



LEVEL ONE

Discovery Charter School - Teachers, Students, Families, and Community in a Learning Partnership

Family Guide To Total Learning Objectives: Creating Knowledge Through Questions, Projects, Experiences and Problem Solving

WELCOME TO LITERACY

*“Open up the treasure chest
To see what you will find
Answers for your questions
And a fortune for your mind”*

METHODOLOGY

All instruction at the Discovery Charter School focuses on total learning. We feature a blended teaching method that engages students in acquiring knowledge and skills through an extended inquiry and experience based process. Learning is structured around authentic questions, carefully designed projects and targeted learning experiences. Teachers, students and families are fully involved in planning and implementing learning experiences and projects. Our instruction blends the processes of thinking, developing skills and gaining knowledge allowing students to “understand”, “know” and “do”. We support students in learning and practicing skills in problem solving, communication, and self-management. We integrate curriculum areas, thematic instruction, and community issues. Assessment of performance is on content and skills using criteria similar to those in the work world, thus encouraging accountability, goal setting, and improved performance. We focus on meeting the needs of learners with varying skill levels and learning styles and we target individual interests to engage and motivate bored or indifferent students. We highlight the Learning Team Concept focusing on the synergistic power of teachers, students and families working together. We develop Individualized Learning Plans closely aligned with curriculum guidelines, benchmarks, and standards.

LOVE OF LEARNING

- _____ understands that each human brain is a powerful learning tool
- _____ believes in their ability to learn and expresses excitement about learning
- _____ applies the process of asking questions and sharing previous gained information
- _____ responds to questions posed by family, teachers, peers and other adults
- _____ identifies areas of interest and curiosity
- _____ organizes, records, and shares information using objects, pictures, demonstrations, technology and verbal responses
- _____ uses questions to guide the information collection
- _____ values personal knowledge skills in light of rapid growth of information base due to technology
- _____ understands that their brain is constantly growing and collecting information from all activities and experiences
- _____ understands that there are many ways to learn and that different people learn in different ways

SOLVING PROBLEMS

- _____ applies previous experience and knowledge to problem solving experiences
- _____ explains and verifies results of problem solving experiences
- _____ continues to apply a variety of strategies when the first strategy proves to be unproductive
- _____ develops confidence in the use of technology to assist in solving problems
- _____ reviews problem solutions, and uses questions to identify new problems and experiences
- _____ takes pride in problem solutions

ENGLISH - LANGUAGE ARTS - READING

Level One students are excited about the gift of literacy. They meet, practice and begin to correctly use the skills of speaking, reading, and writing.

WORD ANALYSIS

- _____ demonstrate phonological awareness of spoken words through syllable awareness and onset and rime
- _____ demonstrate phonemic awareness through matching, isolating, blending, segmenting, deleting, and substituting individual sounds in spoken words
- _____ use phonics (e.g. letter/sound relationships, short/long vowels, digraphs, blends, word families, and spelling patterns) to decode words in text
- _____ understand vocabulary by using suffixes, synonyms, and antonyms
- _____ apply basic knowledge of alphabetic order
- _____ read high frequency words (regular and irregular) to build fluency and construct meaning (e.g. what, then)
- _____ read decodable text aloud with fluency

READING STRATEGIES

- _____ use concepts of print and concept of word (e.g. top/bottom, left/right, and story sense)
- _____ identify author and illustrator
- _____ predict what a story will be about
- _____ use self-correcting strategies to aid comprehension
- _____ identify key vocabulary
- _____ retell details of a story or text
- _____ restate the main idea of a story or text

LITERARY TEXT

- _____ identify setting and sequence of events
- _____ make inferences and draw conclusions about characters, setting, and plot
- _____ describe physical and personality traits of characters
- _____ identify the main idea
- _____ listen to, read, and discuss texts from different cultures and time periods
- _____ make predications based on evidence
- _____ use information to answer specific questions
- _____ distinguish between fact and opinion
- _____ read literary text aloud with fluency

EXPOSITORY TEXT

- _____ identify and gain information from text features (e.g. text boxes, illustrations, headings, and titles)
- _____ identify the topic
- _____ describe the sequential order of events found in text
- _____ listen to, read, and discuss texts from different cultures and time periods
- _____ use information to answer specific questions
- _____ make predictions
- _____ make inferences and draw conclusions
- _____ follow pictorial and written directions to complete tasks
- _____ read expository texts aloud with fluency

EFFECTIVE WRITING

- _____ plan written work
- _____ choose and narrow topic
- _____ organize ideas
- _____ write complete sentences with supporting details
- _____ revise writing (e.g. organization, ideas, word choice, sentence structure, and relevant details)
- _____ edit for correct use of end punctuation and capitalization
- _____ edit for correct word usage (e.g. nouns, verbs, and pronouns)
- _____ edit for complete sentences
- _____ print legibly using left-to-right, top-to-bottom directionality, and correct spacing between letters and words
- _____ prepare a legible final draft to display or share
- _____ use correct spelling of simple words (e.g. cat, sit, run) and high frequency words (e.g. the, is, my, are)

