



Healing Through The Arts®

Where those who are healing find strength,  
hope and inspiration through the arts.

## Science, Lesson 2 – *Cancer Treatments*

### Lesson goal –

- To encourage more creating thinking strategies.
- To help high school teachers and students make the connection to art and healing and inspiring them to create inspirational art.
- To show how art can be taught across all subject areas, not just in art class.

### Target students – 10th grade and higher

**Learning Objective** – Students will research treatments for cancer and be able to compare and contrast many aspects of them.

### Outcome –

- Students will produce a Venn Diagram or Mind Map comparing the different cancer treatments.
- Student will produce a picture/drawing representing the different cancer treatments.

### Standards –

- Science as Inquiry Standard A – understanding of scientific concepts
- Science and Technology Standard E
- Science in Personal and Social Perspectives Standard F

**Materials / Resources** – The following resources will be required for this lesson:

- Internet access

### Resources:

- BBC, Bright Outlook on Cancer. Website  
<http://news.bbc.co.uk/2/hi/health/1168895.stm>

- Phys.org, Building Mathematical Models for Cancer Research. Website  
<http://www.physorg.com/news192180859.html>
- *Mathematical modeling of cancer progression and response to chemotherapy*. PDF  
<http://www.math.uci.edu/~cristini/publications/cristini.pdf>
- The Economist. *Up close, and personal*. Website  
<http://www.economist.com/node/3285968>
- Build a mind map (web map) or Venn diagram  
<http://www.mind-overmatter.com/>
- <https://bubbl.us/>
- <http://creately.com/Draw-Venn-Diagrams-Online>
- Draw a picture representing one of the cancer treatments  
[http://www.lucidchart.com/pages/examples/venn\\_diagram\\_maker](http://www.lucidchart.com/pages/examples/venn_diagram_maker)

### **Description of Lesson (1-2 Weeks):**

1. Have student research cancer treatments such as the following therapies: chemotherapy, hormone, immunotherapy, supportive, hypnotherapy and radiation.
2. The students should focus on the following questions:
  - a. What it is?
  - b. How does it work?
  - c. The usage.
  - d. Any side effects.
  - e. The success rate.
3. Individually, or if they are working in groups, share their results with the class including a picture or drawing of a room that shows the cancer treatment being used.
4. Students, individually or in groups, build a Venn Diagram or Mind Map comparing and contrasting the different types of cancer treatments.

Lower Level – Compares 2 to 3 different cancer treatments.

Academic Level – Compares 3 to 5 different cancer treatments.

Honors Level – Compares ALL the different cancer treatments the class researches.