

Notice Problems

Describe problems you notice that a person (could be you) or an animal or a plant has. This problem could be something that is difficult for them to do, puts them in danger, makes their day harder, or causes them to struggle. It could also be something that would make their life better – more fun, easier, happier, etc.

For each problem, identify who has the problem and describe what it is.

Who? _____

Problem _____

_____ STEM Solvable

Who? _____

Problem _____

_____ STEM Solvable

Who? _____

Problem _____

_____ STEM Solvable

Notice More Problems

Who? _____

Problem _____

_____ STEM Solvable

Who? _____

Problem _____

_____ STEM Solvable

Who? _____

Problem _____

_____ STEM Solvable

Who? _____

Problem _____

_____ STEM Solvable

Notice More Problems

Who? _____

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Notice More Problems

Who? _____

Problem _____

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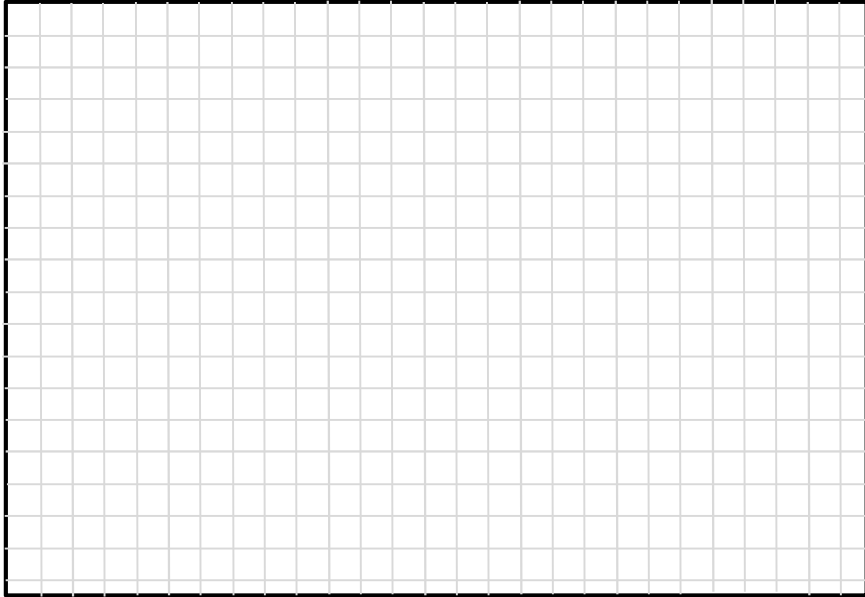
Who? _____

Problem _____

_____ STEM Solvable

Brainstorm Solution

Imagine a STEM solution for one of the problems you identified. Draw and describe the solution below. Don't worry about whether the solution seems possible or not. Just think of ways you could make life better for the person, animal, or plant.



How will your solution help the person/animal/plant with their problem?

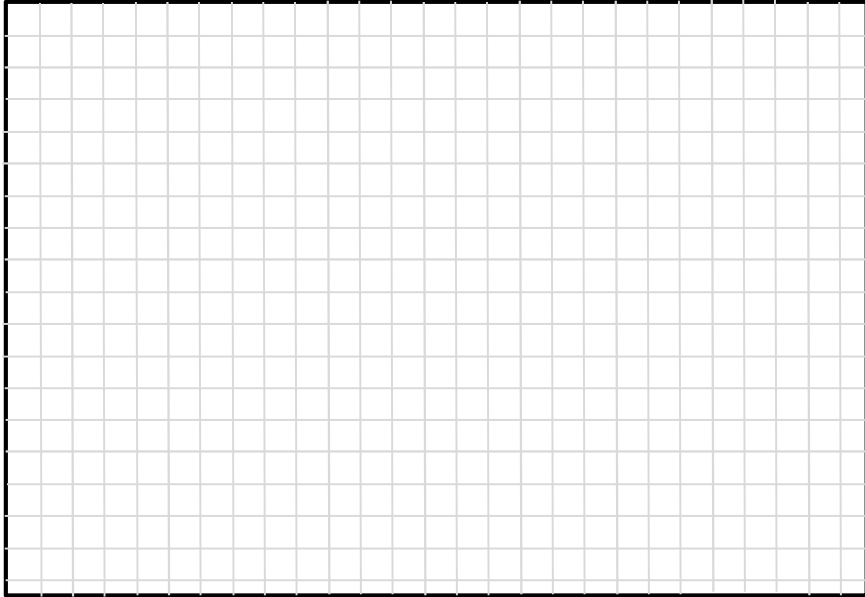
How will you know if it is doing what you want?

What challenges do you think you will have when trying to design a prototype/model of your solution?

Can you think of modifications to your idea, which would make it more likely to solve the problem? Describe them.

Brainstorm Solution

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How will your solution help the person/animal/plant with their problem?

How will you know if it is doing what you want?

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Describe a modification can make to your prototype/model.

Make the modification.

Describe the procedure for a test you will conduct to determine if the modification has made the prototype/model perform better, the same, or worse than before. How will you know if it is better?

Test Procedure: _____

Data Table

Independent Variable:	Dependent variable: _____ Units: _____				
	Units:	Trial 1	Trial 2	Trial 3	Trial 4

Prototype/Model is: Better / Same / Worse
(circle one)

Observational or Quantitative Evidence

From the test you did, describe either observational data or quantitative data to support your claim that the prototype model is better, the same, or worse.

