Problem Solving - Five Easy Pieces

Rubric - PSSSP

Be Proactive

See it

Simplify it

Stir it up

Pause and Reflect
Be Proactive

Don’t just sit there – Do something!

Make a commitment.

Everyone Can Start!

Intimate Engagement

Try to understand the problem

Ask questions
See it

Visualize

Draw Sketches

Draw Charts

Draw Graphs

Make Tables

Make Lists

Draw Pictures

Construct Models

Create Mental Images
Simplify It

Smaller versions, smaller numbers

Examine simpler, more concrete cases of a problem.

In problems involving large numbers, start with similar problems using small numbers.
Stir It Up

Try things

Plunge in

Think of similar problems
Pause and Reflect

Reflection is important during all parts of the problem solving process.

In the Beginning

Intimate Engagement – Do you understand it? What do you know? What don't you know? Is there enough information to solve the problem?

In the Middle

Monitor progress. Reflect on whether original plan is leading to progress or it may be necessary to change the plan. Sleep on it. Share it with someone else.

In the End
Look back at what you did, what worked and what didn’t work. Can you extend the solution to a more general problem? Can you solve it with a different approach?