

Design Thinking: Living Well

Creating An Active Healthy Community Space

Introduction

One hundred years ago, the average baby in America could expect to live about 35 years. Today, you can expect to live more than twice that long, at least 70 or 75 years. There are many reasons for this increase in life expectancy: better food, improved hygiene, and modern medicines. And our lives have not only become longer; our quality of life is better. If you take care of yourself, you can expect to stay active for many, many years.

Last year, something alarming happened. For the first time in over 20 years the life expectancy of a new baby actually went down. Many factors are thought to be at the root of this problem, but most researchers agree that we need to refocus on finding ways to live healthy and happy lives.

We can apply ideas from science, technology, engineering, and math (STEM) to find ways to stay active and healthy. Scientific studies help us understand more about how nutrition, stress, exercise, and other factors combine to affect our health. Engineers are inventing new ways to help us be healthy, from the design of buildings to new exercise technology. The power of social media is being used to help us stay motivated, and many new apps are helping us keep track of our diet and exercise.

Scientists and engineers are always working to design solutions to help us stay active and healthy. These are complex problems, and they require complex thinking. Design thinking is a powerful way to develop solutions to complex problems. It starts with defining the problem and understanding how that problem affects people. Then it requires brainstorming many, many ideas and designing and testing prototypes of those ideas. In this type of design, failure is just part of the process. There is room for improvement in every design.

There is much we can already do to stay active and healthy. But there is also much more we could do. And that is where you come in. By applying your understanding of STEM skills and knowledge and by using design thinking, you can come up with new and innovative solutions to help YOUR community stay active and healthy.

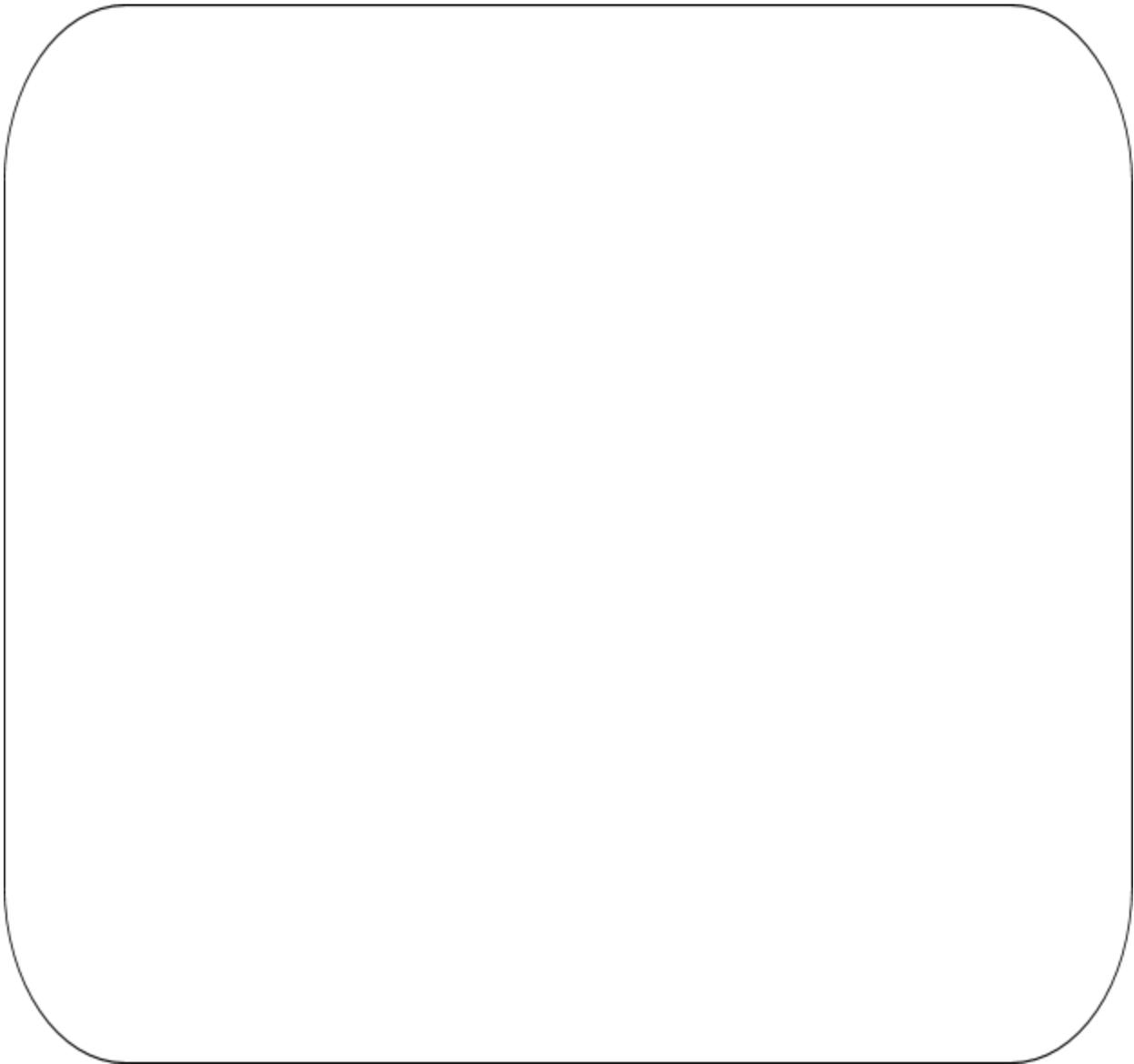
Your **Day of Design Challenge** is to design an active, healthy community space as a solution to help your community live well.

