



2024

Center of Transformation (CoT)

Program Curriculum

Facilitator Handbook –

Week 2 Session

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Developed By

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Week 2: STEM: Transportation Basics

Duration: 45 minutes

Week 2 Introduction (Video):

- Welcome Members back briefly recap Week 1.
- Provide an overview of Week 2's focus on modes of transportation and global climate change.
- Introduce the CoT Journey scenario for Weeks 2-10.
- Summarize this week's activities.

Objectives: The objectives of this session are to:

- Provide a basic understanding of the modes of transportation.
- Recognize how transportation can affect the greenhouse gas emissions.
- Understand the science of how various forms of transportation contribute to climate change and what solutions may address the problem.
- Select a mode of transportation and primary energy source that will be used for the CoT journey ahead.

Facilitator Time Commitment: 3 hours maximum

- Weekly Check-in Meetings: 1 hour per week (or less)
 - Please ensure that at least one person from your organization joins us each week so that we can share important CoT updates, answer questions, and ensure program alignment.
 - Join Zoom Meeting
 - <https://us02web.zoom.us/j/89252599378?pwd=Mkg0Um5QL2QzUzBLYUxkUzZSY21TUT09>
 - Meeting ID: 892 5259 9378
 - Passcode: 727575
- Session Preparation: 30 minutes per week (or less)
- Session Facilitator: 1 hour
- Reporting and Feedback: 30 minutes per week

Facilitator Instructions:

- Set up:
 - Learning Content: Open an Internet window and have the Introductory and Learning Videos ready to play. The weekly session content and videos can be found at: <https://www.clubhouseatyourhouse.com/week2>. Scroll down to the "Weekly CoT Session" section of the web page and click on the specific week.
 - Virtual Facilitation:
 - Open the Zoom room at least 15 minutes before the start of the session.

- CoT Virtual Session Zoom Link (for Tuesdays at 5:30 pm EST):
<https://us02web.zoom.us/j/86164296749?pwd=RWNuSWxUdzVaVmhhPRjRuamhiVTlEQT09>
 - Some teens may join individually and others may join in a group at a local club. This may present some challenges with individual exercises and activities. Ensure that teens in the same room still have access to electronic devices to complete their assignments.
 - Club/Organization facilitators may want to participate and help facilitate the discussion with the teens.
 - Teens should be paired up and assigned breakout rooms. If teens are in the same room at their club, the Club CoT Facilitator should assist with pairing and guiding teens.
 - Video submission: Teams should submit their videos at the bottom of the week 2 session page at: <https://www.clubhouseatyourhouse.com/week2>
 - Take pictures and video clips of your group and email them to: cot@bgcgw.org.
- In-person facilitation:
 - Arrive at least 15-30 minutes before the start of the session to set-up and prepare.
 - Teens should have access to electronic devices for individual assignments.
 - Print the *Transportation Selection Worksheet* for your group (located at the end of week 2 below).
 - Video submission: Teams should submit their videos here: <https://www.clubhouseatyourhouse.com/week2>.
 - Take pictures and video clips of your group and email them to: cot@bgcgw.org
- Introduction Video: Begin the weekly session by playing the weekly BCGGW CoT Introduction video.
 - Set-up: It is recommended to set up the teen space before the teens join, test the projector/TV connection and play the video to check the video and audio features
 - Ensure that teens have access to electronic/mobile devices with an Internet connection.
 - The video will welcome teen members to the program and provide a brief overview of the CoT Program, the calendar of events, and how the weekly sessions are designed.
 - The video link is: <https://www.clubhouseatyourhouse.com/week2>.
 - Learning Video:
 - Play the learning video of the week (2:46): <https://youtu.be/c4iVCJ00BYA>

- Set-up: It is recommended to set up the teen space before the teens join, test the projector/TV connection and play the video to check the video and audio features.
 - Ensure that teens have access to electronic/mobile devices with an Internet connection.
 - The video will introduce the topic of the week and provide teen members with basic learning materials.
- Exercise or Activity: Transportation Research and Video:
 - Part 1: Research a Mode of Transportation
 - Members will work in teams of two and select from one of the transportation modes (limit duplicate modes until all are covered): (1) cars, (2) buses, (3) trucks, (4) trains, (5) ships, (6) aircraft, (7) pipelines, or (8) micro mobility.
 - The teams will briefly research their selected mode of transportation and complete the *Transportation Selection Worksheet*. These do not need to be submitted. This is for teens to do their research.
 - Print out the Transportation Selection Worksheets (if your group is meeting in-person).
 - Can also be completed electronically.
 - Part 2: The song/rap/poem or another creative expression should include:
 - (1) team member names
 - (2) the transportation mode selected
 - (3) who or what does the mode of transportation transport
 - (4) primary energy source used
 - (5) describe the science of how the mode contributes or affects climate change challenge
 - (6) offer one solution to addressing climate change for this mode of transportation.
 - Video submission: Submit your video online at: <https://www.clubhouseatyourhouse.com/week2>
 - CoT staff will evaluate videos and may select a few winning videos for a prize and to feature on social media.

