



## Westlandia Harvest Activity

In the book *Westlandia*, Wesley did not fit into our society, so he made his own world, where he did. He created a culture where his ideas and creativity were brought to life. Wesley used his knowledge of STEAM subjects to fashion a world that provided all of the necessities that he needed.

Much like *Westlandia* Makerspaces/culture promotes the use of creativity to harness the knowledge and skills that students obtain in the classroom. It goes beyond student writing tests and assignments, to allow for the creative process that is so important in engineering to take place.

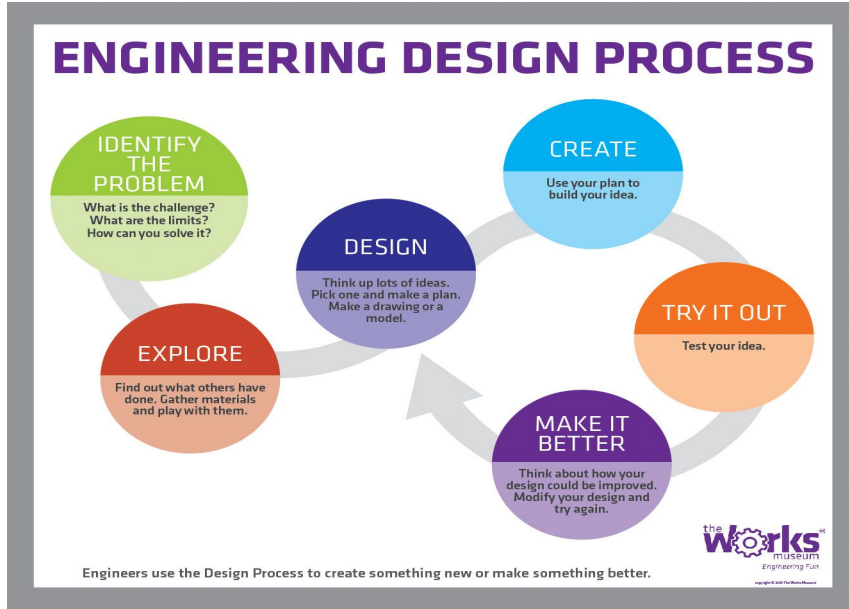
Wesley applied his previous knowledge in *Westlandia* to create food, games, clothes and more. The book helps to promote many of the 21<sup>st</sup> century skills that are necessary for students in today's society. We see Wesley look past social struggles to find his own happiness in society.

Throughout the story, Wesley was innovative and used what was available to him to create his culture. He changed the traditional functionality of many real world objects, to suit what he needed to do in his culture. Often times, in Makerspaces, remixing objects is good way to initiate the Making and design process.

### Challenge

For this challenge, you will be given a Sphero, cardboard and MakeDo supplies to create a vehicle that can be used to help Wesley harvest the crops he has grown. You will need to take into consideration the capabilities of the Sphero, while designing your vehicle.

Before you start, consider the Engineering design process.



What is the challenge that you have been given? Are there any limitations to completing this challenge? How might you approach the challenge?

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Take some time, and explore the internet. What have other people created that will help inspire your creation? Where might you find some ideas? (Hint: check out <https://edu.sphero.com/cwists/63/preview>) Brainstorm some ideas that you might want to implement.

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Design Considerations

Aspect of Vehicle	Design Consideration	Rationale
Wheels	One wheel at the back, two at the front	The wheel at the back will help steer the vehicle, while the two at the front stabilize

Design Concepts

Use this space to draw a vehicle concept - what do you envision your vehicle looking like? Think about the different angles that you might look at your vehicle from.

Materials

Indicate the materials that you will be using to bring your design concept to life.

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Now that you have made a plan, you are ready to implement it. As you build, ensure that you are making observations and thinking of ways that you can be proactive and mitigate problems that might occur, later on in the process.

Process Procedure

As you create, write down the steps that you took to create your vehicle.

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Reflection

Now that you have created your vehicle, try it! Consider the following questions, as you reflect and think of ways that you might be able to improve your design.

What worked?

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What didn't work?

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What needs to be changed?

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How might you approach making those changes?

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Now that you've thought of the modifications that could make your design better, implement them! After you make the changes, try your vehicle again!

#### Making Connections

Now that you have gone through the design process to complete the challenge, consider how your vehicle might help propel the culture within Weslandia. Why is your invention necessary? How does it help the people who live in Weslandia? What are some other innovations that could contribute to the success of Weslandia?