TYPES OF WRITING

- _____ write informational sentences using a topic
- _____ write sentences about experiences and/or events
- _____ write responses to a variety of texts
- _____ write sentences that answer a research question and state an opinion
- _____ record information from simple reference materials and technology
- _____ write poetry
- _____ participate in daily writing activities (e.g. stories, letters, and notes)

LISTENING

- _____ listen for a variety of purposes (e.g. gaining information, being entertained, and understanding directions)
- _____ listen and respond to oral communication
- _____ expand vocabulary through listening
- _____ link information to prior knowledge

SPEAKING

- _____ give directions to complete tasks
- _____ ask questions to clarify directions
- _____ use precise language to describe feelings, experiences, observations, and ideas
- _____ communicate in small and large groups
- _____ participate in group discussions using the turn-taking process
- _____ communicate clearly in complete sentences
- _____ use varied vocabulary to communicate ideas

MATHEMATICS

Level One students experience the fun of numbers. They learn the basic addition facts through sums of ten and the corresponding subtraction facts. The foundation for algebraic reasoning is built through sorting and patterning. They begin to learn about fractions, continue to develop geometry concepts, and use nonstandard units of measure.

NUMBERS, NUMBER SENSE, AND COMPUTATION

- _____ identify, model, read, and write place value positions of 1's and 10's
- _____ identify and model a whole
- _____ identify and model $\frac{1}{2}$ as two equal parts of a whole or a set of objects
- _____ read, write, compare, and order numbers from 0 - 100
- _____ identify ordinal positions first to tenth
- _____ read and write number words to 10
- _____ use number patterns and models to count by 2's, 5's, and 10's to 100
- _____ identify and model basic addition facts (sums to 10) and the corresponding subtraction facts
- _____ estimate the number of objects in a set to 10 and verify by counting
- _____ demonstrate the joining and separating of sets with 20 or fewer objects
- _____ model the meaning of addition and subtraction in a variety of ways including the comparison of sets using objects, pictorial representations, and symbols
- _____ use mental computation in appropriate situations to solve problems
- _____ use number sense, computation, and estimation to solve mathematical and real-world problems
- _____ use mathematics vocabulary and symbols to describe addition, subtraction, and equality

PATTERNS, FUNCTIONS, AND ALGEBRA

- _____ sort and categorize objects, shapes, and numbers in a variety of ways
- _____ recognize, describe, label, extend, and create simple repeating patterns using symbols, objects, and manipulatives
- _____ create, compare, and describe sets of objects as greater than, less than, or equal to
- _____ recognize that unknowns in an addition or subtraction equation represent a missing value that will make the statement true
- _____ determine possible combinations for a given number (0-10)

MEASUREMENT

- _____ compare, order, describe, and represent objects by length and weight
- _____ compare and measure length and weight using non-standard measurement
- _____ determine the value of any set of pennies, nickels, and dimes
- _____ recount experiences and retell stories in sequence
- _____ recite in order the months of the year
- _____ use a calendar to identify days, weeks, months, and a year

- _____ read time to the nearest hour
- _____ identify and sort coins and bills

SPATIAL RELATIONSHIPS, GEOMETRY AND LOGIC

- _____ name, sort, and sketch two-dimensional geometric shapes (circles, triangles, rectangles, including squares) regardless of orientation
- _____ demonstrate an understanding of position words, including down/up, left/right, top/bottom, and between/middle, by describing the relative location of objects
- _____ identify and copy two-dimensional designs that contain a line of symmetry
- _____ identify and name three-dimensional figures in the environment
- _____ sort and classify objects by size or thickness
- _____ identify what comes next in a step-by-step story or event sequence

DATA ANALYSIS

- _____ collect, organize, and record data in response to questions posed by teacher and/or students
- _____ use tally marks to represent data
- _____ use data to make decisions and solve problems
- _____ read and interpret information on graphs made with objects, pictures, or numbers

PROBLEM SOLVING

- _____ apply previous experience and knowledge to new problem solving situations
- _____ formulate their own problems
- _____ explain and verify results with respect to the original problem
- _____ try more than one strategy when the first strategy proves to be unproductive
- _____ use technology, including calculators, to develop mathematical concepts.