Wrap Up

1. Debrief Questions: Discuss the session with teens and ask them questions:
 - What was one new thing you learned about your selected transportation mode?
 - How does your selected mode affect or impact climate change?
2. Teens should submit team videos here: <https://www.clubhouseatyourhouse.com/week2>.
3. Facilitator: Submit weekly pictures and video clips and email them to: cot@bgcgw.org.

4. Teen Registration: If you have new teens joining this week, please have them complete the online Teen Registration form at: <https://bit.ly/cotregistration>.
5. Share an Overview of Week 3 with the teens.

Week 2 Session:

Duration	Activities	Facilitator	Resource(s)/ Material(s)
5 min	Week 2 CoT Video	BGCGW/CoT Staff	<ul style="list-style-type: none"> Video link: https://www.clubhouseatyourhouse.com/week2
5 min	Video: Transportation	Club Facilitator	<ul style="list-style-type: none"> Learning Video: https://youtu.be/c4iVCJ00BYA
30 min	<p>Exercise or Activity: Transportation Research and Video</p> <p>Part 1: Research a Mode of Transportation Members will work in teams of two and select from one of the transportation modes (limit duplicate modes until all are covered): (1) cars, (2) buses, (3) trucks, (4) trains, (5) ships, (6) aircraft, (7) pipelines, or (8) micro mobility. Then, research a mode of transportation and complete the Transportation Selection Worksheet at: https://www.clubhouseatyourhouse.com/week2.</p> <p>Part II: Record a song, rap, or poem video (60 sec max) that explains one issue on how that mode contributes to climate change. The song/rap/or poem should include (1) team member names, (2) the mode selected, (3) who or what does the mode of transportation transport, (4) primary energy source used, (5) describe the</p>	Club Facilitator	<ul style="list-style-type: none"> Part 1: Facilitator will ensure teens select a different mode until all modes are covered. Teens will research their selected mode of transportation and complete the Transportation Selection Worksheet at https://www.clubhouseatyourhouse.com/week2. Part II: Mobile or recording device. Videos submitted (.mp4, or .mov) format: https://www.clubhouseatyourhouse.com/week2.

	<p>science of how the mode contributes to the climate change challenge, (6) offer one solution to addressing climate change for this mode.</p> <p>Part III: CoT staff will evaluate videos and may select a few winning videos for a prize and to feature on social media.</p>		
5 min	Wrap-up	Club Facilitator	<ul style="list-style-type: none"> • Debrief questions. • Week 3 overview. • Upload the 60 sec video to the CoT portal.

Outcomes:

- Teens: Submitted 60 second video demonstrating awareness of how transportation modes cause climate change issues and one solution that can address the issue. Submit at: <https://www.clubhouseatyourhouse.com/week2>.
- Facilitator: Submit weekly pictures and video clips and email to: cot@bgcgw.org.

Center of Transformation***Transportation Selection Worksheet*****Week:** _____ **Date:** _____**Member Name 1:** _____**Member Name 2:** _____**Selected Transportation Mode:** _____**Who or what is transported by this mode (i.e. people, what kind of goods or products):**

What kind of energy or fuel does this mode operate on: _____**Describe how the selected transportation mode contribute to climate change:**

Describe how this transportation mode could improve climate change in its industry:

Identify one company in the transportation industry for the transportation mode:

Company Website: _____**Does the Company Have a Climate Change Commitment (Yes or No?):** If yes, what is the commitment? _____

Week 3 Session:

Duration	Activities	Facilitator	Resource(s)/ Material(s)
5 min	Week 3 CoT Video	BGCGW/CoT Staff	<ul style="list-style-type: none"> Video link: https://www.clubhouseatyourhouse.com/week3
5 min	Video: What is Energy	Club Facilitator	<ul style="list-style-type: none"> Learning Video: https://www.clubhouseatyourhouse.com/week3
5 min	Types of Energy Activity Instructions	Club Facilitator	<ul style="list-style-type: none"> Instructions
25 min	Types of Energy Activity: Explore different types of energy (fossil fuels, renewable, and clean) used to support the transportation industry. Teens will identify which types of energy help and/or harm the environment more. Explain why.	Club Facilitator	<ul style="list-style-type: none"> Materials Energy Worksheet: https://www.clubhouseatyourhouse.com/week3
5 min	Wrap-up	Club Facilitator	<ul style="list-style-type: none"> Debrief questions. Week 4 overview.

Outcomes:

- Awareness of energy in the context of global climate change, transportation, and STEM and how we make decisions about energy, and the society-wide impacts of energy use related climate change.
- Submitted **Energy Worksheet**.