

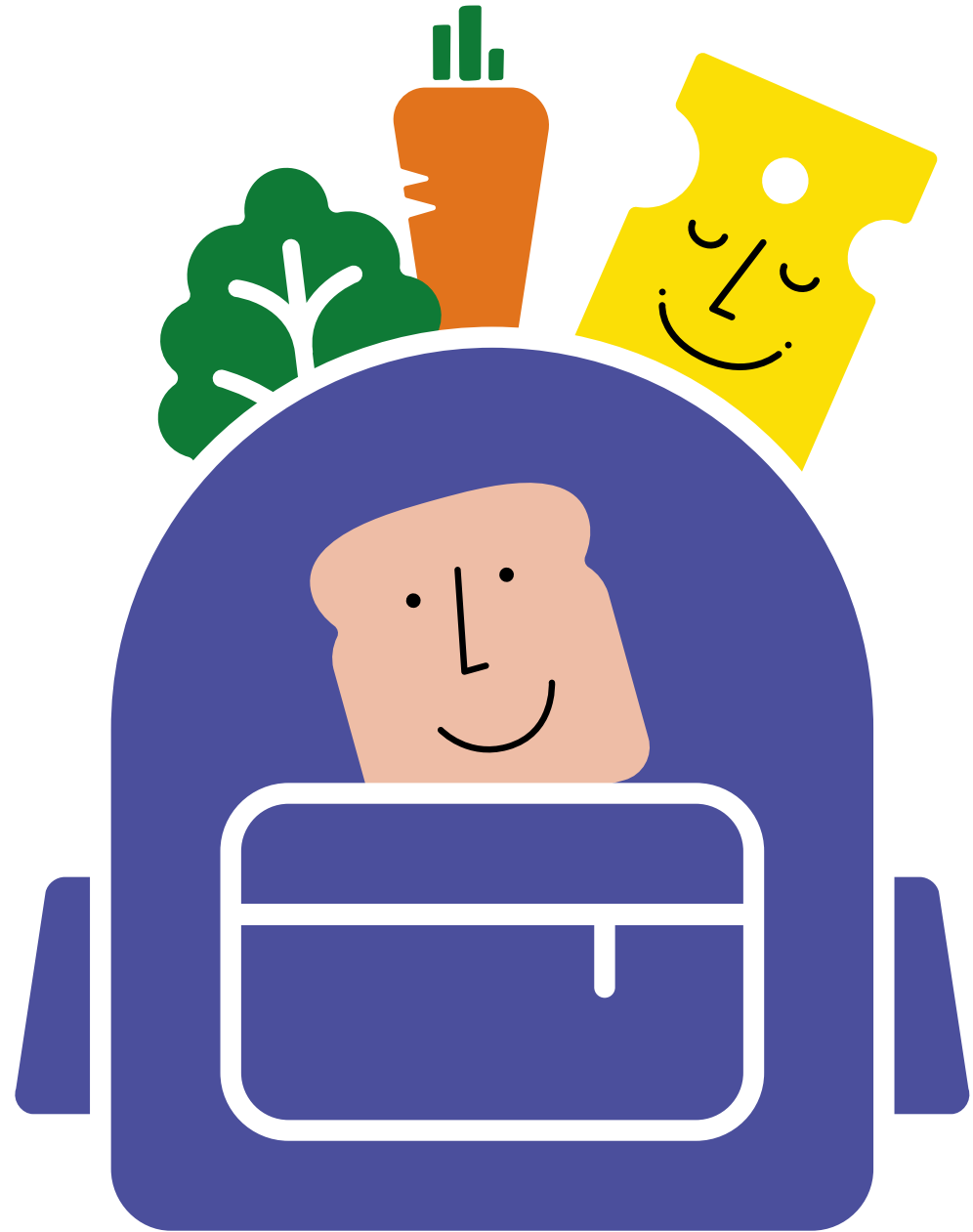


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# FEAST

FOOD EDUCATION AND  
SUSTAINABILITY TRAINING

## LESSON THREE



## LESSON 3: USING STEM THINKING FOR PROBLEM SOLVING



### WELCOME TO LESSON 3 OF THE FEAST PROGRAM!

— Allocated time: 45 minutes

— Resources required:

Internet access including

Student Resources - electronic or paper

Link: <https://education.ozharvest.org/student-resources/>

— STEM is a way to investigate and discover more about the world around us while having fun with Science, Maths and more. In this lesson we are going to use STEM thinking and science inquiry skills to be change-makers

— Change-makers:

- Dream big
- Take risks
- Explore
- Imagine new possibilities
- Show courage
- Express creativity
- Embrace challenge

### LET'S BEGIN OUR STEM CHALLENGES!

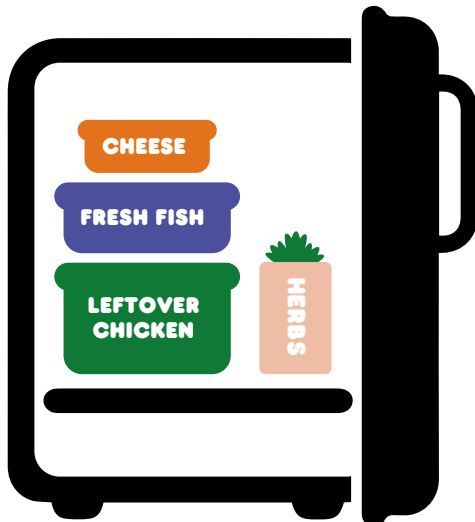


# ACTIVITY 1: STEM CHALLENGE - CREATE A HYPOTHESIS



— A hypothesis is an educated guess, or a guess you make based on information you already know. For example, I hypothesise that if bananas are left out for a week then they will turn brown. After you make a hypothesis, then comes the fun part: doing the science experiment to see what happens! This lets you discover if your hypothesis was correct or incorrect.

