

ENVIRONMENT

YOUTH DESIGN CHALLENGE

4th September - 4th December 2020



YOUTH GUIDE TO RUNNING THE YOUTH DESIGN CHALLENGE

This design challenge can be completed as an individual or in a team. It will take about 90 minutes in total plus time to upload projects to the Challenge page.

IN ADVANCE

- **Look at the challenge website so you have some background information - bit.ly/ycaenviro**
- **Print the worksheets (one set per person) or get the PowerPoint files ready if you don't have a printer**
- **Everyone should have a pencil and something to lean on**

DURING

- **Introduce the challenge and then make sure everyone has a partner. If you've got an odd number of people you can work in a group of three or someone can interview a parent or someone else you know.**
- **Follow the time guides and use the slides to explain each step**

AFTER THE CHALLENGE

- **Upload your ideas on to the Challenge website to be considered by the Judging Panel!**
- **You may wish to extend the activity by doing additional sessions to take you through customer value proposition, business models, validation, budgets, branding and pitching! Get in touch with Young Change Agents for these resources.**

1. Choose your focus area

Choose one of the four challenge areas:

- Reduce food waste and/or overconsumption
- Decrease greenhouse gas emissions from food production
- Encourage better use of our water resources
- Improve energy efficiency and use of renewable energy

Decide where you want to create change:

- In your home
- In your school
- In your community (e.g. community spaces, transport)

2. Problem Exploration

Dive deep into the problem area you have chosen - you want to find out why the problem is happening in that context. The first activity is to ask the question, “why” and then ask “why?” again until you get to what we call the “root cause” or the bottom of the problem. For example, if you have chosen the challenge “reduce food waste” and picked “at schools” as your area you want to effect change, your conversation might go something like this:

- “Why is there food wastage at school?”
- Because kids don’t always like what’s in their lunchbox
- Why?
- Because they don’t make their own lunch.
- Why?
- Because their parents do it for them!

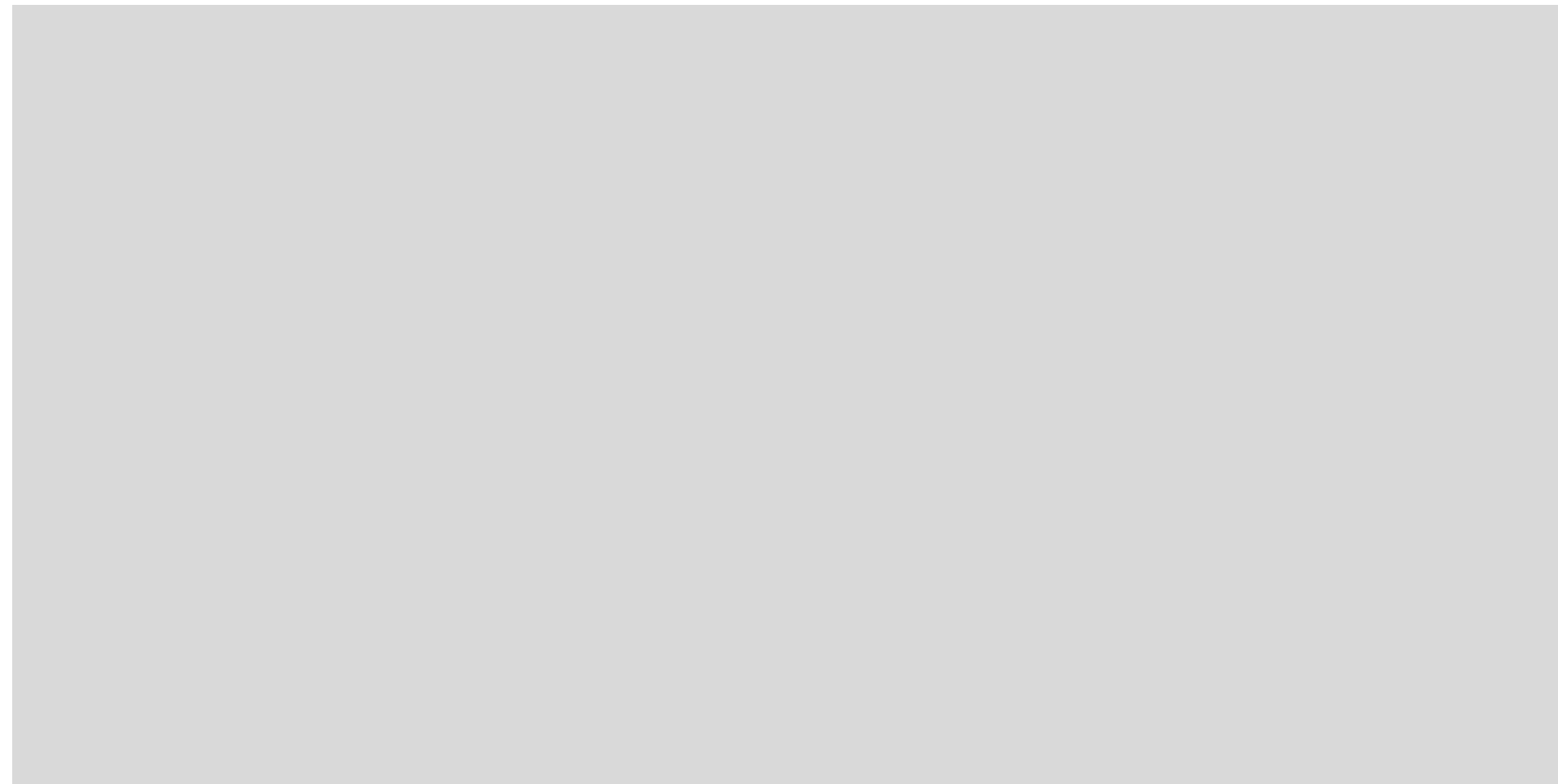
So what if we made it easier for students to create their own lunches? Of course, there are many reasons why there is food waste at school - you can pick lots of reasons and follow the same process to come up with a different root cause. In reality, solving problems needs to be done in multiple ways, and all together! That's why the Global SDGs are a call to action for everyone to work on these together in lots of different ways!

