laugh, he a crazy dino, that for sure!* Tell jokes, Write your own joke. What words can make you laugh? Find the dark A& B of the alphabet parade

Extra science – Bubbles – Study bubbles and make your own bubble wands. What can make the biggest bubble.

Letter D

Shading – Positive and negative space arrows. Arrow show directions Street signs often use arrows, Study signs that give information without words. Hidden letter D in smile

Personal growth : Saurolophus I thinking with a sparkle in his eye. What makes your eyes sparkle. What makes other people's eyes sparkle Saurolophus is wondering about the universe. What things make you wonder about the world.?

Dinosaur – Saurolophus – a dinosaur with a long crest.

Plant life - Plants from the jungle that have leaves that look like arrows, some go up, and some go down. Leaves can have all sorts of shapes.

Insects – Stinkbugs

Artwork – Rodin sculpture The thinker (the stinker). (Just like Saurolphus is thinking)
Make figures out of clay. Study Rodin the French Sculptor. Visit the sculptures in your area.

Landscape – Rattlesnake Canyon, outside of Grand Junction, Colorado. There are natural arches, and a rock shaped like a vulture. Study erosion., land forms, national parks, like Arches

Planets – They have the faces of the gods that they were named for. Study our solar system.

Language- *Sauolouphus is the king of forming the letter D, with his tailing his crest, he thinks about a nap.* Siesta- what is it. Also what is a pun – Thinker – Stinker. Can you make a pun?

Math –Calculations about the planets. Do we use arrows to show more and less?

Letter E

Shading – spines or blades of grass Hidden letter E on stomach

Dinosaur Pachycephalosaurus –

Personal Questions about courtesy and poverty. The dinosaur is begging. Is begging good? Why would you do it. How can you be polite to get what you want? What do you say when you get something you have asked for? The dinosaur asks for things, the grasshoppers don't! Is he praying? Would you give him food? Why or why not?

Plant life – Sweet Potato Vine – a fun plant to grow at home or at school. Cut the potato is half, and stick several tooth picks in the sides and put it over a cup of water and watch it grow. Vines are different from other plants, how? Also the Prayer Plant, which close its leaves. The prayer plant is being eaten. What sort of animals and insects damage plants. Do they have defenses 0 like the spines of the cactus.

Insects – Grasshoppers. Study life of grasshopper – how they lay eggs what they like to eat. What is the difference between a grasshopper and a cricket. Study crickets special place in Japanese society Insects as pets –good or bad.

Artwork - Praying hands by Albrecht Durer – famous printer from 1500s – and a very talented young man – his self-portrait drawn when he was 13 years old should be seen, also his print of the rabbit. Drawing could focus on hands, faces or animals.

Math – find the negative space E's _ eaten into the leaves. How many swells on the dinosaurs head, how many degrees apart would they be?

Language - *Pachycephalosaurus is not embarrassed, with his hands in front he asks for his dinner, begging everyone, he's an E, of all of the big eaters, he is king.*

Below are the words for please and thank you – Por favor and gracias. What words are polite and what words are not.

Letter F

Shading – Stars negative and positive/ Hidden letter F in tail.

Dinosaur- Edmontosaurus

Personal = Edmontosaurus is content – what makes people and animals content. Many of the insects are together sharing. Do you share? Does it make you content? This dinosaur's favorite color is yellow. What is yours?

Plant Life – Cactus. What are spines. How do they protect a plant. What numbers do they come in. What kinds of flowers do they have? One is the night blooming Cereus which only blooms for one night every few years. How many kinds of cactus are there. What can you do with cactus? Eat cactus – nopalitos. Grow cactus. Do cacti have deep roots? Why or why not.

Insects – Lots live under the ground. Everywhere we walk we are walking on top of insect and worm homes. Some insects sleep at night and others – moths – work at night. Nocturnal and Diurnal insects and animals.

Stars.- Several actual constellations are present – the big dipper , the little dipper, etc.Study the night sky, the mythology, the locations. There are no stars on the right side of the page because the sun is rising, which is much brighter than the stars.

Artwork- Starry Night by Vincent Van Gogh – Study Van Gogh's paintings, Study landscape. Draw a landscape of your town, home. How can you make colors look bright – put dark colors around light ones.

Math – Related to light years. How far away are things. Do measurements, angles in the constellation

Language - *How content the letter F, Edmontosaurus is the boss of being happy and agreeable, he is a very nice guy.* What is bellow and mellow. Can you find the alphabet parade?

Letter G

Shading: spirals or curls. Hidden letter G in the spine.

Personal – Tickling – good or bad? Waterslides and swimming. What are good things to do in the water. Is it good to have a lifeguard when you swim. Are you afraid or unafraid of water.

