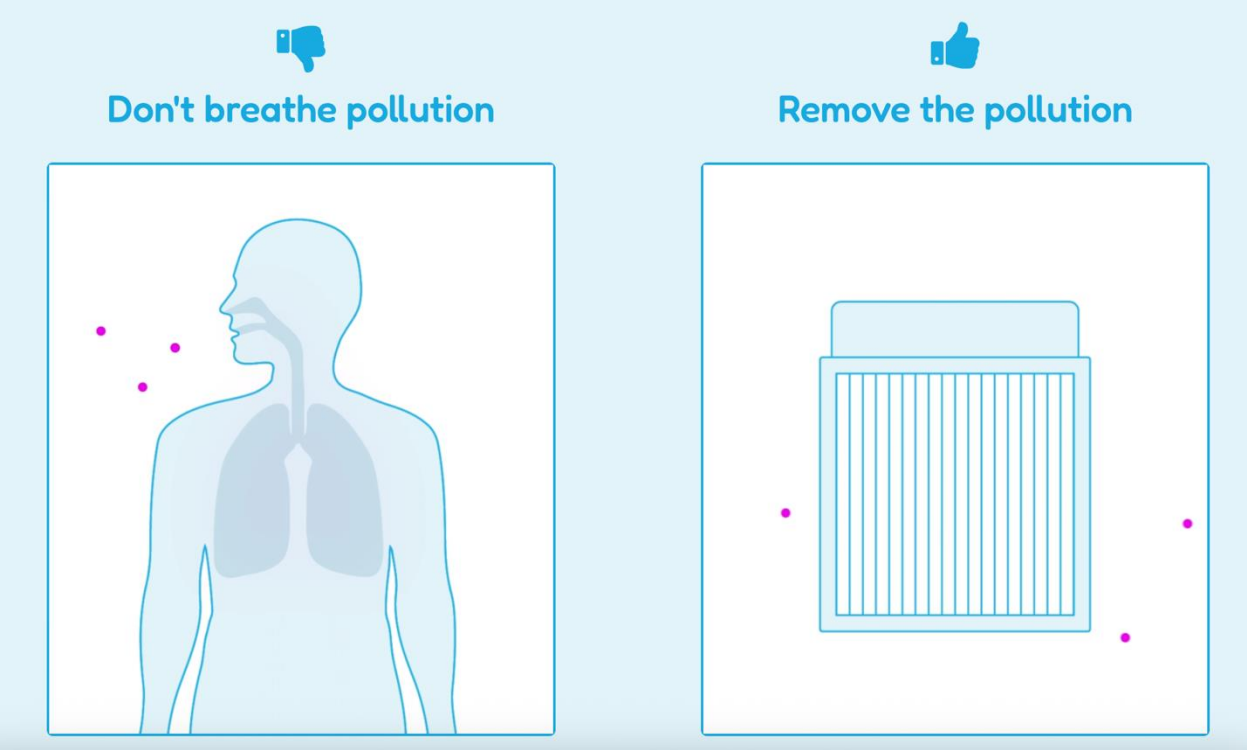
Lesson 1. What's in the air?

3 things in the air are…



I notice	I wonder

Engineering Design

What is the engineering design problem we want to solve?

