



Ling Lim

First released for Outbox 2021

mmu



Meal Plan
#121
60 mins

Starters 5-10 mins

Snack, Cackle & Pop..... 2 mins

Snack: Grab a snack before beginning

Cackle:



Pop: Stemillions playlist on Spotify:

bit.ly/stemillionsplaylist

Meet Her..... 5 mins

Ling has a degree in Civil Engineering with Computing and a PhD in Air Quality Modelling. Now, Ling's research looks into the environmental impacts of aviation industry.

Discuss:

- ★ What do you think of Ling's job?
- ★ What do you think civil engineering is?

Desserts 5 min

Share with us 1 min

Upload photos on [Twitter](#) or [Instagram](#) and tag @Stemettes and #Stemillions.

Ask Them..... 2 mins

Got a question? Ask Away! bit.ly/Ask-Away

Digest..... 2 mins

Digest this Meal Plan - fill out the feedback form.

Mains 20 mins - choose ONE only

MAKE..... 20 mins

Ingredients: glass jar, tin foil, ice, scrap paper, matches, adult supervision.

Ling has a PhD in Air Quality Modelling, in this experiment, we will make some smog in a jar. Smog, or smoke fog, is a type of intense air pollution and this is what Ling is looking to avoid with the aviation industry.

1. Firstly, rinse you jar so there are some water droplets on the inside of your jar.
2. Make a tin foil lid for the jar by squishing foil over the top of the jar. Leave this to one side. Place ice on top of the lid to make it cold.
3. Now, ask your adult to light a match and carefully set fire to a small scrap of paper. Quickly place the paper in the jar.
4. Now place the tin foil lid on top of the jar and place the ice back on top of the lid..
5. Watch the smog form in your jar.

Watch [this video](#) for the explanation of why smog forms. A bit lost, [watch the video to follow along](#).

EXPLORE..... 20 mins

Ingredients: paper, pens, colouring pencils.

Ling's research looks at the environmental impacts of aircrafts on the environment. In this activity you will design an aircraft of the future and make it as environmentally friendly as possible. You could create a plane, helicopter or even a rocket. Think about:

- ★ Where does the aircraft get its energy from?
- ★ The equipment on board?
- ★ The pollution caused by takeoff and landing
- ★ The materials the aircraft is made out of

Draw your new aircraft and label all the new aspects your are creating. Present your ideas to everyone in the group.