3. Empathy Interviews

EMPATHY INTERVIEW

(5 mins).

INSIGHTS: Capture your insights in this box. You can use the sample questions on the worksheet provided and/or come up with your own!



From your empathy interview you will get interesting insights about some problems this person might have in helping to be part of the solution. For example, Sarah might use her clothes dryer everyday as her backyard is small and she doesn't have space for a clothesline.

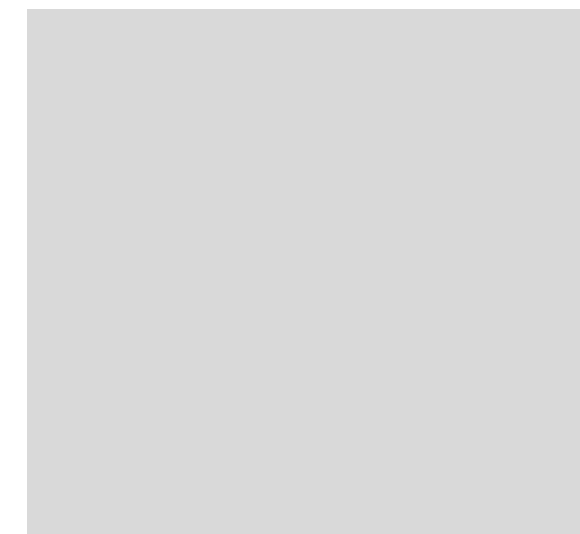