Modification: Keep / Kick
(circle one)

Final Prototype/Model

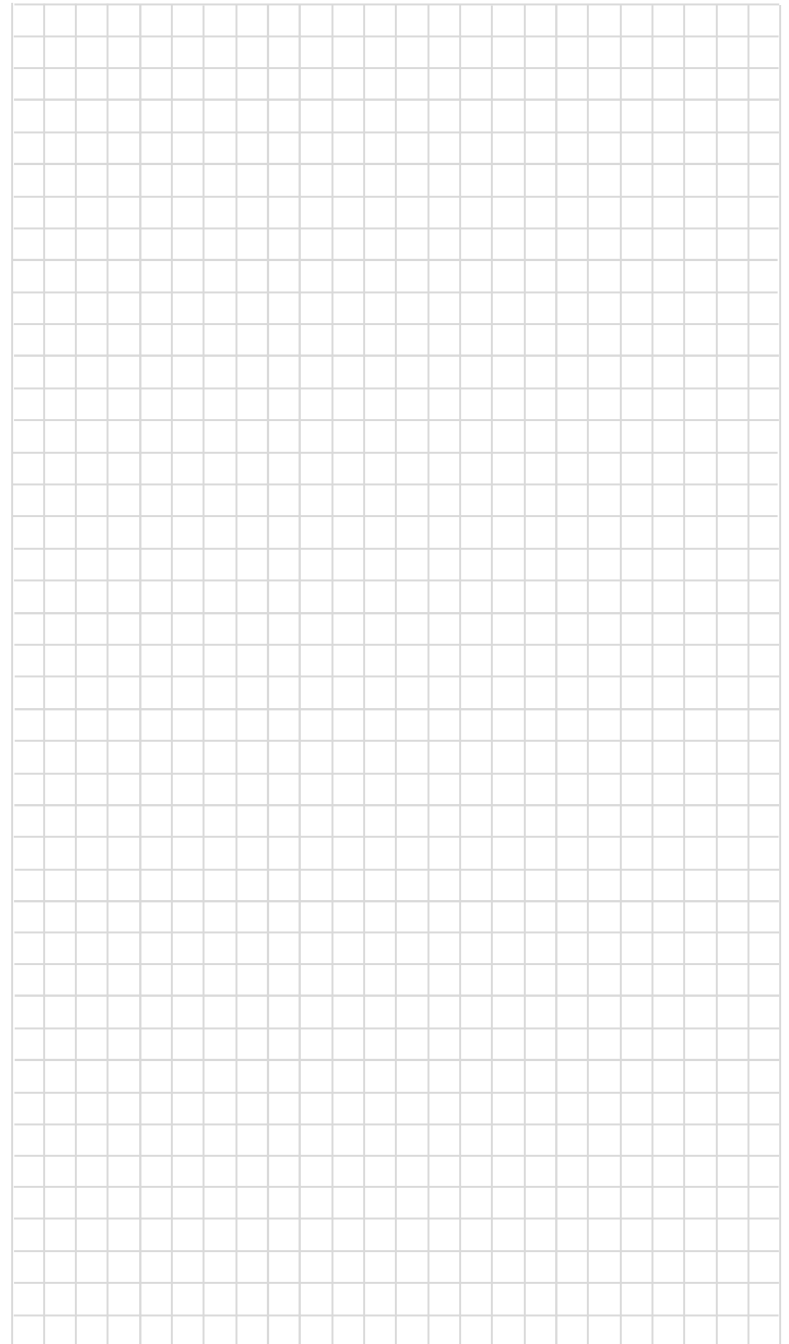
Who? _____

Problem _____

Description of Final Prototype/Model

How does it solve the problem?

Draw and label final prototype/model.

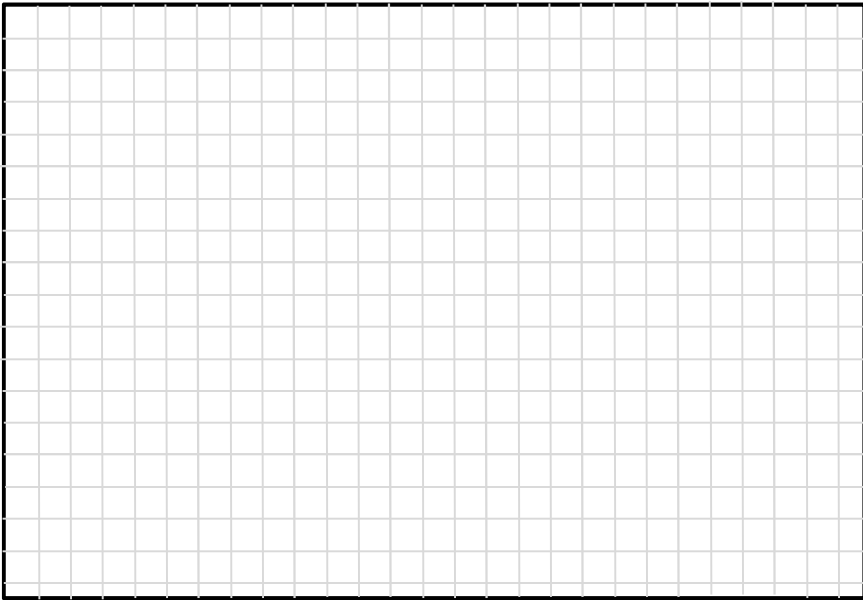


Marketing

Name of Product _____

Slogan _____

Company or Product Logo



Key Features _____

Website Design for Product

Make a sketch of what the homepage for this product would look like. Be sure to include your product logo and slogan on the site.

