



## Grade 10 Sample Lesson Plan: Healthy Environment – Your World Your Health

### SOLs

- 10.2 U
- 10.3 Y

### Objectives/Goals

- Students will analyze how environment and personal health are interrelated.
- Students will establish goals for improving environmental health
- Students will assess personal health practices as it relates to environmental health
- Students will develop a plan to attain an environmental health goal.

### Materials

- 1 – PowerPoint – Your World Your Health – Goal Setting and Environmental Health
- 2 – Handout – Goal Setting for a Healthier Environment Assessment

### Procedure

#### Step 1

- A – Before you begin the lesson, familiarize yourself with some of the key environmental health concepts such as environmental hazards, sources of environmental exposures, exposure pathways, and acute and chronic conditions. You can modify and/or extend this lesson depending on the time available. Once some key concepts of environmental health are taught, it is important to teach the health skill of goal-setting (SMART acronym).
- B – Once complete, students should be able to:
  - Define environmental health/wellness
  - Recognize that the health of the environment is connected to the health of people
  - Understand how substances in the environment can get into the human body through inhalation, absorption and ingestion (exposure pathways)
  - Apply goal setting skills to enhance individual and environmental health

#### Step 2

- A – Start the lesson using the PowerPoint called “Your World Your Health – Goal Setting and Environmental Health.” In slide 2, ask students if they agree or disagree with the quote “*Everyone has the right to an environment that is not harmful to their health and well-being.*” See where students stand on this issue and have a brief discussion.

- B – Next, ask the question *What is environmental health?* Have students brain storm ideas, then provide them with the definition on slide 3: *Recognition between one's health and connection to environmental surroundings. This includes factors such as air quality, water, living conditions, and energy usage. Encourages individuals to explore how personal behaviors to conserve and protect the environment affect individual health.*
- C – Next have students think of some examples of how the environment impacts health. Slide 4 shows some examples like pollution, smog, oil spill, and Tsunami (there are many more students might come up with). Try to get students to not just name an example, but expand on *how* it impacts health.
- D – Hippocrates once said, *"If you want to learn about the health of a population, look at the air they breathe, the water they drink, and the and the places where they live."* Ask students *how do you think that air, water and where you live impacts your health? Are there any specific examples that you can think of?* Perhaps discuss some of the environmental conditions in your school or local community that might impact one's health.

### Step 3

- A – Show the picture on Slide 7 and ask students *Would you want to play on this playground? Why or why not?*
- B – Define *environmental health hazard* – *a substance that has the ability to cause an adverse health event.* (slide 8)

Some other questions you could ask would be...

- *What are some other environmental health hazards you can think of?*
  - *How might you avoid exposure to environmental health hazards?*
  - *What can be done by individuals, government, communities to protect the residents from environmental health hazards?*
- C – Next, briefly discuss the idea of *acute vs. chronic* conditions (slide 9). The goal is to simply get students to understand the difference between acute and chronic and not about any particular medical conditions.
  - D – Ask students *what is in the environment that can affect health?* (slide 10) See what they know. Key ideas include:
    - Chemicals
    - Toxic waste
    - Radiation
    - Disease causing microorganisms
    - Pesticides
    - Heavy metals
  - E – Explain to students that certain health conditions are possibly linked to the environment, but not fully understood. Scientists continue to work to further understand the environmental connections to these health outcomes. Share the list (slide 11). If

time permits, you might ask *why do you think it is so difficult to determine environment and health conditions?*

*Step 4 (New Lesson) – Teaching the Skills of Goal Setting.*

- A - Hook (slide 12) - Start by showing a quote from Daymond John (seen on the show Shark Tank) and what goal-setting means to him. The quote reads *Goal-setting is a very specific thing. It's not "I want to lose weight." It's "I will drink 10 glasses of water per day. I will not eat fried foods or red meat. I will walk over 10,000 steps per day. Do cardio in the morning and weight lift at night." In return for that, I will lose two pounds per week to get down to my goal weight of 170lbs. And this will allow me to be healthier and to remain in my daughters' lives for a longer period of time.*
- B - Instant Activity (slide 13) - State *Achieving your goals takes thought and consideration.* Ask the students, *What steps do you feel are involved in setting and accomplishing a goal?* Let students brainstorm and discuss this question as a class. Perhaps you list ideas generated on the board.
- C - Think-Pair-Share (slide 14) - Next, have students imagine they are about to graduate from high school. *What do you hope happens next? What goals do you have? What do you envision yourself doing? College? Military? Apprenticeship? Job? Something else?*
- D - Now ask, *what would you need to do to make sure your post-high school goals happen?* (slide 15) List two or three short-term goals or action steps you would set/take to be sure you reach that outcome.
- E - Once students have had a chance to think/write on their own, now have them form pairs to share their post graduation goals. Have them explain how their goals will lead to the desired outcome for the next step after high school. After a few minutes of discussion, have a few students share their ideas to the class.
- F - Next, ask students *Why is it important to set goals?* (slide 16) Answer(s) might include: To help you reach your dreams and set up a plan to make sure you can get there, important to remember that short-term goals can help us achieve our long-term goals...they help us be successful.
- G - Now it is important that you introduce the skill cues for effective goal setting. They include:
  - ASSESS current health (strengths and areas for improvement)
  - IDENTIFY an area that you want to work on
  - CREATE a SMART goal to maintain or improve your health
  - APPLY strategies and skills to accomplish the goal
  - RECORD, REFLECT ON, and EVALUATE goal progress and outcome
- H - Have students start with skill cue #1 and have them ASSESS their current health status in terms of environmental health/wellness (see the self-assessment 7 questions on the Handout from page 1).
- I - Once students complete the self-assessment on their attitudes and behaviors towards environmental health have them identify one area that they want to work on to improve