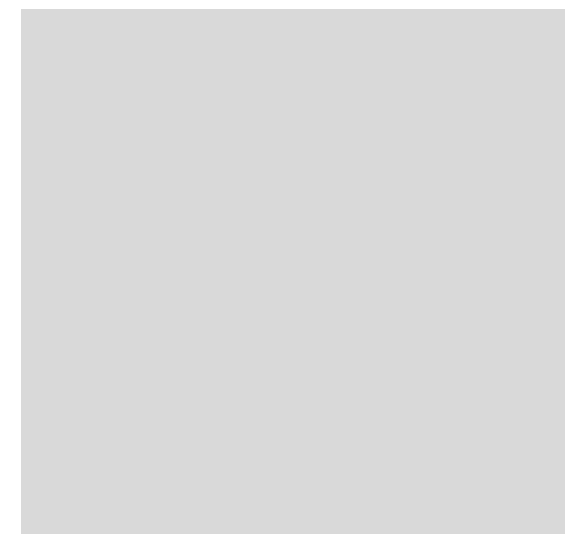
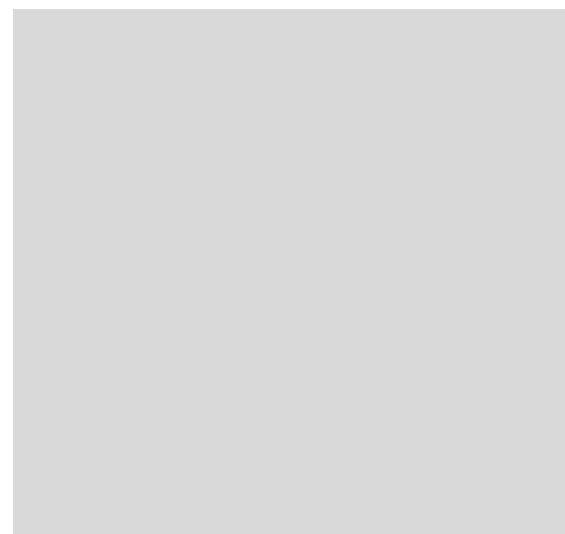
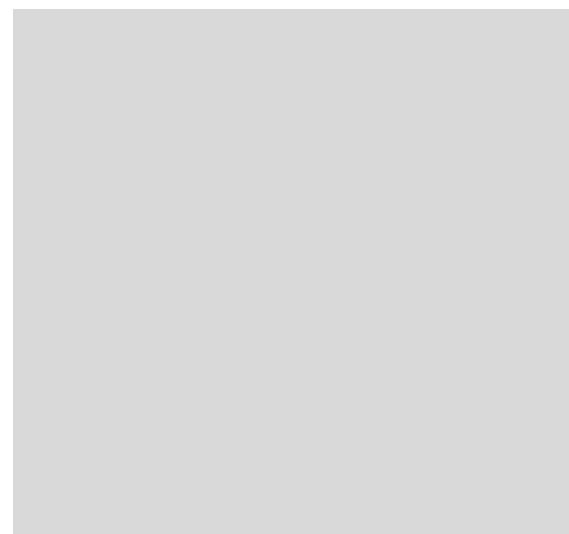
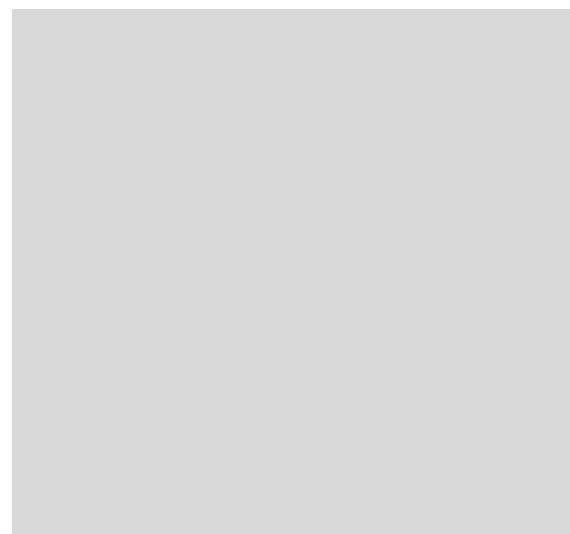
4. Ideation

TURN THE PROBLEM INTO A "HOW MIGHT WE.....?" (3 MINS)

eg How might we help Sarah create a better clothes drying solution for small backyard?

How might we _____ ?

IDEATION: COME UP WITH 5 RADICAL SOLUTIONS TO THE PROBLEM! (INCLUDE SKETCH)(6 MINS)



5. Validation

SHARE IDEAS WITH YOUR PARTNER AND CAPTURE THEIR FEEDBACK AND CIRCLE THEIR FAVOURITE IDEA (5 MINS)

