

Step-By-Step Generate Game Set-Up Instructions (for Class Delivery)

The Generate Game kit includes contents for eight student stations for the classroom:

- *CERT Educational Series, Energy Generation Research Summary Sheet.docx* (9 copies)
- Game board and energy pieces
- *CERT Educational Series, Energy Generation, Generate Calculation Support Sheet.xlsx* (9 copies). Sorted from lowest-to-highest cost by generator type, and for \$0 and \$10/metric-Ton carbon tax.
- *CERT Educational Series, Energy Generation, Team Score Card.xlsx* (9 copies)
- *CERT Educational Series, Energy Generation, Generate Scoreboard for Scoring and Ranking Teams.xlsx* (downloadable, to be displayed on your screen)
- Portable mouse
- A memory stick containing all files listed above/below
- A notebook with all documents listed above/below

Homework Assignment: **Done Prior to Class 1**

1. Assign students into up to 8 teams.
2. Assign a student in each team an energy source to research from this list (some students could work on 2 energy sources if your teams are less than 5 people):
 - a. Coal
 - b. Natural Gas
 - c. Nuclear
 - d. Solar
 - e. Wind
3. Students should go to www.EIA.gov for research and complete the *CERT Educational Series, Energy Generation Research Sheet.docx* for the assigned energy source. Students can download file and fill in, or print out and fill in.

Class 1: **Assignment Review**

1. Students will report on their research findings to their team.
2. Team members will take notes on all team research findings on the *CERT Educational Series, Energy Generation Research Summary Sheet.docx*. Can be filled in on computers, or on paper.
3. Play/Watch *CERT Educational Series, Energy Generation, Basics.mp4* to review findings of the student research assignment, and/or post the *CERT Educational Series, Energy Generation.pptx* for students to review.

Class 2: **Set-up and Play Generate:**

1. Ask students to get into groups (8 groups can be accommodated).

2. Open the Kit box and remove the game pouches with pieces and boards. Distribute to student teams.
3. Direct students to download *CERT Educational Series, Energy Generation, Team Score Card.xlsx* (from Canvas, after you have put the file there from the memory stick). Have students enter Team # from Pouch on Team Score Card. (The computer version of the Team Score Card makes it easy for students to check that they have played and counted the correct number of pieces on their grid boards (covers 352 grid rectangles).
 - a. Instruct students to count game pieces played, and enter into .xlsx file to check that total of 352 is found at the bottom of Round x.
 - b. If they can't download the xlsx file, distribute the paper version of the Team Score Card provided in the kit. Verification of game pieces played will take place when you as the teacher enter the data into the Generate Scoreboard displayed for the class on your screen.)
4. Tell teams that game pieces are played horizontally on the board ONLY. They should be in a readable orientation.
5. Distribute *CERT Educational Series, Energy Generation, Generate Calculation Support Sheet.xlsx* to each student team.
6. Upload *CERT Educational Series, Energy Generation, Generate Scoreboard for Scoring and Ranking Teams.xlsx* onto your "teacher" computer, and prepare it to be viewed on the classroom screen.
7. Upload *CERT Educational Series, Energy Generation, EPA Generate Game.mp4*, and prepare it to be viewed on the classroom screen. The video will lead the class through the game, and each time you see the sun pop onto the screen, and/or hear the laser sound, you will pause the video, and then resume when appropriate. The students will either be playing their pieces, or you will have discussions with the students about the results of the game.
 - a. Students will bring their game piece "counts" to you to enter on the Generate Scoreboard.

Pack the kit for return to CERT:

1. Ask students to inventory all pieces against the list found in the inside cover of the pouches of pieces. Please notify us if pieces are damaged or missing, so that we can replace them before loaning the kit to another teacher. (use sticky notes to tell us of missing or extra pieces, please).
2. Ask the students to replace the pieces into the correct slots in the pouches. (In front of "labeled tabs," except for last tab: place small efficiency pieces in front of tab; AND large efficiency pieces behind tab.)
3. Collect all pouches and boards, and place them back in the kit box.
4. Return the flash drive to the pencil bag found in the notebook, and place notebook into the box.
5. Return the portable mouse to the box.
6. Return any unused paper in the folder (Energy Generation Research Summary Sheets, Generation Calculation Support Sheets, and Team Score Cards)

Contact CERT for pickup of the Kit.

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