

The 5 E's of Science!

ENGAGE

Lessons that mentally engage students with an event or question.

Connections are made with what a student knows and can do

- Creates interest
- Generates curiosity
- Raises questions
- Elicits responses





EXPLORE

Students work with each other to explore ideas through hands-on activities. Students begin to clarify their own understanding of major

- concepts and skills with the guidance of the teacher
- Students work together without direct instruction but within limits of the activity
- Test predictions and hypothesis
- Form new predictions and hypothesis
- Record observations and ideas

EXPLAIN

Students explain their understanding of concepts/processes

Teachers introduce new concepts and skills



- Accountable Talk
- Refers to previous activities or experience
- Uses recorded observations and materials in explanations
- Asks for justification and clarification



ELABORATE

Lessons that challenge students to apply what they have learned and build upon the concepts to extend their knowledge and skills

- New labels, definitions, explanations and skills are applied in new yet related situations
- Uses information to ask questions, propose solutions, make decisions, and design experiments
- Draws reasonable conclusions from evidence
- Uses accountable talk to communicate with peers

EVALUATE

Students assess their own knowledge, skills, and abilities. Teachers are able to evaluate students' progress.

- Open minded questions
- Models/Demonstrations
- Presentations
- Reflections
- Asks questions that would encourage future investigations