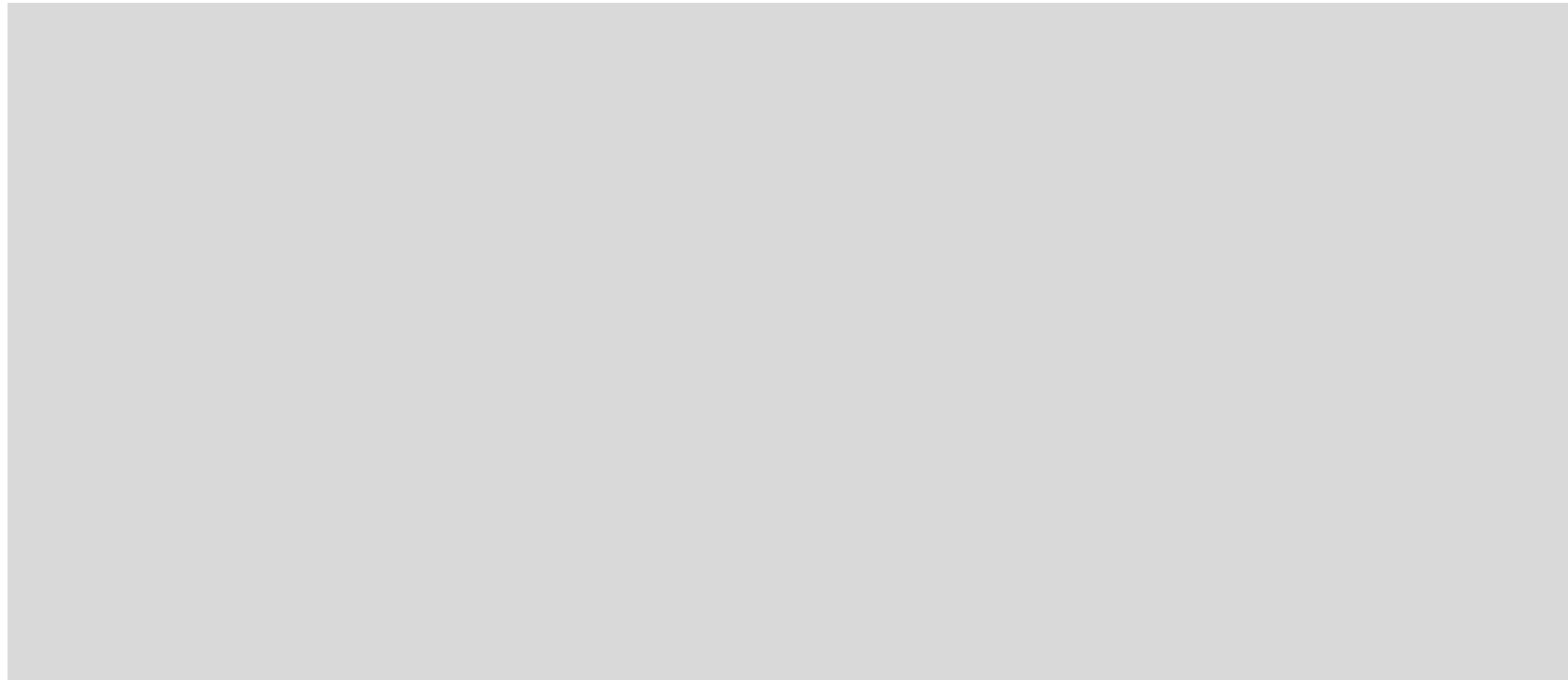
WHAT WAS IT THAT THEY LIKED ABOUT THIS IDEA - HOW DID THEY ENHANCE YOUR ORIGINAL IDEA? (3 MINS)

SHARE THE TOP IDEA WITH TWO OTHER PEOPLE VIA PHONE OR IN PERSON! (10 MINS)

WHAT FEEDBACK DID THEY HAVE AND WHAT DID YOU LEARN THAT MIGHT HELP YOU IMPROVE ON YOUR IDEA? (5 MINS)

6. Prototyping

FINAL PROTOTYPE: DRAW UP YOUR FINAL IDEA TO PRESENT (10 MINS)



SAMPLE EMPATHY QUESTIONS: Reduce food waste and/or overconsumption

Home

How much food waste in your home is there?

What is the biggest source of food waste in your house? (What do you find yourself throwing away?)

Why do you think that happens?

Have you tried to do anything about it or what is stopping you from reducing this waste?

Finish this sentence, "I want to reduce food waste, but I....."

School

How much food waste in your school is there?

What does it tend to be? (What types of food?)

What happens to the food waste (including packaging)?

