



Description This activity is meant to extend the experience of the Chemistry of Plastination lab at The Tech. Through this activity your students will participate in small group discussions on the topic of whether or not they would donate their bodies to a future Body Worlds exhibition.		
Grade Level 8-12	Student Outcomes Students will: <ul style="list-style-type: none"> Engage in a critical discussion on their opinions regarding donating their bodies to a future Body Worlds exhibition. 	Common Core ELA Standards • Grades 8-12: SL.1, SL.4
Duration Two 60-minute sessions		

Vocabulary

Familiarity with these terms and concepts will enhance students' experience in the activity.

- **Consent:** Permission for something to happen or agreement to do something.
- **Opinion:** A view or judgment formed about something, not necessarily based on fact or knowledge.
- **Plastination:** A chemical preservation process of human remains that replaces all fat and fluids within the body with flexible polymer (plastic).
- **Posthumous:** Occurring, awarded, or appearing after the death of the originator.

Teaching points

1. Begin by reviewing what was seen at the Body Worlds Exhibition seen at The Tech Interactive. Encourage students to think about what they saw and the value of the exhibition. Some discussion questions or prompts include:
 - a. What are the benefits of exhibitions like Body Worlds Decoded?
 - b. Why do you think the people displayed in the exhibition donated their bodies for this purpose?
 - c. Do you think that the donors knew all about the entire plastination process before deciding to donate? Do you think knowing about the process would change their minds?
2. After some initial discussion, let students know that they will be participating in group discussions on their own opinions on whether or not they would be willing or interested in donating their body to Body Worlds for plastination.
3. Group discussions can take place in one large group or in small groups of 4-6 students. This can also be done as a writing assignment if class time for discussion groups is short.

Procedure

1. Review the differences between opinion and fact – if time permits, you can have students review op-ed pieces from the local newspaper and have them underline facts and circle opinions. Students can then discuss the differences between the two as a review exercise.
2. After reviewing opinion versus fact, provide students with their assignment: Would you consider donating your body to Body Worlds after your death? Why or why not?



- a. Opinion pieces or discussion should be each individual's position on whether or not they would donate their own remains.
- b. Students should provide at least three supporting arguments for why they would want to donate or not. Supporting arguments can be based on ethics of the process or posthumous donation, facts about the exhibition or plastination process, etc.
3. Give students the rest of the class period to do their research and formulate their opinions (or assign as homework).
4. In the next class period, before beginning discussion groups, review appropriate discussion techniques:
 - a. Be respectful of other people's opinions and reasoning.
 - b. Only one person speaks at a time.
 - c. There will be plenty of overlapping opinions; however, everyone will still need to engage in the discussion.
 - d. Add any other discussion rules of your own.
5. Begin your class or small group discussion – if doing small groups, groups should consist of students who would and students who would not consider donating their body to Body Worlds to get a greater variety of discussion.
6. After group discussion time is over, poll the class to see where everyone stands on the issue. You can also ask if anyone else's discussion swayed their opinions on the matter.

Resources for students

The following links are great resources that students can use to help form their opinions on whether or not they would consider donating their bodies to Body Worlds.

Ethics of posthumous donation:

- "Plastination: Ethical and Medico-Legal Considerations"
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5329882/>
- "Origins of Exhibited Cadavers Questioned"
<https://www.npr.org/templates/story/story.php?storyId=5637687>
- "Philosophy of Organ Donation: Review of Ethical Facets"
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4478599/>

Plastination as an educational tool:

- "Plastination Benefits"
<https://americanplastination.com/about-plastination/plastination-benefits.html>
- "Plastination and its Importance in Teaching Anatomy. Critical Points for Long-Term Preservation of Human Tissue"
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3931543/>
- "Plastinates: Possible Tool for Medical Education in the Near Future"
<https://pdfs.semanticscholar.org/06e6/5baf0dcdf97bf640cd8c02c3b6155fddf128.pdf>

The donation process and posthumous donation:

- "Donate your Body to Science"
<https://www.pcrm.org/ethical-science/animal-testing-and-alternatives/donate-your-body-to-science>
- "Body Donation for Body Worlds"
<https://bodyworlds.com/plastination/bodydonation/>
- "Donate your Body to Science in California"
<https://www.sciencecare.com/locations/california-donating-body-to-science/>
- "What Happens to your Body When it is Donated to Science?"
<https://www.healthline.com/health-news/what-happens-to-your-body-when-its-donated-to-science>