**Elementary Science Chapter 5 Assessment**

**Science learning**

**-monitor students’ progress**

**-increase communication with students**

**-improve instruction and the learning environment**

**-enhance teacher accountability**

**Authentic assessment**

**Genuine-data should measure what it is suppose to measure**

**Internal purpose assessments-classroom-based assessments used by the teacher to measure the progress of students within their class**

**External purpose assessments-standardized assessments generally initiated by a school district or state to compare intact classes within a larger system**

**Types of authentic assessment**

**Essay questions**

**-useful in evaluating whether students are able to express personal ideas clearly and can be designed to assess higher order thinking, the ability to solve problems, or capability to reason about the interrelationships between concepts**

**-remember to differentiate for kids**

**Performance-based assessment**

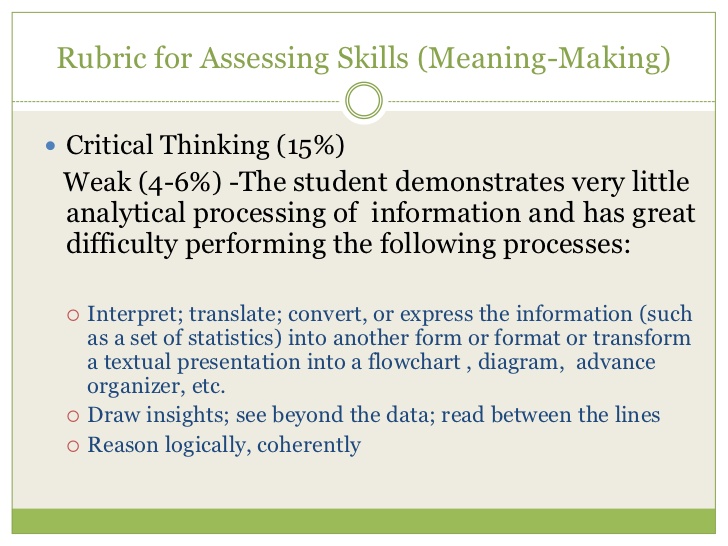
**-generates answers by the students**

**-indicates the process used by the students to arrive at that answer**

**-associated with know and be able to do**

**-processing skills can be evaluated**

**-children can demonstrate process skills with concrete materials**



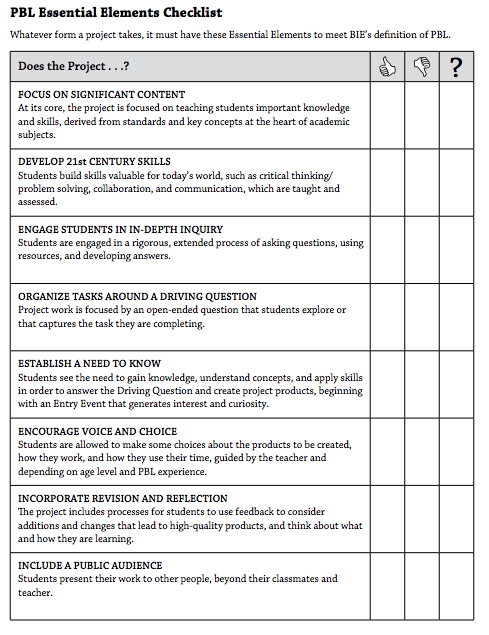
**-your personal assessments may not be as reliable without performance-based assessments**

