

How Does it Grow?

Orange



What tasks are performed by hand?

What tasks are performed by machine?



Describe the working conditions and tasks of a farm worker on an orange farm.
What would a job description look like to hire workers for this farm?

Report to the **Engineer**

Identify one step of production to mechanize:

Choose one step in the food production process where you want to reduce manual labor. Describe how humans currently perform this step and explain what tasks a machine or robot would need to replicate to complete it successfully.

Identify constraints and requirements:

Explain what the machine or robot needs to do to successfully harvest crops. Think about whether it must recognize the size, color, and ripeness of the fruit, and if being too rough could damage the plant. Consider if the fruit or vegetables are easy to see or hidden under leaves and branches, and whether they bruise easily when handled. Include any other challenges the robot might face while picking produce.

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Cucumber



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Asparagus



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Cauliflower



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Bell Pepper



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How Does it Grow? **Avocado**



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Blueberry



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Peach



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Raspberry



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Apple



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