

Science

ASSURANCES

1. Tools of Science

The students will be able to gather, analyze and interpret information using selected equipment and tools to extend the senses, including graduated cylinders, beakers, calculators, microscopes, cameras, sound recorders, computers, hand lenses, metric rulers, thermometers, compasses, balances, hot plates, meter sticks, timing devices, magnets, collection nets, safety goggles.

2. Reading & Writing

The student will read a variety of texts to analyze, review, and critique scientific explanations, hypotheses and theories as to strengths and weaknesses, and draw inferences on promotional materials. The student will write to inform, describe, and classify using correct scientific vocabulary, scientific concepts, sentence structure, capitalization, punctuation, spelling, usage and word order. The student will use a scientific journal to record data, thoughts, inspirations, scientific hypothesis, materials, procedures, and results including graphs and diagrams, and conclusions.

3. Vocabulary

The student will build and expand vocabulary, through a print rich environment, to increase fluency and understanding by incorporating scientific vocabulary into their everyday speaking, listening and writing routines.

4. Know and Be Able to Do

The student will:

- demonstrate safe practices.
- plan and implement investigative procedures; ask well-defined questions, formulate hypotheses.
- select and use equipment and technology; collect data through observation and measurement.
- demonstrate repeated investigations increase reliability of results.
- organize, analyze, evaluate, make inferences, and predict trends from direct and indirect evidence.
- communicate valid conclusions.
- construct graphs, tables, maps and charts to organize, examine, and evaluate data.
- connect science concepts with history and scientists.

* indicates that this benchmark is a tested objective on the Elementary Science TAKS test

≈ indicates that this benchmark supports a tested objective on the Elementary Science TAKS test