

Importance of Math: Classroom Lesson Plan

Lesson Topic:

Importance of Math

Lesson Objective:

Students will be able to describe the role of mathematics in career success and everyday life.

Materials:

• Projector or other method to watch the movie

Advanced Preparation:

• Preview the video before sharing it with your students [2:12].

Warm-up Activity:

- 1. Ask students to share their feelings about math.
- 2. Help students who report they "hate" math or "are not good at math" to talk about their negative math experiences.
- 3. Guide students to reframe their negative feelings about math so they are able to tell themselves better stories about the acquisition of math skills and concepts. For example, if students report that they tell themselves, "Math is hard," help them reframe that feeling into something like, "Math can be challenging, but I can do it!"



View the Video: "Importance of Math"

- 1. Tell students they will be watching the video, "Importance of Math".
- 2. Explain that the video presents role models talking about the importance of developing positive attitudes when learning math.
- 3. Ask students to listen to the last role model who speaks in the video and tell why her contribution differs from the rest. Watch the video together.
- 4. View the video again; this time, invite students to formulate questions or comments about the ideas discussed in the video and to be prepared to discuss these after viewing the video.

Video Follow-up:

- 1. Ask students to offer their questions, comments, reactions and responses to the video.
- 2. Invite students to note any new information they learned about math education (e.g., "I liked the idea that I can think about math as a language. Thinking of math that way makes it easier for me to not be so afraid of it.").
- 3. Ask students to talk about the following questions first with a partner, then bring the class together to discuss them as a group. Challenge students, during the whole class discussion, to think of ways that all careers use math. For example, students may answer that a hair stylist doesn't use math. However, hair stylists need to make and give change, book appointments, use measurements and proportions for cutting and dying hair, etc.
 - a) What careers use a lot of math? What careers don't use any math?
 - b) When do adults need to use math in their lives outside of work?
 - c) Why do you think math is important? Explain your answer.
 - d) What math goals could you set for yourself in order to succeed?



Extension Activities:

- 1. Use the "Related Questions to Explore" as discussion springboards or writing prompts to help students further explore the importance of math.
- 2. Encourage students to ask the adults in their lives to tell if and how they use math in their careers.
- 3. Have students use the Career Girls website to discover careers that rely on math.

Related Questions to Explore:

- How many careers can you name that rely on math for success?
- Why do you think many of the role models in the video agree that it's important to learn math skills and concepts even if you're not planning a career that involves math? Use real life examples to explain your answer.
- The first speaker said, "Math is really important now because it equates to money later." Explain what she meant and whether or not you agree. Give a real-life example of someone who has used math skills successfully to earn more money.
- One of the role models in the video said that knowing math helps "bolster confidence." Explain what she meant and whether or not you agree.
- Some of the role models explained what you should do if you are afraid of math. Do you think it's important to "make peace" with math instead of being afraid of it? Why or why not?
- How can you learn more about careers that involve math?
- What are some ways the role models in the video may have prepared for their careers involving math? How do you know?



Ideas for Future Lessons/Activities Related to the Importance of Math:

- 1. Math Is All Around Us: Looking for Math in Our Everyday Lives
- 2. Understanding Math as a Language: Why Do People Call Math a Foreign Language?
- 3. Surprising Math Careers: Wow! That Career Requires Math Skills?!
- 4. Generating a Confidence Mindset: Language and Actions to Build Math Confidence
- 5. Women in Mathematics: Researching Famous Female Mathematicians
- 6. Literature-Based Learning: Reaching for the Moon and The Girl with a Mind for Math
- 7. Making Math Fun: Teamwork, Story Problems, and Real-Life Math Experiences