# Assignment Summary

For this assignment, you will find an answer to an everyday problem. Choose a problem that you think can be solved by developing a new technology or applying an existing technology in a new way. You will then conduct research and use your findings to create a multimedia presentation.

Background Information

Science and technology improve society and meet our needs. New tools and ideas improve our quality of life. Solutions take time to develop. Sometimes the ideas and knowledge exist but technological challenges occur. At other times, someone uses existing tools in a new way to solve an old problem. Use your knowledge and the tools available to develop a solution to an everyday problem.

Materials

* Internet access
* Newspapers
* Periodicals
* Presentation software
* Word-processing software

# Assignment Instructions

For this project, you are expected to submit the following items:

1. A multimedia presentation of your problem and proposed solution that includes the following:
   1. A title slide
   2. A detailed description of one problem you will try to solve
   3. A list of possible solutions to the problem you selected
   4. A detailed outline of one possible solution to the chosen problem
   5. A list of challenges you would anticipate for finding and putting in place a solution to the problem
2. A word-processing document with any notes you took while researching the project, including the list of problems you considered and a list of possible solutions

**Step 1: Prepare for the project.**

1. Read through the guide before you begin so you know the expectations for this project.
2. If there is anything that is not clear to you, be sure to ask your teacher.

**Step 2: Identify personally relevant scientific or technological problems.**

1. Make a list in your science journal of problems in your everyday life that can be solved by technology. Choose problems that are important to you.
   1. Start by thinking of challenges you face in your daily life. For example, how might you keep a pet dog from jumping on the counter?
   2. Write a brief description of each problem.
   3. Prioritize your list to identify the problem you feel you could address successfully.
   4. Select one problem to try to solve. Review your choice with your teacher before moving to the next step.

**Step 3: Think about technology that could help solve the problem.**

1. Identify two or more ways to solve the problem.
   1. Use the Internet, newspapers, and periodicals to research possible solutions. Make sure you keep track of any sources you used. Have other people found solutions you could use in your situation?
2. Select what you feel is the best possible solution

**Step 4: Outline how you would test your primary solution.**

1. Create a detailed list of steps of your solution and what you need to do to make it work.
2. Predict challenges that might keep your solution from working.
   1. Include scientific and technological challenges.
   2. Include challenges with respect to implementing a solution in your community.
      1. Identify individuals/groups that would support or reject your ideas.

**Step 5: Prepare a presentation.**

1. Using multimedia software, present your work.
2. Create one slide for each of the following:
   1. A title slide
   2. A detailed description of one problem you will try to solve
   3. A list of possible solutions to the problem you selected
   4. A detailed outline of one possible solution to the chosen problem
   5. A list of scientific or technological challenges you would anticipate for finding and putting in place a solution to the problem
   6. A list of possible societal or community challenges you would anticipate for finding and putting in place a solution to the problem
   7. A list of the resources you used, with citations
3. On each slide, include bullets as talking points.
4. On each slide, include a relevant image or visual aide.

**Step 6: Evaluate your project using this checklist.**

If you can check each box below, you are ready to submit your project.

* Did you identify personally relevant problems and list them in your word-processing document?
* Can the problems be resolved with science or an existing technology?
* Did you select one problem and describe it in detail?
* Did you create a list of possible solutions to your problem and explain why you chose the solution you presented?
* Did you develop a detailed, step-by-step approach for solving the problem?
* Did you list scientific, technological, and community challenges that might make it difficult to solve the problem?
* Does your presentation include all of the slides listed in Step 5?
* Do your slides use text and visuals?
* Did you include a final slide listing any Internet, newspaper, or periodical resources you used in this project as well as citations?

**Step 7: Revise and submit your project.**

1. If you were unable to check off all of the requirements on the checklist, go back and make sure that your project is complete. Save your project before submitting it.
2. Turn in your notes and final multimedia presentation to your teacher. Be sure that your name is on all your work. Make sure your multimedia presentation has a title slide.
3. Submit your multimedia presentation through the Virtual Classroom.
4. Congratulations! You have completed your project.