

Mathematics Pacing Guide Research-based Instructional Practices

Incorporate these practices into your Mathematics teaching.

- Actively seek out and encourage student's thoughts and points of view, and allow students to make choices.
- Explicitly connect lesson content to students' lives.
- Encourage meaningful peer interactions and promote peer conversations.
- Give students the floor. Avoid dominating classroom conversations by maintaining a balance of teacher and student talk.
- Help students consider different perspectives. Present and encourage multiple and varied points of view.
- Convey how and when to use concepts and procedures and the difference between them.
- Assist your students to define and refine their understanding by presenting an assortment of examples and contrasting non-examples that illustrate the concept or procedure.
- Offer extended opportunities for students to examine and analyze information. Engage students in higher-order thinking skills by giving them chances to explore data and evidence.
- Provide opportunities for students to make predictions and brainstorm consequences. Encourage them to discover and evaluate their own answers.
- Challenge students with open-ended tasks that have a variety of solutions and require students to think about how to use their knowledge in creative ways.
- Help students monitor their own thinking by showing them how you
 approach a problem and the questions you ask yourself to monitor your
 own thinking process. Model the process by thinking out loud.
- Help students to think about their own learning by offering opportunities to reflect on, plan, and share their developing thought processes.
- Find ways to integrate mathematics into all subject areas.