MATHEMATICAL COMMUNICATION

- _____ use everyday language, both orally and in writing, to communicate strategies and solutions to mathematical problems
- _____ use inquiry techniques to solve mathematical problems (discussion, questioning, research, data gathering)
- _____ use mathematical notation to communicate and explain problems
- _____ use physical materials, models, pictures, or writing to represent and communicate mathematical ideas

MATHEMATICAL REASONING

- _____ justify and explain the solutions to problems using physical models
- _____ discuss the steps used to solve a mathematical problem
- _____ draw logical conclusions about mathematical problems

MATHEMATICAL CONNECTIONS

- _____ link new concepts to prior knowledge
- _____ identify, explain, and use mathematics in everyday life
- _____ apply mathematical thinking and modeling to solve problems that arise in other disciplines, such as rhythm in music and motion in science
- _____ view mathematics as an integrated whole in order to identify mathematics used in everyday life

SCIENCE

Level One students share observations about the natural world. They ask questions, make predictions, and formulate explanations through science investigations. They collect information and keep records about plants and earth materials. They explore and describe motion. They use tools to collect information. Nature and History of Science objectives are embedded throughout the year in the contexts of life, earth, and physical science. Hands-on experiences and problem solving bring excitement to learning.

NATURE OF SCIENCE

- _____ record observations and explanations using pictures, words, and numbers
- _____ use equipment (eye dropper, magnifying lens, funnel, sifter) to gather information
- _____ make predictions based on observed patterns (night/day, seasons, growth)
- _____ ask questions based on observations and interactions
- _____ respect ideas and contributions of others
- _____ recognize that science involves people of all ages and backgrounds

PHYSICAL SCIENCE

- _____ investigate, observe, and describe that objects may move in a variety of ways (straight lines, rotating, rolling, revolving, zigzag, circular) and at different speeds
- _____ make objects move, stop, change direction and balance
- _____ observe and describe how magnets can be used to make objects move without being touched
- _____ observe and describe how things fall to the ground unless something holds them up

EARTH SCIENCE

- _____ recognize that the Earth is composed of different kinds of materials
- _____ observe and describe the size, shape, texture, color and patterns of rocks
- _____ observe and describe basic properties of soils

LIFE SCIENCE

- _____ investigate and describe how particular plants have seeds that produce the same kind of plant
- _____ identify observable characteristics of plants
- _____ sort plants by observable characteristics
- _____ investigate, observe, and describe how plants grow and change through their life cycles
- _____ use the five senses to investigate the natural world
- _____ recognize and explain that plants grow in different places and need certain resources to survive

SOCIAL STUDIES

Level One students learn through experiencing their neighborhood and community. Students experience their roles as members of a community and begin to recognize symbols, icons, and songs that reflect a common heritage. Students experience government, economic concepts of choice, and places on maps.

HISTORY

- _____ describe local life long ago, including jobs, school, communication, transportation, and recreation
- _____ listen to stories that reflect the beliefs, customs, ceremonies, and traditions of the varied cultures in the neighborhood
- _____ listen to histories of important local landmarks that create a sense of community among citizens
- _____ listen to stories that reflect the beliefs, customs, ceremonies, traditions, and social practices of cultures around the world
- _____ identify landmarks around the world
- _____ identify ways that sharing can resolve problems in the classroom and school
- _____ describe the neighborhood around their school
- _____ compare and/or contrast their daily lives with those of their parents or guardians
- _____ identify and describe occupations in the community that help people, i.e., police officers, fire fighters, and nurses
- _____ demonstrate respect for each other and people in the neighborhood
- _____ discuss events that are happening in the school

GEOGRAPHY

- _____ differentiate between and identify water and land on a map and globe and use the terms ocean and continent
- _____ describe maps as representations of places
- _____ recognize the shape of North America on a world map
- _____ use simple maps to illustrate direction
- _____ visually display geographic information using simple lists, graphs, and maps
- _____ sort and group pictures displaying geographic features, i.e., forests, deserts, lake regions
- _____ identify similarities and differences between people in the community
- _____ identify patterns of change within the community, i.e., construction
- _____ recall home address and phone number
- _____ use the classroom population to categorize simple demographic information
- _____ explain that some people live in locations other than where they were born
- _____ identify characteristics of rural and urban communities
- _____ tell how the physical environment affects activity at school, i.e., inside/outside recess
- _____ identify locations for accessing basic resources available to the student, i.e., food, water

ECONOMICS

- _____ give examples of all-or-nothing choices, such as choosing to have music on or off
- _____ identify a consumer
- _____ identify a producer
- _____ give examples of ways people earn money
- _____ explain what money is and how it is used
- _____ identify resources that are shared in the classroom and the community
- _____ define trade

CIVICS

- _____ identify and follow classroom and school rules that guide behavior and resolve conflicts
- _____ identify an individual's rights within the classroom
- _____ participate in class decision-making, i.e., individual responsibilities in the classroom and school
- _____ recite the Pledge of Allegiance
- _____ name a traditional United States patriotic activity, holiday, or symbol
- _____ name the current president of the United States
- _____ identify sources of information
- _____ name their school