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ARD - 3.1.2 Resources

Project List of Materials:

- Box - any size box will be able to be used, the results will vary slightly but there is no right or wrong answer.
- Marker - any type of marker will work, as it is only being used to mark locations.
- Tape Measure - standard tool used in construction and agriculture.
- Paper - utilized daily by students and teachers.
- Pencil - utilized daily by students and teachers.
- Calculator - formerly taught skill for use, but could be reviewed before lab begins.

1. When materials are scarce, researchers will have to adjust their procedure and experiment style to accommodate their needs. Sometimes there are alternates available to use and the experiment will not be adjusted too greatly. It could be that there are no rulers, but there are tape measures, which would be an easy fix.
2. Substitutions will affect the step-by-step procedures because the researcher will have to remember to make the changes to the list. Sometimes the researcher could list the alternatives to use within the procedures so that when the experiment is recreated, the individual can accommodate to the materials that they have. Different materials may need to be explained how to use them in the procedures.
3. Details about safe use should be included in the procedures so that the experiment will be carried out safely and the individuals conducting the experiment are less likely to be hurt. The procedures should be read before the experiment anyway, so doing this will prepare the researcher for the different uses within the experiment.