Goal: State the Goals (standards/indicators) intended for the lesson.

- Break down into specific content objectives.
- Example: Benchmark: Students will understand and apply surface area concepts:
  - Know area formulas
  - Know steps to find surface area
  - Find surface area for various objects
  - Predict uses for finding surface area

Access: What will you do to access students' prior knowledge?

- Graphic organizers
- Concept map
- Make predictions
- KWL Chart
- Visualization
- Picture or Object
- Story or analogy
- Summary or review
- Question or hypothesis

New: Acquire new Information: Declarative, Procedural, or Both

- To acquire declarative knowledge: Gather and organize
- To acquire procedural knowledge: Follow steps and practice

Apply Knowledge- a thinking skill or practice

To process declarative knowledge:

• Knowledge	Recall (facts or method); Classify
• Comprehension	Concept/convention formation; Predict (if, then)
• Apply	Compare; Make an analogy
• Analyze	Express a point of view; Identify a system of structure
• Synthesize	Form and test a hypothesis: Solve a problem
• Evaluate	Make a decision; Argue or persuade; Make a judgment or critique

To process procedural knowledge:

- Shape and use in a new situation

Generalize or Summarize Knowledge Learned:

• Paper and Pencil	Physical representation	Computer-assisted
• Anecdotal example	Partner strategies	

The Nine Research-Based Strategies That Affect Student Achievement

1. Identify similarities and differences

- **Use Venn diagrams or charts to compare and classify items.**
- **Engage students in comparing, classifying, and creating metaphors and analogies.**

2. Summarizing and note taking

- **Provide a set of rules for creating a summary**
- **When summarizing, ask students to question what is unclear, clarify those questions, and then predict what will happen next in the text.**
- **Use teacher prepared notes.**
- **Stick to a consistent format for notes, although students can refine the notes as necessary.**

3. Reinforcing effort and providing recognition

- **Find ways to personalize recognition, give rewards for individual accomplishments.**
- **"Pause, Prompt, Praise." If a student is struggling pause to discuss the problem, the prompt with specific suggestions to help he/she improve. If the student's performance improves as a result, offer praise.**

4. Homework and practice

- **Establish a homework policy with advice-such as keeping a consistent schedule, setting, and time limit.**
- **Tell students if homework is for practice or preparation for upcoming test.**
- **Maximize the effectiveness of feedback by varying the way it is delivered.**

5. Nonlinguistic representation

- **Incorporate words and images using symbols to represent relationships.**
- **Use physical models and physical movement to represent information.**

6. Cooperative learning

- **When grouping students, consider a variety of criteria, such as common experiences or interests.**
- **Vary group sizes and objectives.**
- **Design group work around the core components of cooperative learning-positive interdependence, group processing, and appropriate use of social skills, face-to-face interaction, and individual and group accountability.**

7. Setting objectives and providing feedback

- **State benchmark/indicator is student friendly language.**
- **Set specific goals that students must attain and the grade they will receive if they meet those goals.**
- **Make sure feedback is corrective in nature; tell students how they did in relation to specific levels of knowledge: Rubrics are a great way to do this!**
- **Keep feedback timely and specific.**

8. Generating and testing hypotheses

- **Ask students to predict what would "happen" if questions.**
- **Ask students to build something.**

9. Questions, cues, and advance organizers

- **Pause briefly after asking a question.**
- **Vary the style of advance organizers. There are many ways to expose student to information before they "learn" it.**