REAL SCIENCE:
FACE MASK REDESIGN PROJECT GUIDE

INTRODUCTION

Although the title of this guide says "Face Mask Redesign", the project is not limited to redesigning face masks. Students are tasked to redesign objects that help with illness prevention for students. Any object.

Furthermore, the key is for students to develop empathy for their user. Thus, if students decide to redesign a face mask, how would they redesign it so it is a face mask specifically for high school students (if that is the target audience)?

STEP 1

- Review how diseases are transferred from one person to another.
- Also, discuss with students what things people do to keep from getting sick. Answers may vary, but make sure to record what ideas students come up with and feel free to add your own.

STEP 2

- Students choose one idea from Step 1 to redesign.
- For homework, have students interview at least 3 other students. Some questions students can ask can include: What do you do to keep from being sick? Why do you do that? Have you tried using <>? Why or why not? What problems did you encounter when using <>?
- Students can submit their interview data as part of their design process (ie. justification for their design choices later on).

STEP 3

- Have students build a prototype of their idea.
- It must be physical prototype - not just a sketch or a written description.
- Prototypes do not have to be completely polished (ie. they can be made of paper and tape), but they do need to be working prototype.

STEP 4

- Have students present their prototypes and describe their design choices by referring to their initial interviews.