— Write your answer in the space provided on the right of this page or on the **Student Resources: STEM Challenge, Page 4.**  
Download document at <https://education.ozharvest.org/student-resources/>



## WHICH OF THE FOLLOWING IS A HYPOTHESIS AND WHICH ONE IS NOT? WRITE DOWN YOUR ANSWER.

1. If fruit is kept in the fridge it will last longer than in the fruit bowl

2. Wasting food is bad for the environment

3. If I keep bread in the freezer, then it won't go mouldy

4. A third of all food produced is wasted

5. Bananas are tastier than apples

## CREATE YOUR OWN HYPOTHESIS ABOUT A FOOD. WHAT DO YOU PREDICT?

I hypothesise that if...

then...

## ACTIVITY 2: STEM CHALLENGE - FUN FOOD SCIENCE



— Did you know that cooking is a bit like a science experiment as it causes a chemical reaction?

In science, 'a mixture' refers to a material that is made up of two or more substances. To make pancakes, bread, salads, dips and sauces you need to mix two or more ingredients together to make your delicious dish.



Watch the **Rescued Sunday Roast** video by OzHarvest (1:00min) and

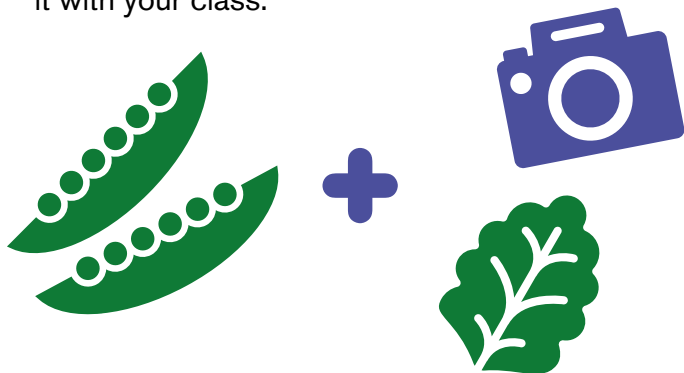
answer the following questions.

Link: <https://www.youtube.com/watch?v=OtFD-Ck5gZQ>

— With an adult present, try making your own **Rescued Sunday Roast** or wasty recipe.

Link: <https://education.ozharvest.org/home-resources/>

— Take a photo of the final product and share it with your class.



**AFTER WATCHING THE VIDEO, ANSWER THE FOLLOWING QUESTIONS.**

**1. WHAT HAPPENED WHEN THE FLOUR AND EGGS WERE ADDED TO THE MIXTURE?**

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**2. WHAT CHEMICAL REACTIONS OCCUR WHEN THE FRITTERS COOK?**

**A) DO THEY CHANGE FROM A LIQUID TO SOLIDS?**

Circle the right answer:      **YES**      **NO**

**B) DO THEY CHANGE COLOUR?**

Circle the right answer:      **YES**      **NO**

If yes, what colour do they change to?

**C) DID BUBBLES FORM ON THE TOP OF THE FRITTERS WHEN COOKING?**

Circle the right answer:      **YES**      **NO**

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**3. HOW MANY INGREDIENTS WERE ADDED TO THE MIXTURE?**

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**4. WHAT OTHER INGREDIENTS COULD BE ADDED TO THE FRITTER RECIPE TO PREVENT FOOD FROM GOING TO WASTE?**

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**5. HOW DOES THE RECIPE REDUCE FOOD WASTE?**

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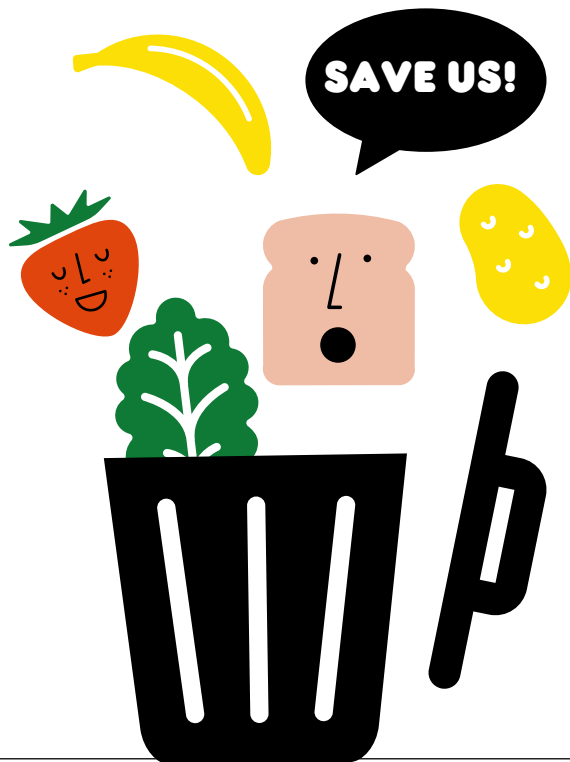
# ACTIVITY 3: STEM CHALLENGE

## CREATE YOUR OWN WASTY RECIPE



— Be creative and use STEM thinking to come up with a wasty recipe that could use **fruit or vegetables** that might otherwise be wasted, like wilted lettuce, bendy carrots or beans, floppy celery or soft tomatoes.

— Find some delicious inspiration here:  
Link: <https://education.ozharvest.org/home-resources/>



**WRITE OR DRAW THE STEPS INVOLVED IN MAKING YOUR RECIPE WITH THESE INGREDIENTS:**

**1 NAME OF THE RECIPE:**

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**2**

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**3**

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**4**

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**5**

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**6**

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