

LESSON 4: Researching the Problem

LESSON OVERVIEW

This lesson will introduce students to research and learning more about a problem. Students will think about how to explore the reasons why the problem exists, who is most affected, and possible solutions. Students will be led to consider their available resources for research such as books, media materials, and other people who can help them learn more.

OBJECTIVE

Students will be able to:

- Identify various resources to research a problem.
- Analyze information to problem solve.
- Apply learned information to create a solution.

MATERIALS

- Google Slides: YIPLit Lesson 4
- Book: *The Day the Crayons Quit*, by Drew Daywalt, Illustrated by Oliver Jeffers ISBN: 0399548920, 978039954892
- Chalkboard/wall space/large sticky notes/online place to record brainstorming
- Pencils and paper for writing
- Invention Process- Research worksheet (included in the YIPLit: Inventor's Journal)
- YIPLit: Inventor's Journals

NOTES FOR THE TEACHER

Teacher may use slides provided or lead instruction and discussion on their own.

You will be doing more brainstorming in this lesson. You may wish to remind students about the ground rules to create a safe space where all students feel comfortable sharing ideas.

INSTRUCTION & ACTIVITIES

Teacher may lead the following lesson plan with flexibility to adapt as needed to fit technology and class format:

Teacher Instruction:

Explain that research is gathering facts and information to help approach a subject with as much knowledge as possible in order to understand it. Students have been thinking about the problems of the characters in the theme book and their problems, and now it's time to dig deeper to learn more about

these problems and their possible solutions. Have students to brainstorm ideas as to how they can find out more about their problem(s). How can they find answers to these questions?

- How can we find out more about the problems we have identified?
- What resources can we use?
- Who might be able to help us with our research?
- How can we ask for help?

Activity: Researching Duncan (10 minutes)

Let's focus on Duncan. What are some of his problems? Who can help Duncan? What are some possible solutions to help Duncan? Can he use his crayons in a new way? Can he use new colors? Can he hold his crayons differently or not press so hard? Can he use another drawing tool? The students should work in groups or pairs to discuss ways to help Duncan. After a few minutes of group or pair sharing, have students come together to share their ideas. You can place large sticky notes around the room with category headings, or have different table groups for each category, or use your white board to record brainstorming ideas.

Activity: Let's Help Duncan (25 minutes)

Ask students to create a story about a new color crayon and how Duncan treated it better in his drawings and colorings. You can guide students to ideas if they are stuck: Did he use a new tool to keep the crayons safe and happy? Did he change his grip or coloring technique? Did he use something else to help him color? Students may also think about SCAMPERing a crayon to help them with ideas. If students are not ready to write a story, you may also ask them to pair or group share an idea for a story or act out their story.

Closure Activity: Where does "research" fit into the Invention Process? (5 minutes)

Where does "research" fit into the Invention Process? Ask students to write or draw where "research" fits into the Invention Process. Then ask them to explain their reasoning. Have students use the Invention Process-Research worksheet (included in the YIPLit: Inventor's Journal) to record their responses.

IDEAS FOR VIRTUAL INSTRUCTION

Researching Duncan

Ask students to focus on Duncan. What are some of his problems? Who can help Duncan? What are some possible solutions to help Duncan? Can he use his crayons in a new way? Can he use new colors? Can he hold his crayons differently or not press so hard? Can he use another drawing tool? In a class discussion or use a shared document where students can type their thoughts. Students can also share their ideas in the chat. Brainstorm with a partner, using a shared document or Zoom breakout rooms.

Let's Help Duncan

Have students create a story about a new color crayon and how Duncan treated it better in his drawings and colorings. If students are not ready to write a story, you may also ask them share an idea for a story or act out their story. Use a virtual platform to share.