Engineering a Story: Baby Bear Goes to the Zoo

Begin by explaining the engineering process to students. This should include identifying a problem, listing what is known about the problem, generating solution, designing/building a prototype, improving upon the prototype and sharing the final solution.

Then, read Baby Bear Goes to the Zoo by Lorette Broekstra.

Have students brainstorm ideas about how Baby Bear could find his mother. List all possibilities.

Divide the answers into three groups; ordinary, innovative and magical. Explain to students you will be working for the innovative list. We don’t want to do ordinary things that have been done, and we don’t have magical powers for the third list. This will teach the students about boundaries and restrictions and engineering.

Have the students draw and build a prototype from recyclables.

Compare the designs and discuss how they are the same and different. What are the advantages and disadvantages to each one? Using this information, have students think about how they can improve on their prototypes. Have them make changes.

Once they are done they can write a letter to Baby Bear explaining they have solved the problem.