

Walton Academy
STEAM Objectives
K-5

STEAM stands for Science, Technology, Engineering, the Arts, and Math. STEAM provides the students opportunities to think critically and to problem solve. Walton Academy is among one of the first elementary schools in Eastern, NC, to incorporate weekly STEAM lessons. WA has a STEAM lab that our students will visit each week completing educational experiments that promote higher order thinking skills and team work skills that will prepare students for the 21st Century world of work.

STEAM Objectives

1. Students will use problem-solving strategies to investigate and understand increasingly complex content and be able to:
 - a. Formulate and solve multi-step problems from everyday situations.
 - b. Solve problems using a variety of strategies (e.g., working backwards, looking for patterns and relationships; guess and check; making tables, charts, or organized lists; solving a simpler version of a problem, drawing a diagram; or creating a model)
 - c. Verify and interpret results with respect to the original problem.
 - d. Determine if the solution of a problem is reasonable.
 - e. Solve problems using manipulatives, graphs, charts, diagrams, calculators, and other technological devices (i.e., Smartboard, iPad, etc).
 - f. Demonstrate that a problem may be solved in more than one way.
 - g. Exhibit confidence in their ability to solve problems independently and in groups.
 - h. Display increasing perseverance, and persistence in problem solving.

2. Students will use reasoning and proof to be able to:
 - a. Use models, known facts, properties, and relationships to explain their thinking.
 - b. Justify solution processes and answers (e.g., "I chose this method to solve the problem because...").
 - c. Draw conclusions using inductive reasoning.
 - d. Identify the missing information needed to find a solution to a given story problem.
 - e. Use patterns and relationships to analyze everyday situations (e.g., count by fives).