the health of the environment and ultimately their health and others.

- J - Next, you will need to teach and introduce the SMART goal-setting acronym (see slide 20)
  - S = Specific
  - M = Measurable
  - A = Adjustable
  - R = Realistic
  - T = Timely
- K - When teaching a health skill such as goal-setting it is important that you model the skill as a class so students understand how to apply the SMART acronym to a situation. Here is an example you could use with your class (slide 21)

### Example: Comparing a SMART Goal with a Not-So-SMART Goal

	<i>I will cut down on the number of energy drinks I consume.</i>	<i>I will drink a total of 3 energy drinks over the course of 7 days for the next 6 weeks.</i>
<b>Specific?</b>	No – How many energy drinks? How often?	Yes – Only 3 energy drinks per week are allowed.
<b>Measurable?</b>	No – What does <i>cut down</i> mean? Less than what? How many?	Yes – You can measure if more than 3 energy drinks are consumed.
<b>Adjustable?</b>	Yes	Yes
<b>Realistic?</b>	Yes (but keep in mind that determining the extent to which the goal is realistic is up to the individual student).	Yes (but keep in mind that determining the extent to which the goal is realistic is up to the individual student).
<b>Time-Based?</b>	No – For how long? When will this start? Over what time period?	Yes – 7 days over the next 6 weeks

- L - Next, have the class practice a scenario together as you lead them through setting up a SMART goal. Here is an example scenario (feel free to change it) (slide 22)  
*Julian is an 10th grader who stays after school each day to hangout with his friends before arriving home after 4:30pm. When he gets home, he grabs a snack and heads to the family room in the basement. He turns on the TV, opens his phone to Snapchat, and frequently texts with his friends. His mom has suggested in the past that he do his homework as soon as he gets home, but Julian feels the need for a break before tackling that. Around 7pm each night, his family has dinner together, and no electronics are allowed. After dinner, Julian's chores are to clear the table and help with dishes. Julian loves TV and has something to watch each night at 8pm; he does his homework while he watches. He recently discovered that sophomore year is harder than freshman year, even though his methods of doing what he's supposed to do in class and for homework haven't changed at all. Julian received mostly A's last year, but have quickly slipped to B's and C's now. As a result, he'd like to make a change in his life.*
- M – (slide 23) When working through the example above, have students try to answer these questions as it pertains to SMART (see below)

**Specific** – What does Julian specifically want to accomplish?

**Measureable** – How can he measure his progress over time?

**Adjustable** – Is this something you think he can adjust if it is too easy or too hard?

**Realistic** – How realistic is it that he achieves this goal? Too hard? Too easy?

**Time-bound** – How long do you think it should take for him to accomplish this goal? Set a time in the shorter term to check progress.

- N - From here, have the class create a SMART goal statement or sentence that combines the answers above into a clear-concise statement.

### *Step 5 – Teaching the Skills of Goal Setting (Day 2) – Linking to Environmental Health*

A - Now, have students write their own environmental health goal using the skills they just practiced. Use the Handout from page 1 – Goal Setting for a Healthier Environment assessment.

### **Assessment Idea**

Students will complete the Goal Setting for a Healthier Environment assessment (see handout).

Other possible ideas include:

- Write a letter to the governor or a state or local representative, discussing a specific environmental health issue and suggest actions or request support (funding/attention/more research) to address the problem.
- Develop an environmental health education campaign (perhaps in the form of a video, poster, PowerPoint presentation, or brochure) about the environment and its connections to human health. You could incorporate the health skill of advocacy.

### **References**

- CDC – [Determinants of Health](#)
- HealthyPeople.gov – [Environmental Health](#)
- *Lesson Planning for Skills Based Health Education* - Sarah Benes & Holly Alperin

### **Handout**

The next page includes a handout for the lesson. The handout is designed for print use only.

