

Overarching Structures for Productive Discussions in Science

Anticipating – “Doing the Science” to Plan

Monitoring the Learning

Selecting and Sequencing Student Strategies and Ideas

Connecting Concepts and Student Ideas

High-Leverage Teaching Routines in Science

- **Productive Classroom Culture**
 - **Habits of Interaction and Practice**
 - Fostering a **Growth Mindset**
- **Selecting and Implementing Worthwhile Science Tasks**
- **Accountable Talk**
 - **5 Talk Moves (Restating, Revoicing, Adding On, Agree/Disagree and Why, Wait Time)**
 - **Structured Science Talk (Listen & Compare, Revoice and Compare, and Interpret & Compare)**
- **Effective Questioning**
 - **Teacher Generated Questions (Focus, Assessing, and Advancing)**
 - **Student Generated Questions**
- **Public Records and Anchor Charts**
- **Selecting & Sequencing** Student Strategies and Ideas
- Using **Science Notebooks** Authentically