**Evaluation Strategy**

**1st Grade Science**

 Occupations involving science, math, and technology are important in our 21st century, globally-connected world. Science understanding is a deciding factor for many students as they leave formal education and enter institutions of higher education or the working world. The basic understandings of gathering data, sharing observations, and understanding our natural world begin early. Both formative and summative assessments guide the evaluation of this science curriculum and the comprehension of these early skills.

 Formative assessment will be used during each lesson and in a variety of forms. The first form will be classroom and group discussion. As the teacher presents concepts, he/she will listen to student responses and comments for both understanding and misconceptions. Through questioning and discussion, the teacher will determine what learning needs to be reviewed and when it is time to move on. Teachers may also find teachable moments to utilize from these discussions as students present their own ideas or questions about the science concepts.

 Student observation journals will also be an effective formative assessment that will be utilized during most of the curriculum plan. During investigations, students will enter data, observations, and answers to investigation questions in these science journals. The teacher will use these as an informal assessment of how students document observations, their abilities to document data, individual responses to given science questions. Students will utilize the journals for note-taking and presenting their own questions about the concepts as well.

 Another necessary formative assessment that will be used during instruction will be quizzes. Pre-quizzes may be administered before teaching a new concept to see what kind of knowledge base the students have before instruction. Exit slip quizzes may be used after a lesson to see what information was retained from the day’s work. Before moving concepts within each category, there will also be a quiz to assess whether or not the students are ready to move on to the next concept.

 Summative assessments will take the form of category tests and application projects. After each category (physical science, earth and space science, and life science), a summative assessment will be given to check for overall student understanding and instructional effectiveness of the curriculum. These summative assessments will include standards-based questions and the main concepts taught throughout that category. The teacher will use information gathered from these assessments to analyze individual student learning and to make changes to the curriculum if necessary.

 After each category, students will also complete an application project. These will be projects that demonstrate the learning elements of the category, involve data collection or research, and have a presentation element. An example of an application project for the life science category would be for students to complete a presentation that demonstrates the habitat and needs of a particular animal. This would be presented in a creative, student-directed way to the class.

 Assessment is an important aspect of curriculum design. By utilizing both formative and summative assessment, learning can be documented and the curriculum can be altered to meet the needs of the students.