## Goal Setting for a Healthier Environment

First, complete the self-assessment on your own environmental wellness. It is important to be honest and see where you stand. Next, you will use the results to determine one goal you would like to work on to help contribute to a healthier environment. Complete the SMART Goals Questionnaire. Remember, you will be working on your goal over the next few weeks so be sure to select a goal that is meaningful to you and that you are willing to work toward achieving.

<b>Environmental Health</b>	<i>Recognition between one’s health and connection to environmental surroundings. This includes factors such as air quality, water, living conditions, and energy usage. Encourages individuals to explore how personal behaviors to conserve and protect the environment affect individual health.</i>		
<b>Scoring System</b>	<b>1 – Rarely or Never</b>	<b>2 - Sometimes</b>	<b>3 – Often or Always</b>
1. I recycle regularly			
2. I try to reduce my water consumption by turning off the water while I brush my teeth or taking a shorter shower.			
3. I look for products that are environmentally friendly.			
4. I wear my clothes more than once before washing.			
5. I limit the amount of paper I print off or write on.			
6. I turn off the car when no one is driving to limit the exhaust.			
7. I use refillable water bottles or containers in my lunch.			

What was your total score? \_\_\_\_\_ The higher the number, the more you likely value environmental health and wellness.

Next, using complete sentences, write a paragraph or two describing and analyzing how environment and personal health are interrelated.

Based on your self-assessment results, what is one health behavior that you think you could improve to help contribute to a healthier environment and state why you are choosing this

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**Defining Your SMART Goal** - You should answer all of these questions before moving on.

1. **Specific:** What will your goal accomplish? How will it be accomplished?
2. **Measurable:** How will you measure whether or not your goal has been reached? Think of these as small steps or daily actions/habits you can take to make change. List at least two indicators.
3. **Adjustable:** Will you be able to adjust this goal if needed? Once you start working on your goal, you may find it needs to be adjusted.
4. **Realistic:** Is it actually possible to achieve your goal? Have others done it successfully? Is it challenging but still achievable? Do you have the necessary skills, abilities, resources, support, and motivation to accomplish the goal?
5. **Timely:** Is our classroom timeline (approx 3 weeks) for the project a suitable deadline for you to be successful? If not, what is the time frame you are setting for your goal?

Once you have answered the questions above, clearly state your SMART goal in a clear, concise sentence (it should contain all 5 elements from above)

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**Action Steps**

When breaking your goal down in to action steps, what specific tasks will you need to complete in order to attain your goal? Think of these as “small wins” you can do on a daily or weekly basis. Be specific.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

**Roadblocks & Solutions**

Identify at least 3 realistic roadblocks (or challenges) that might “get in your way” of achieving your goal. Then, come up with 1-2 plausible solutions around that potential roadblock to ensure you have more success if/when they present themselves.

Roadblock	Solution(s)

**Result & Reward**

How will you feel when you accomplish your goal? Also, identify a **health-enhancing** reward for yourself that is related to your goal.

**Recording Your Progress**

It is important to come up with a specific method of recording progress. It might be something as simple as a **quick indicator** (like a checklist, a smiley face, number rating, etc.) **AND** a **narrative** on your progress (such as journal entry, voice recording, etc). *How will you keep track of your progress* (include one quick indicator AND one narrative)?

# Rubric

**National Health Education Standard 1:** Students will comprehend concepts related to health-promotion and disease prevention to enhance health.

- **1.12.3** The student will analyze how environment and personal health are interrelated.

**National Health Education Standard 6:** Students will demonstrate the ability to use goal-setting skills to enhance health.

- **6.12.1** Assess personal health practices *as it relates to environmental health and wellness*.
- **6.12.2** Develop a plan to attain a personal health goal that addresses strengths, needs, and/or risks *as it relates to environmental health and wellness*.
- **6.12.3** Implement strategies and monitor progress in achieving a personal *environmental* health goal.

Concerns (“Not Yet”) Areas That Need Work w/Comments	Criteria (“Proficient”) Standards for Performance	Advanced (“Above & Beyond”) Evidence of Exceeding Standard w/Comments
	Thoroughly analyzes how environment and personal health are interrelated by providing 3 or more examples (NHES 1.12.3)	
	Completes the self-assessment on one’s own environmental wellness behaviors (NHES 6.12.1)	
	Clearly and accurately identifies all components of the SMART acronym with sufficient detail. (NHES 6.12.2)	
	Identifies 3 action steps that can be repeated with all or most FITT Principle elements, and/or one or more could be more specific/detailed (NHES 6.12.3)	
	Identifies 3 roadblocks and 1 plausible solutions for each (NHES 6.12.3)	

**Grade & Teacher Comments:**

