

Introduction to Health; Environment + Genes + Choices = YOUR HEALTH!

Brief Description

This is an introductory lesson to a Health course that introduces students to the relationship between the Environment, Genetics and Choices to individual health. It also introduces them to the six components of one's health and how they are influenced by the Health equation.

Duration of the lesson: 2+ days

Learning Objectives

Students will be able to:

- EALR 2.1: Understand dimensions and indicators of health.
- EALR 2.3: Understands the concepts of prevention and control of disease.
- EALR 2.4: Acquires skills to live safely and reduce health risks.
- EALR 3.1: Understands how family, culture and environmental factors affect personal health.

Materials:

- *Circle within a Circle* worksheet questions (one per table group)
- *Your Money or Your Life* worksheet (one per student)
- *Your Money or Your Life Socratic Seminar* worksheet (one per student)
- *Your Money or Your Life Outcomes* (individualize each outcome and put them in an envelope = 9 total)
- *Family Tree* rubric (one for each student)
- *Family Tree* template (one for each student)

Instructional Activities

1. Circle within a Circle Activity

- Divide the class in half. Instruct each group to stand up in an open space, forming a circle within a circle, so that every person in the inside circle is facing someone in the outside circle.
- Have students introduce themselves to each other and using the Circle within a Circle question list, ask the first question and have them discuss it with the person they are standing in front of.
- After about a minute, tell the students in the outside circle to take one step towards their left, so they are facing someone new. Have them introduce themselves to the new person and ask the second question on the Circle within a Circle list and have them discuss it with each other.
- Repeat this process until all questions have been discussed.
- Have students return to their seats.

2. Brainstorm: What is in the environment? What is in genetics? How do we make choices?

- In groups of 4, or table groups, have the Circle within a Circle questions and the blank Components of Health venn diagram worksheet available for each group.
- Have students discuss how each of the questions relates to the first question: "What age do you want to be when you die?"

They should see their answers correlate to how long they want to live.
- Have students brainstorm which questions are associated with each other and separate them into three categories. Have them brainstorm a word or phrase that represents each category as it relates to their overall Health and longevity. Have students complete the venn diagram and share their thoughts as a class.
- Discuss the equation
$$\text{Environment} + \text{Genes} + \text{Choices} = \text{Health}$$
as it relates to what will be learned in the semester of Health.

3. Your Money or Your Life Socratic Seminar Activity (ATHENA)

- Explain to students that they will be using a Socratic Seminar style of learning to promote discussion and critical thinking about issues of genetics and environmental factors as they relate to choices.
- Separate students into small groups of 4 or 5 and designate them equally into groups "A" or "B." Hand out the *Your Money or Your Life* worksheet to each group member and the *Your Money or Your Life Socratic Seminar* worksheet. Have them label their worksheets whether they are group "A" or group "B."

High School Health

- Have a group "A" team up with a group "B." Explain to the class that group "A" will be the participants of the seminar first, and group "B" will be the evaluators first. Here are the rules:
 - Participants will:
 - ✓ Respectfully participate in the discussion of the questions presented for their designated group after the reading.
 - ✓ Write notes for themselves based on the discussion.
 - Evaluators will:
 - ✓ Not speak to other participants or group members.
 - ✓ Use the *Your Money or Your Life Socratic Seminar* worksheet to record questions and feedback for Participants.
 - ✓ Provide feedback after the Participants' discussion is over within the allotted time frame.
 - 1. Provide 10 minutes for everyone to read *Part I* silently and record their thoughts on the discussion questions provided for them.
 - 2. After everyone is done, group "A" will be given 5 minutes to orally discuss the questions for Part I as a group. Group "B" will listen and record their thoughts on the *Socratic Seminar* worksheet.
 - 3. Group "B" will be given 5 minutes to provide feedback and ask questions to group "A."
 - 4. Repeat the process with *Part II*, this time group "B" are the Participants and group "A" are the Evaluators.
 - After the seminar is over, hand each group a "possible outcome" slip and have one person from each group share with the class.
 - Discuss the following questions as a class:
 - Do you think someone could really face this kind of choice? Any examples?
 - Does anyone know someone who has faced any choices like this where they live, work, go to school or play?
 - Are there things society can do to prevent dilemmas like the one Frank faced?
 - Have a discussion on why health decisions like this are so difficult and emphasize to students that these implications and possibilities are the reason why there are so many possible answers when it comes to making decisions regarding your health. This semester we will be looking at six areas of your health: social, emotional, physical, spiritual, intellectual and vocational. These components are influenced by genetics, the environment and choices.
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High School Health

- Have each student write down a dilemma that their peers may face or have faced around any of the four major units: Sexuality, Mental Health, Drugs, and Consumerism and Nutrition. Have students share their ideas with the class and discuss how it may impact one or more areas of one's health.

4. Family Tree Research Project and Brochure Assessment

- Have students begin thinking about their own family. Explain the Family Tree rubric and using the family tree template, have students begin filling in what they know about their family.
- If possible, provide students a day with computer carts to help them with their research (about 3-4 days later).

Accommodations:

Follow IEP and 504 Accommodations for individual students.

Resources:

NIEHS Center for Ecogenetics and Environmental Health, University of Washington.

ATHENA: The Academy for Teaching About Health and Environment Associations

Barb Velategui, Tori Marcum, *Newport High School & ATHENA participants*

Circle within a Circle Questions

1. What age do you want to be when you die?
2. What are your three greatest stressors?
3. At what age do you feel it is appropriate to begin using drugs?
4. Are any medical issues common in your family?
5. Have you ever ingested a substance that has made you sick?
6. In a typical week how often do you eat fast food?
7. What is your typical behavior around seat belt use?
8. Where have you lived other than [*name your town*] and how was it different there?
9. What is a physical trait that is common in your family?
10. In a typical week how many minutes do you spend exercising?

Health Equation