_____

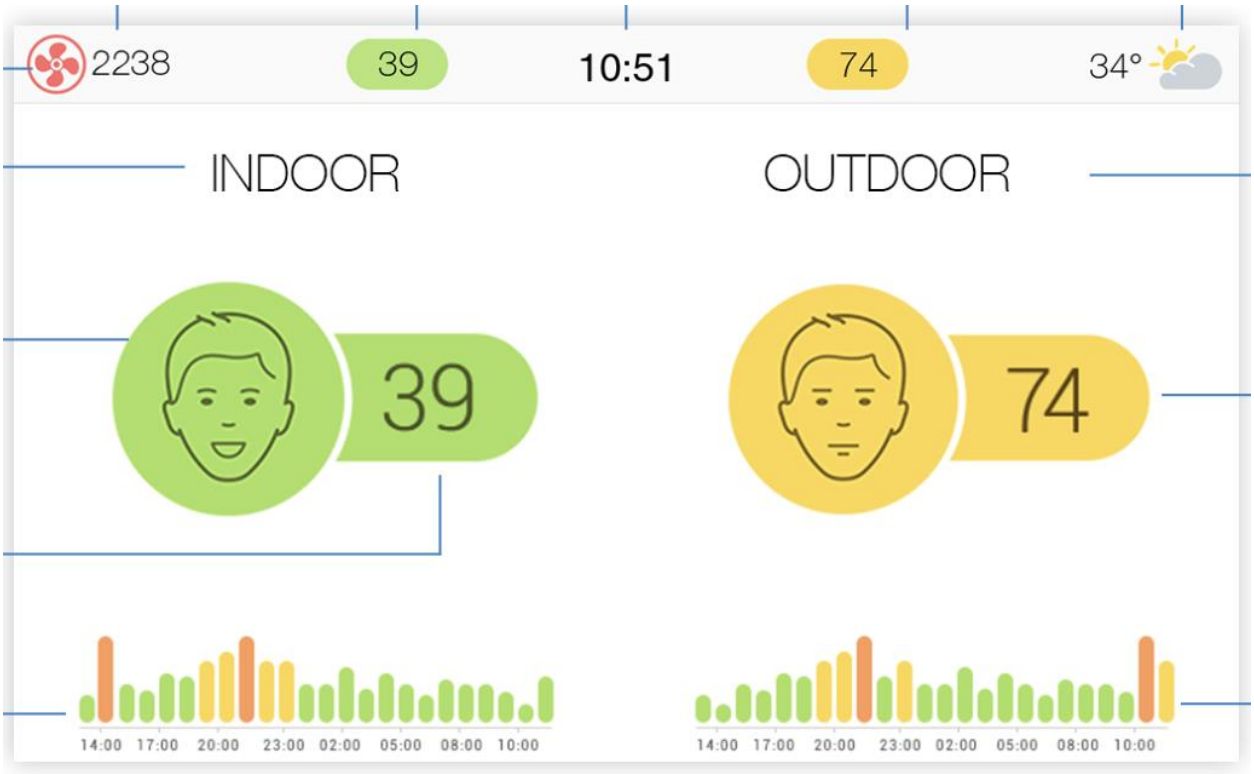
_____

Cite one piece of evidence from the video. We want to solve this problem, because

_____

_____

Criteria: Our solution needs to…	Constraints: Things we need to consider are…
1. _____ 2. _____	1. _____ 2. _____



Label the time, temperature, and indoor air quality index.

Making inferences. What can this air monitor tell us?

I think green means _____ air.

I think yellow means _____ air.

Based on the picture, do we want a low or high Air Quality Index, the number next to the face?

_____, because _____.

Date	Air Quality Index	Smile or Frown?

Lesson 2. Building an Air Purifier

My job is _____.

Does air quality change over time?

Plan an investigation to test the air quality.

1. What data will you collect? Check one.

   _____Air Quality Index

   _____Carbon dioxide (CO_2)

   _____Particulate matter (PM)

2. When will you collect data?

   I will collect data _____.

Make a prediction.

I think the _____ (from question 1)

will _____ (increase or decrease) over time.

Lesson 3. Collecting Data

Date	Air Quality Index	Smile or Frown?

Analyzing Data

Write a claim about your data.

My data tells me _____

Use two pieces of evidence from your data to support your claim.

_____

_____

Explain your claim. Why do you think the data shows this pattern?

_____

_____

Sharing the Results

Scientists and engineers share their results with lots of different people. Choose a role, audience, and format. Create a product that communicates your results appropriately to the audience.

Role	Audience	Format	Topic
Scientist Engineer Student	Family Principal Politicians UConn researchers	Letter Presentation (slides) Infographic Report	Indoor air quality