Dinosaur – Ouranosaurus –

Plant Life – Bromeliad. These plants have few or not roots and get water when it rains by funneling them down their leaves. Some live in tree tops of cloud forests. Ferns also like a moist environment. Studying the reproductive spores of ferns, Umbrella plants too.

Insects – Some can live above ground and underwater.

Artwork – Whistler's Mother – Arrangement in Grey and Black. Do family pictures, or monochromatic pictures. Can you draw in gray and black and make it look like this? How do you think she feels. What Whistler a good son to paint this? She was a model – Use a model in the classroom and draw the figure. Do figure proportions.

Language *Ouranosaurus make a G when she tickles her foot, she is pretty and delicate and always in love.* Alliterations – what is it - live laugh loves gentle g Write some of your own. Find others in the previous letter F of the alfadinobet, with lots more to come.

Letter H

Shading – Hearts positive and negative. He is a lover boy. Notice even the roots, flowers and leaves are hearts. Hidden H in belly.

Personal – What and who do you love?

Dinosaur – Velociraptor

Plants Life – Hoja Picada, a vine that grows on trees, Bleeding heart, a favorite spring flower, that dies back in the summer, - Places and times that are good for plants.

Insects – lady bugs, worms in lovey –dovey situations. Study insect reproduction! Good ladybugs and bad ladybugs – we have both kinds here in Colorado.

Artwork – Andy Warhol's Marilyn – multiple screen prints of Marilyn Monroe. Do printing with students using foam or meat trays, make a coy and duplicate it on the same page with different colored paint or inks. Draw hearts, make valentines.

Language *Velociraptor – GEE! How handsome is his H He loves to always give hugs and kisses.* What is smug? Find Alphabet parade.

Letter I

Shading- eyes positive and negative Hidden letter I in a finger

Personal – eyes sounds like I. What do we use our eyes for. Can animals see like we do? Make animal masks to see where their eyes are.

Courtesy –greeting people – how do people in other cultures greet each other?

Dinosaur – Ceratosuarus – one horn

Plant life – pine trees, bromeliads, leaves that look like waving hands

Insects – greeting each other

Artwork – Leonardo da Vinci – Mona Lisa, and a Last Supper. Study Leonardo – his art, inventions, his mirror writing, notebooks. (the real Mona Lisa doesn't wave!)

Land form – Devil's Tower – opposite Last Supper,(two extremes) extinct volcano core – study volcanoes, land forms of the west. National Monuments and Parks.

Language - *Imitate the letter I, ceratosaurus says yes, he stand straight and waves, he is a great dino.* Words for greetings, writing letters salutation, thank you letters, invitations, etc.

Letter J

Shading – Holly Hidden letter in the jaw

Dinosaur – Kentrosaurus – reptile with spikes

Plants – Holly . This is a plant that needs a male plant and a female plant to reproduce and get berries. The leaves have tiny spikes on the end of them. They are glossy and preserve water. The berries are food for animals, not for people.

Insects – The life cycle of the earwig. Study insect reproduction, names of different forms of life – larva etc. Study digestion – how do we process food. What animals/ insects/ have more stomachs than we do, etc What if food?

Artwork – Haystacks by Monet. Talk about impressionism. Paint your own impressionist work. And hay is food for someone! And the holly is red and green – Christmas colors, work with complementary colors.

Language- *Kentrosaurus e somewhat crazy, she never shuts her mouth, she doesn't wear a boot in the holly, but she is a cute J. Find the alphabet parade*

Math – Multiplication – if two bugs have five offspring in two weeks, how many can they have in a month, two months, etc.

Letter K

Shading – word kooky. Hidden K is in the armpit.

Personal. – Flexibility What can you do?

Dinosaur –Anatosaurus -bill like a duck

Plants – Impatiens – Pretty flowers from the garden center, Native to the high forests of Central and S. America. The seed pods pop open when touched – usually hard to find the pods here in the states, but in Latin America you can spend hours popping pods and watching the seeds fly. Wisteria seeds do this too – and sound like a gun shot when they pop. How do seeds travel – explode, hitchhikers (burs), fliers –dandelions, floaters- lotus birds eat – cherries, etc. How do we travel?

Insects –Our friendly bees again. Extremely important for pollination

Artwork – Children's Games by Peter Brueghal . Look at the games in the painting. Can you identify some that you play with same way people did 400 years ago. What games can you draw.

Math – circumference of a circle – bees are turning circles. How far can a seed fly - measurement. 14 bees come to pollinate impatiens, 3 are hit by flying seeds. How many don't need bandages!