Why do you think there is food waste at school?

If you had \$1000 what would you do to reduce food waste at school?

Are there students at your school who don't have enough food?

Does your school do anything currently with extra food or to reduce food waste (eg use over-ripe bananas to make banana bread or grow herbs that are used only on-demand)

Community

How much food waste is there in the community? (local shops, in public spaces, at events etc)

What food waste is the most common?

What happens to the food waste generally?

What do you think could happen to it?

Finish this sentence, "If only the food waste could be..."

SAMPLE EMPATHY QUESTIONS: Decrease greenhouse gas emissions from food production

Home

Do you currently grow or produce any food for your own consumption? If yes, tell me more about that! / If no, have you tried or can you tell me what is stopping you?

Is there any food you would like to produce yourself?

What would be something that would really help you produce your own food?

Finish this sentence, "I can see myself producing....."

School

How much food is brought into the school each year do you think?

Is any food grown or made on site (including animals/by-products of animals)? If yes, tell me more about that! / If no, have you tried or can you tell me what is stopping your school?

What would be something that would really help your school produce their own food?

What sort of fresh produce is produced in your area (ie what do local farmers or people around you make/produce?)

Finish this sentence, "I can see our school producing....."

Community

What sort of food is grown or produced in your local community?

How much of that food is consumed by your local community versus sent out of the community (approximately)?

Do you see any opportunities to create or make more food in your community using existing facilities or land (not by deforestation)?

What would help your community produce some of its own food?

Is there anything about your community that comes to mind when you think about people who live there (for example, a high population of Italian-Australians or lots of young families)

Are there any community gardens/farms or any other type facilities like factories etc?

Finish this sentence, "our community could be producing its own.... If only we had....."

SAMPLE EMPATHY QUESTIONS: Encourage better use of our water resources

Home

Take me through a typical week - what do you use water for in your home? (Don't forget outdoor spaces!)

Do you know how much water you use?

Have you done anything to try and reduce your water footprint?

Is there anything you have seen in your friends homes you don't do in yours?

Finish this sentence, "My family could cut our water usage in half by...X". What is stopping you from doing that do you think?

School

Take me through a typical week - what do you use water for in your school? (Don't forget outdoor spaces!)

Do you know how much water you use?

Has your school done anything to try and reduce your water footprint?

Do you currently capture any rainwater at your school? If so, what is it used for?

Finish this sentence, "the easiest way we could cut water usage at our school is by.....". What is stopping you from doing that?

Community

What are some of the biggest usages of water in your community?

How much of that water usage is from rainwater or greywater (used water but not from toilets)?

Can you think of any water usage in your community that you think could be improved in order to reduce water usage? (For example, by using rainwater or greywater)

What are some innovative ways you know about that minimise our use of water?

What is stopping us from reducing our water usage in the community?

Finish this sentence, "If I was Mayor, I would cut water usage in the community by....."

SAMPLE EMPATHY QUESTIONS: Improve energy efficiency and use of renewable energy

Home

What sort of energy sources do you use in your home? What percentage of your energy use in your home is currently from renewable energy?

What uses the most energy in your home and how energy efficient are they?

What do you think about renewable energy? Do you use any renewable energy sources in your home? (Wind, solar etc)

How could you use less energy in your home? Have you done anything in the last 3 years to reduce energy consumption or to move to renewable energy?

School

What sort of energy sources do you use in your school?

What percentage of your energy use in your school is currently from renewable energy?

What uses the most energy in your school and how energy efficient is it?

What do you think about renewable energy? Do you use any renewable energy sources in your school? (Wind, solar etc)

How could you use less energy in your school?

Has your school done anything in the last 3 years to reduce energy consumption or to move to renewable energy? What's stopping your school do you think?

Community

What sort of energy sources are used in your local community? (Think about local facilities like libraries but also sporting grounds, transport etc)

What percentage of your energy use in your local community is currently from renewable energy? (Approximate!)

What uses the most energy in your community and how energy efficient is it?

What do you think about renewable energy? Do you use any renewable energy sources in your community? (Wind, solar etc)

How could you use less energy in your community? Has your community done anything in the last 3 years to reduce energy consumption or to move to renewable energy?

Finish this sentence, "If I were Mayor, I would reduce our energy usage by.....". What's stopping your community do you think?