

## INDEPENDENT STUDENT LEARNING AT HOME

### LESSON 2: Problem Solving

#### TODAY I WILL LEARN...

Have you ever thought about how an invention is created? Like you, inventors face problems every day. And, like you, they have innovative ideas to solve these problems.

Today, you will understand how inventors solve problems. You will combine techniques of creative and critical thinking to approach problems and consider possible solutions.

#### MATERIALS

##### Resources Provided by YIP:

- Video: Problem Solving – Guided Instructions
- Slide Deck: Problem Solving
- Videos: Invention Convention videos
  - <https://youtu.be/fYCO61pJUc> (4:21)
  - <https://youtu.be/RLdUdMF2PF8> (2:29)
  - <https://youtu.be/pCVkdKXsf18> (4:54)
- PDF/Worksheet: The Crayon Holder
- PDF/Worksheet: Problems All Around Me
- PDF/Worksheet: What's Your Problem?

##### Materials from Home:

- Pens/pencils
- Notebook or other paper for writing and drawing

#### INVENTOR PLAN

##### Instruction: Problem Solving

1. Watch Video: Problem Solving – Guided Instructions. Refer to Slide Deck if needed for review.
2. Watch Video: Invention Convention videos
  - <https://youtu.be/fYCO61pJUc> (4:21)
  - <https://youtu.be/RLdUdMF2PF8> (2:29)
  - <https://youtu.be/pCVkdKXsf18> (4:54)

**AND/OR**

Download the The Crayon Holder Worksheet. Read the story of Cassidy Goldstein, inventor of the Crayon Holder.

3. Walk around your house and select 3 inventions that you find. Share these inventions with someone at home and discuss the possible problems these inventions solve.

**Activity: Problems All Around Me**

1. Interview one or more people at home (family members, friends or neighbors).
2. Download the Problems All Around Me Worksheet and then fill it out as you interview these people.
3. Next, download the What's Your Problem? Worksheet. Select the problem you feel is most important to you and identify possible solutions to this problem.
4. Finally, chose the problem you wish to solve. Circle it on your What's Your Problem? Worksheet. Complete the Problems

**CHECK AND REFLECT**

1. Draw a sketch of your new and improved mask design and explain your design to someone at home.