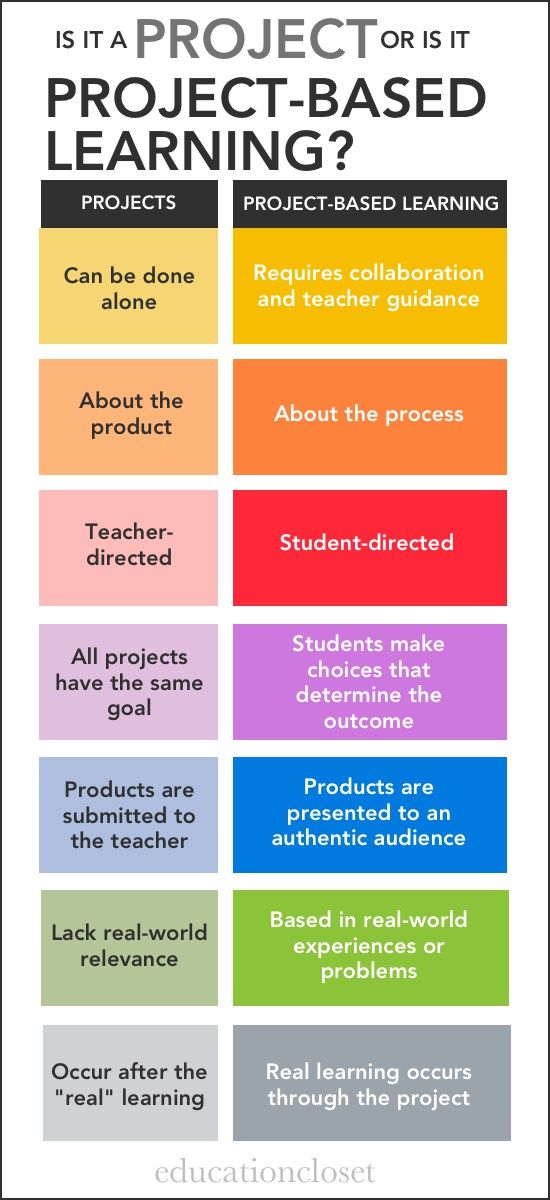
**Project based science assessment**

**-assists students in investigating authentic questions based on scientific phenomena**

**-young learners engage in exploring important and meaningful questions through a process of investigation and collaboration**

**-it should require self-assessment from students throughout the process**





**Peer or Individual Assessments**

**Interviews**

**-useful for early elementary students who struggle expressing themselves in writing**

**-be accepting of answers from students and value children’s thoughts and opinions**

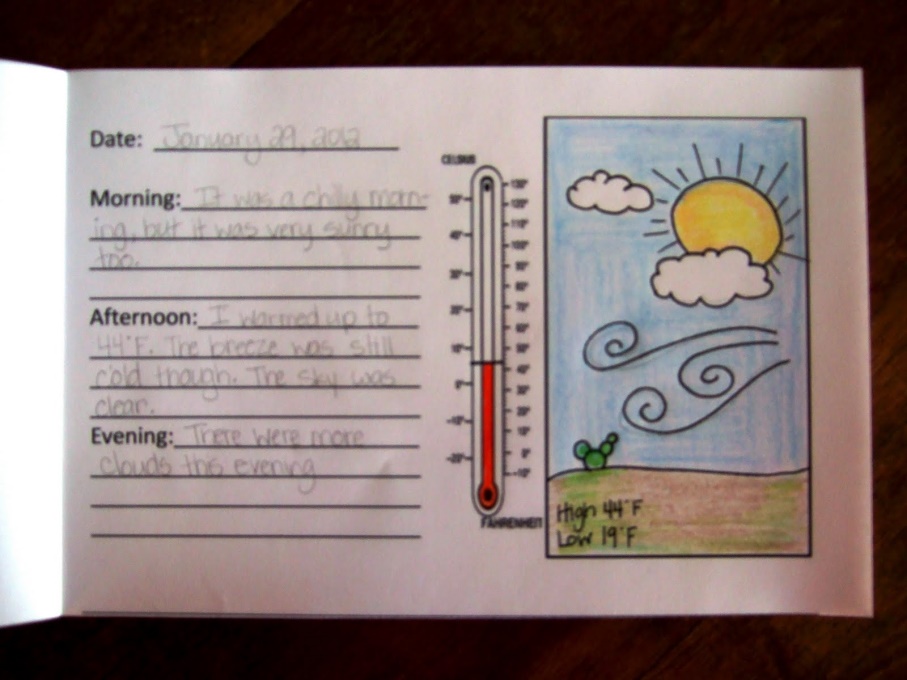
**-prepare general questions ahead of time**

**Journals**

**-offer opportunities to improve science learning and to practice important writing skills at the same time**

**-creative writing should be linked to concepts being studied**

**-you can ask students at different developmental levels to write summaries of what they have learned in a lesson, give opinions, and defend them, write persuasive letters, and compose interview questions**



**Portfolios**

**-students can enjoy having a collection of their work that progresses throughout the year**

**-parents are excited to view their child’s work**

**-not much preparation is required-grab some files, pocket folders, composition books, camera, envelopes, sticky notes, scrap booking materials ect…**

**-you can include journals, reading, writing, math, cooperative learning artifacts, artwork, book reports, daily work, ect..**

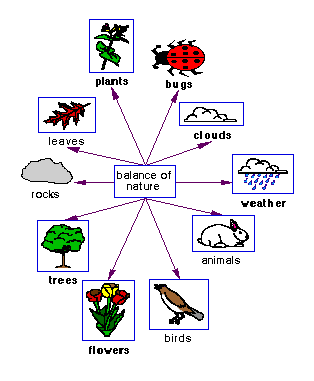
**-you get to know your student better and understand their strengths and weaknesses better**



**Concept maps**

**-most used organizers and excellent means to assess conceptual knowledge**



**Teacher observations**

**-quickest way to find out whether students understand the concepts and processes being taught is to ask questions and listen carefully to their responses**

**Open ended questions**

**-has more than one correct response or pathway to a response**

**-the response may be an answer to a question, a procedure to arrive at a solution to a problem, or an opinion about something**

**-promotes divergent thinking**

