Design Challenge Level 1: What do you want to change?

Think about the different groups that you are a part of: your family, your school, your city, your extracurricular clubs or sports teams, etc. Think about the water conservation issues that might be present in one of these groups. Do your family members leave the water on while brushing their teeth? Do the sprinklers on your school grounds spray a lot of water into the air?

How do you get a feel for the situation? Discuss the following issues with your group, and keep track of your progress in your design notebooks or on your design challenge blog.

- Choose an issue to focus on. Consider how much time you have to complete this design challenge.
- Observe what’s going on and who is involved.
- Reflect on what you notice and what concerns you.
- What do you already know about the issue? What do you need to find out?
- Interview those affected by the issue. Ask them questions to better understand what inspires and motivates them, what they value, and what their constraints are.
Design Challenge Level 2: *How can you make a change?*

Imagining change means brainstorming the possibilities. And the possibilities multiply when you can brainstorm without constraints. Thinking outside of the box and sharing your ideas can lead to highly successful and perhaps unforeseen solutions.

**How do you decide on a design?** Discuss the following issues with your group, and keep track of your progress in your design notebooks or on your design challenge blog.

- Set yourself a time limit and brainstorm as many ideas as you can. Really go for it! Set a goal-10, 20, 100 ideas? Make a list or draw pictures of anything that comes to mind, no matter how silly or impossible it might seem.

- Share your ideas with others. Can any of your ideas be combined with someone else’s? Are there common themes or categories that your ideas can be organized into?

- Vote on a subset of solutions. Draw out the pros and cons of each solution.

- Vote on the best solution.

**Notes:**
Design Challenge Level 3: Make the change!

Put your hard hats on! Now is the time to get to work. Remind yourself why you have accepted this challenge! What is motivating you to design a solution? Who is going to benefit or be impacted by your solution?

**What do you need to take action?** Discuss the following points with your group, and keep track of your progress in your design notebooks or on your design challenge blog.

- Make a list of what resources you will need (supplies AND people) and where/how you will get them.

- Draw up a plan for the steps that you will take to achieve your goal.

- Divide up the work.

- Draw up a timeline for your plan and set goals for completion.

- Make it happen! Implement your plan.

- Reflect on what happened. What worked? What didn’t work? What could you change? What did you learn?

**Notes:**
Design Challenge Level 4: Share your experience

Congratulations on completing your design! You should be proud of your accomplishment and want to share it with others. Think about a time when someone else’s inspiring story has motivated you to take action. Inspire others to make changes and design solutions by sharing your own experience!

How will you empower others? Discuss the following points with your group, and keep track of your progress in your design notebooks or on your design challenge blog.

- Share your story at a school assembly.

- Publish a blog that other youth can read.

- Create a Facebook page to showcase your project.

- Share your experience on Twitter. Encourage others to use the same hash tag to share their stories.

- Post a short video onto Youtube about your solution.

- Present your solution to the Principal or at a local community meeting.

- Send your findings to your local newspaper, or invite a journalist in to your classroom.

Notes: