Considerations for Teaching Math & Science

Math:

- Utilize standards (nysed.gov use Next Generation Crosswalks link) to help plan short and long term objectives
- Predict/research common misconceptions (use teacher guides, research, colleagues and your knowledge to help)
- Review/teach appropriate vocabulary
- Allow time for freeplay/exploration with new materials and discuss what already know/notice
- Short discussion before using familiar materials (i.e., what know, what used for, etc.)
- Utilize games, songs, charts, literature that addresses skills and concepts
- Relate skills/problems to self/real life/why important
- Management/routines to be considered, especially for games and small group activities
- Integrate throughout day/other subjects, etc.
- Plan assessments and how to differentiate
- Utilize checklists, rubrics for both students and teachers

Science:

- All of above plus
- For standards (nysed.gov see Elementary P-2) and be aware:

The state does not publish specific standards for every single grade.

The elementary school grades (P-5) each have their own set of standards, although the engineering design standards are grouped together for grades K-2 and 3-5.

- Utilize Scientific Method
- Focus on Inquiry and answering own questions
- Be aware of fact vs. fiction when utilizing literature (i.e., Eric Carle books)
- Utilize school guides for possible units such as, Air & Weather, Solids & Liquids, etc. Should cover all strands.