PART 1. IMAGINE A SOLUTION

STEP 1. Imagine an “Ideal” Solution

Talk to your team. What do you think the “perfect” solution for an active, healthy community space?

Sketch your idea here:



STEP 2. Dig into The Problem

Now do your research on the problem of an active, healthy community space. Go online. Talk to people who live in your community. If possible, interview someone who works to keep people active and healthy. These are your “users”.

Try to get answers to as many of these questions as you can, and ask other questions that you come up with!

What strategies are already being used to create active, healthy community spaces? Which of these work and which don't work? Why?

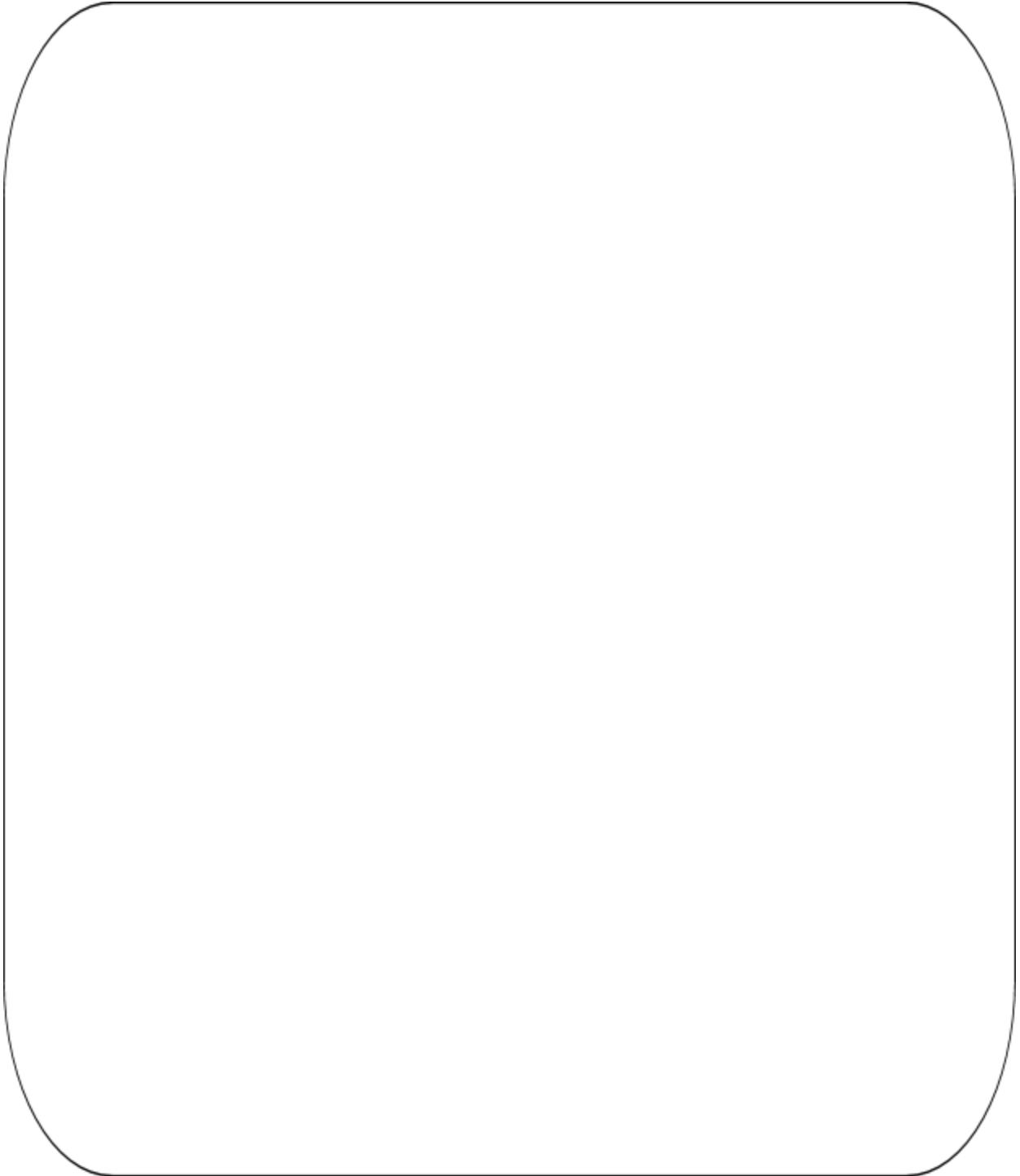
Capture what you learn here:

What is the most important thing your users want active, healthy community spaces to accomplish?

Capture what you learn here:

What does your users' "ideal" solution for an active, healthy community space look like?

Sketch or describe it here:



What is stopping them from making or using their “ideal” solution? Is it money, rules, lack of technology or materials?

Capture what you learn here:

What were the key findings from your research?

Capture what you learn here:

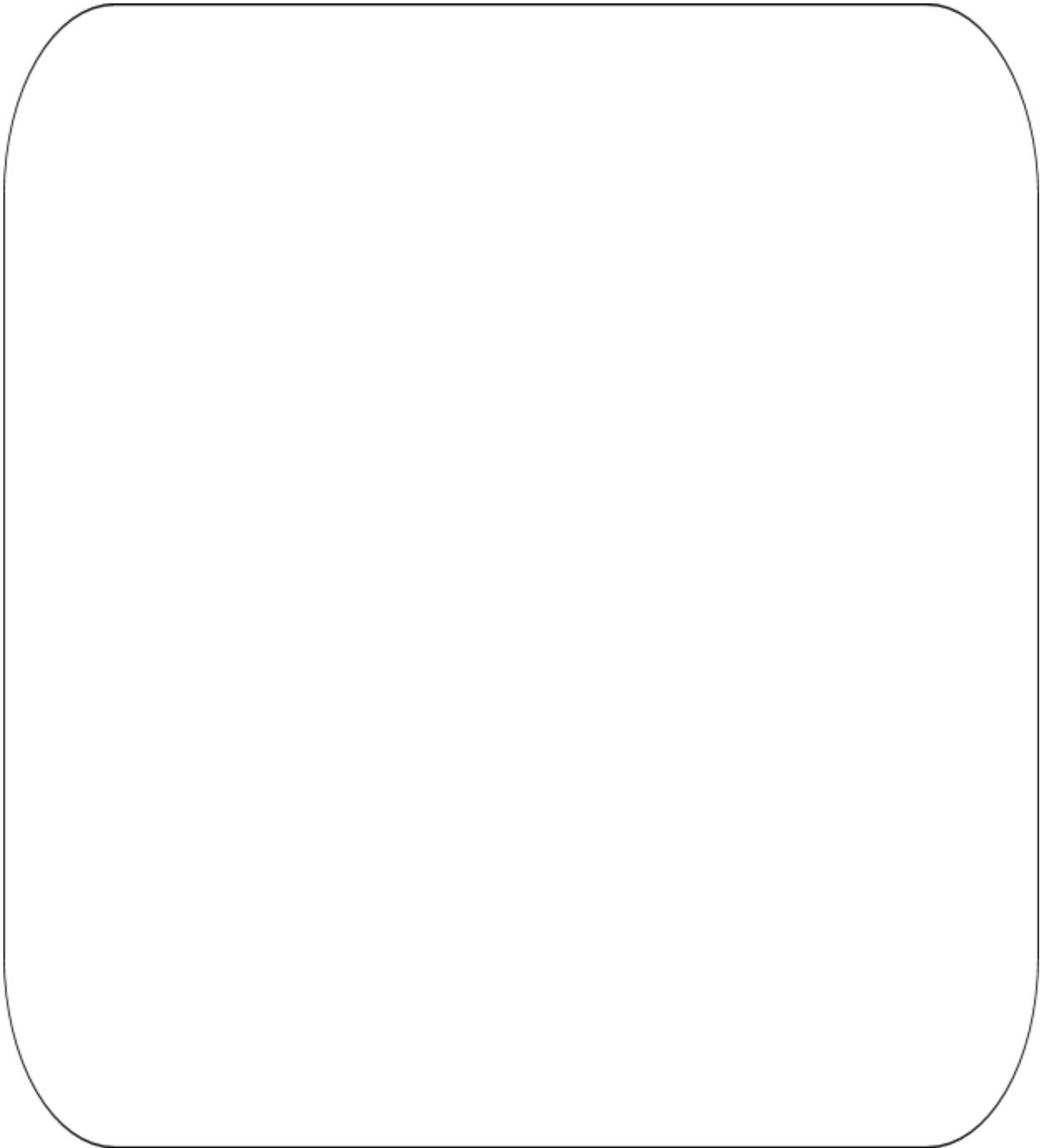
What features of your “ideal” solution do you think will work and which won’t? Why?

Capture what you think here:

STEP 3. Create Alternatives to Test

Imagine at least 3 different ways to meet your “users” needs. Make sure that each is as different as possible from the next.

Sketch your 3 or more ideas here:



Ask your “users” or other teams in your classroom what they think of your ideas.

Capture what you learn here:

PART 2. PROTOTYPE YOUR SOLUTION

STEP 1. Reimagine Your “Ideal” Solution

Based on all the insights you have gained, what do you NOW think the “ideal” solution is to create an active, healthy community space?

Sketch your idea here:



STEP 2. Create a Prototype

Using the resources available to you, create a prototype of your solution. It might not match your ideas completely. But it should help bring your ideas to life for your users, and allow you to start testing them.

Describe how you will create your prototype here:

STEP 3. Test Your Prototype

Using the resources available to you, test your prototype. If possible, ask your “users” what they think.

Describe how you will test your prototype here:

Capture what you learn here:

STEP 4. (OPTIONAL). Refine Your Prototype

If you have the time and the resources, use what you have learned by testing your prototype and improve your solution. You can do this once, twice, or as many times as possible.

PART 3. SHARE YOUR SOLUTION

Now it's time to tell your users and your community about your solution. Using the resources available to you, create a presentation (with pictures if possible) or a short (1-minute video) that describes your solution, how it works, and anything you have learned about it. Don't be afraid to share ideas or designs that didn't work. These are important because they tell you what the tough challenges are and help you make better solutions for the future.

Ask your teacher to upload your presentation / video to the **Day of Design** website so that you can get your **Living Well Design Thinking BADGE**.

How can you bring your prototype / solution to your community? What do you need to make this happen? Who could you work with? Are there other opportunities to help your community stay active and healthy? Be creative, get involved! Then make and share a video to tell the story of your adventure as a DESIGN THINKER!