Language –*Head down, feet up. Anatosaurus doesn't move, he makes a K in a rare form, Do you think his face is red?* Create a picture using a word.

Letter L

Shading – rain drops or tear drops. – hidden letter in foot

Personal. – Being sad sometimes is normal. Do you feel like Psittacosaurus when you take medicine? When else are you sad? What can cheer you up, Like the flowers are doing in the picture? Can you cheer people up?

Plants – Umbrella plants – all plants need rain, and water.

Clouds – they have a silver lining. Cloud formations – different kinds of clouds and weather.

Insects – they are hiding from the rain, but an amphibian – the frog is here. Study frogs and amphibians.

Artwork - Egerton 1st Stroboscopic photograph drop of milk Photographs can be art too. Do nature prints, cyanotypes, pin hole cameras. Draw something slowed down. Because we have cameras we now know what things look like that we could only guess at before. Take digital photos of things in action.

Language- *Psittacosaurus seems sick, he doesn't want a pill, he is a crybaby when his stomach hurts making a handsome letter L.* Alphabet Parade.. Talk about words with silent letters in them, psychology, pneumonia, kneel, knife, etc.

Letter M

Shading – M's Hidden letter over eyes – a McDonald's style M.

Dinosaur –Pteranodon winged and toothless (Pteradactyl has teeth)

Insects – dragon flies and damsel flies. Amazingly beautiful insects that eat mosquitoes and help humans.

Plants - a bean stalk - referring to Jack and the beanstalk because no plants live way up in the sky.

Clouds – more to study

Terrain – land forms of Utah – uplift, glaciers, how is land formed?

Artwork – The Bride - Marc Chagall. Uses lots of color and imaginary things. Draw something that is impossible to do. Use lots of color. Look at the clouds and draw pictures of what they remind you of.

Language – Pteranodon – *how he climbs, he can fly more than a cloud his wings make a fine M, he flies up and he is not afraid.* Is mongo a word? What word might it come from? Can you create a new word by abbreviating or combining two words? (a *slinder* is a favorite –from slender and sliver)

Letter N

Shading – diamonds and starbursts – Hidden letter in spine plate

Dinosaur – Reptile with plates

Personal – What do you protect? Do you have someone who will protect you? What do animals and pets protect.

Insects – Fruit eating insects

Plants – Banana trees – Study then – chop them down, grow bananas, etc, Water lilies.

Land form – Guilin, China. Famous Chinese landscape elephant rock and of karst mountains that are filled with caves. Study caves, stalactites and stalagmites.

Artwork – Afternoon in the Grand Jatte – G. Seurat. Pointillism is a favorite. Do pictures using markers and dots. Did you know this picture is huge and is in the Chicago Art Institute?

Language – *what a noise N makes, when someone comes near his deep cave, the stegosaurus makes a fuss.* How do you write words in Chinese – study characters and the difference between having an alphabet and not.

Letter O

Shading – angles and pyramids. Hidden letter in spine

Dinosaur – Dimetrodon

Personal – Do you have bad moods? What is it like to be around someone who is in a bad mood.?

Plants – Water Hyacinths – they float in water and can take over a lake. Very pretty purple flowers. You can grow them indoors in a water pot and they will multiply!

Insects – Eating O's in the plants

Flying fish

Artwork – Alexander Calder – mobile. Make a mobile or a wire sculpture.

Language - *Dimetrodon feels bad when you make him” how are you?”, with sad eyes he doesn't say hello, he is an o with his jaw on his tail.* Make words using the letters that are in the alphabet parade.

Math – number 0

Letter P

Shading – numbers .

Hidden letter in knee

Dinosaur –oviraptor

Personal – getting exercise is important

Plants – Bristle con pine – oldest plant. Bamboo which is a very strong grass.

Insects – inch worms

Math – lots of numbers. Count the eggs - 1,2,3 then 3,2,1 Use the ruler made of inch worms at the bottom of the page to measure up to 10 inches. And numbers are not just used to measure things, but time also.

Artwork – Salvador Dali, The Persistence of Memory. The famous soft watch. Talk about surrealism – things look real but aren't. Introduce linear perspective, Dali was an expert at that.

Language- *Oviraptor is very athletic, etiquette is not important twisted into a letter p I think it must hurt.* The difference between slang – heck – and formal language.

Letter Q

Shading – curly Q's – Hidden letter in tummy

Personal – polite to yawn? Who gets sleepy?

Dinosaur – Apatosaurus

Plants – grass and Q like leaves

Insects and fish – trilobites – Study fish fossils, remains in stone.

Artwork – Henri Rousseau – Sleeping Gypsy. – fun jungle painting. Invent leaves, etc.

Language[*Look at the sleepyhead, snoring in his corner, Apatosaurus is Q and dreams more than you.*

Letter R

Shading – musical notes. Hidden letter in left leg.

Personal – What kind of music do you like?? Do you dance and sing?

Dinosaur – Allosaurus

Plant life – Trumpet vines

Insect – crickets who make music with their legs

Hidden symphony in the plant life – Find guitar, trumpet, piano, drum, cello, saxophone, tambourine, tuba. Talk about instruments, tones, notes, dance.

Artwork – The Guitar Man by Pablo Picasso. Create musical instruments or draw them. See other works by Picasso.

Language *Allosaurus loves to dance when there is rhythm he tosses his tail and makes a good letter R and dances until the disco(teque) closes.* What words do we use to describe music. Onomatopoeia.

Letter S

Shading – weaving Hidden letter in neck.

Personal – Embarrassment. Telling when you've done something bad or accidental.

Dinosaur

Plant life – mulberries – used by silkworm

Insects – silkworm, - study how they make cocoons of silk, then weave into silk fabric,

Artwork – Vermeer's Milk Maid – spilt milk! Weave paper, a pot holder, a wall hanging.

Language *Diplodocus isn't happy, I don't know what his intention is, when he is embarrassed he makes a great S* . What words have double esses?

T

Shading – lightening – Hidden letter in thigh

Personal – Getting mad

Plant life – carnivorous plants, since T Rex is a carnivore. Study pitcher plants, Venus fly traps, Feed one!

Insects- they are food!

Also volcanoes and thunderstorms. Study weather

Artwork – inspired by Magritte's men in bowler hats. Make hats. Drink Tea! Have a tea party.

Math –

Language - *Tyrannosaurus is fierce, he has an enormous voice and sharp teeth. He's big, His footsteps thunder. The T commands.*

Letter U

Shading – U Hidden letter in tail.

Personal – Pain

Plant life - gets less and less and dinosaurs eat up their world! Just a stag horn parasite
How do parasites work?

Insects – enjoying hot springs like at Yellowstone, a hot tub, a bath.

Science – Geysers, hot springs,

Artwork – What the water brought me by Frida Kahlo. This dino is in pain, and so was Frida, but you can show her self-portraits with monkeys, etc. that won't be as scary as What the Water brought me. Even when we hurt we can do great things. And art can help us express pain and emotions.

Language - *Ankylosaurs gives a scream, he says "Darn", the letter U is very sure that he hurts more than being dead.*

Letter .V

Shading – ovals Hidden letter in arms

Personal: Scary Do you scare anyone? Does anyone or anything scare you?

Plant Life- Less – getting more like desert – just Bristle cone pines, which are some of the oldest plants on earth

Insects _ Mormon Crickets in a library.

Landform – Utah – Brice Canyon and Arches. Study erosion.

Artwork – Petroglyphs – study ancient art and writing. Hieroglyphics, etc.

Language- *Utahraptor is vicious, is it true is malicious, when he is the letter V he is only playing, I know.*

Letter W

Shading – fish – Hidden letter in between teeth.

Personal – a world under the ocean

Plants – underwater coral seaweed kelp

Fish and shellfish – study fish and shellfish

Artwork – Inspired by Venus by Botticelli show Botticelli's Seasons. Explore the seasons and draw seasonal pictures.

Language - *Plesiosaurus is w when he went to sea swimming with ease he has a rare ability.* Alliteration again

Letter X

Shading – dashes Hidden letter on head

Plants – just a yucca – Study the desert

Insects – scorpion

Landform – Monument valley,

Artwork – Georgia O’Keefe Red white and Blue Draw bones and shapes.

Language - *Troodon is in a hurry running with a smile. The letter x on the track tells us see you later.*

Letter Y

Shading - ? Hidden letter in arm and body and neck.

Personal – school and learning.

Plants – Fig trees – plants that give us food – orchards peaches, etc.

Insects, and fish in school

Land and weather

Weather – rain ,wind

Artwork – Michelangelo Sistine Chapel. Tape paper under tables and paint your own Sistine chapel.

Language - *Pterodactyl is great he flies like a plane, with strong wings and a crest behind, he’s the most.*

Letter Z

Shading – snow flakes Hidden letter in edge of mouth.

Plants – none left – ice age is coming

Insects – hiding under the ice

Study snowflakes, weather, winter, ice age,

Artwork-tessellation inspired by Escher. Create your own tessellations using cut paper and tracing.

Math – crystals and numbers

Language - *Ultrasaurus is a huge female who can sleep without a bed and snore loudly, and never sweat. Yes she’s a Z , no doubt.*

