



LESSON PLAN

The first step to true learning is engagement. What better way to engage students these days than video games. That's right... we said video games. This Lesson plan will easily guide you through the process of how you can use meaningful online video game design to enhance students understanding of health eating, exercising and other healthy lifestyle choices (as well as enhance students' science, math, language, technology, and career skills along the way).

You will start out learning how to make sure your school environment is prepared technology wise (easier than you think). Then you will discuss with students exactly what healthy eating, exercising and lifestyle choices are. After that you will be introduced to an easy to use online video game design website called Gamestar Mechanic. Do not be intimidated, this site is built for teachers and students with no game design or even game playing experience. After that you will learn how to publish students' games on the Green Ribbon Schools website, for the entire world to see. All of this can actually occur in less than 4-6 weeks (depending on your schedule).

So let's get started! (See Next Page)

TABLE OF CONTENTS

This Lesson Plan consists of 4 Major Sections and then the Steps within each. These are:

Section 1: Prepare the Environment and Get Healthivores Started on GRS!

Step 1:	Technology Requirements (0-2 hours)
Step 2:	Teacher Registers on GRS (5 minutes)
Step 3:	Teacher Starts the Healthivores Project on GRS (5 minutes)

Section 2: Discuss the Role that Technology Plays in our Health

Step 1:	Review the Health Resources provided in this Lesson Plan or collaborate with Math, Health, PE and other teachers at your school (1 hour)
Step 2:	Discussions and Activities with Students Around Health (1-2 hours)

Section 3: Develop the Games

Step 1:	Teacher Registration on Gamestar Mechanic website and Set up the Class/School (5-30 minutes)
Step 2:	Student Registration (30min - 1 hour)
Step 3:	Students Complete the GM Tutorials (5 hours)
Step 4:	Students are put into groups to Plan their Game (1-2 hours)
Step 5:	Games are created and Published on the GM website (2-3 hours)

Section 4: Green Ribbon Schools - let the world see it!

Step 1:	If not completed in Section 1 - Teacher Registers on GRS and Starts Healthivores Project (10 minutes)
Step 2:	Students register on the GRS website and join the Healthivores Project started by the teacher (0-1 hour)
Step 3:	Students Create Results pages on GRS and Submit to Teacher (1-2 hours)
Step 4:	Teacher Reviews and Publishes Results pages (1 hour)

YOU ARE DONE! (once you Publish the Results page(s) including all of the requirements from the [SUBMISSION CHECKLIST](#), the submission(s) is complete).

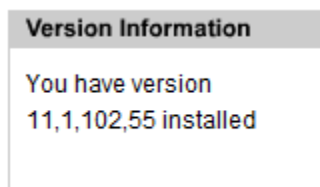


Section 1: Prepare the Environment and Get Healthivores Started on GRS!

Step 1: Technology Requirements: Computers, Browsers and Electricity (easier than you think) - 1 hour

- *Computers* - You will need about one computer for every 1-3 students. One computer per student is preferred so they can all complete the tutorials in SECTION 3: Step 3 at the same time. However, if you have a limited number of computers go ahead and group the students into a group of 3 or more and have them complete the tutorials as a group.
- *Adobe Flash* - All computers will need Adobe Flash (**Version 10 or higher**):

1. Check your version here <http://www.adobe.com/software/flash/about/> and look for the below box on the right side of the page:



2. If your version is lower than 10.0 update your Flash here for Free: <http://get.adobe.com/flashplayer/> (we recommend update to Version 11 or higher)

- *Internet* - All computers will need internet access.
- *Web Browsers* - Be sure that your computers have an internet browser (Internet Explorer or Firefox). Be sure that the browser is updated on all computers. For best results use Firefox 8 or higher (a free browser that can be downloaded here: <http://www.mozilla.org/en-US/firefox/new/>).

Step 2: Teacher Registers on GRS if not already registered (5 minutes)

Visit www.greenribbonschools.org and click on the REGISTER button.

Step 3: Teacher Must Start the "Healthivores" Project on GRS (5 minutes) - [START AN ACTIVITY - HOW TO VIDEO](#)

To “Start” the Healthivores project on the Green Ribbon Schools website:

- Once logged in, click on the big red **Start a New Project** button

A red button with white text that says "Start a New Project".

- Complete the "Start New Project" page. On this page, it is important that:
 - In the **Project Name** blank, you must enter the word “Healthivores”. (You may also include other words in the Project Name as long as “Healthivores” is included.)
 - From the **Cornerstone - Category** pulldown, choose "**Health & Fitness – Health Education**".
 - From the **Subcategory** pulldown, choose "**Healthivores VG Contest**"
 - In the **Keywords** blank, you must enter "AMD". (You may also include keywords that represent your organization, school or activity as well – ex: AMD, TCEA, NSTA, gaming)

Section 2: Discuss the Role that Technology Plays in Maintaining, discussing and monitoring our Personal Health

Step 1: Review the Health Resources provided in this Lesson Plan or collaborate with Health, Science, Technology, PE and other teachers at your school (1 hour)

You, as the teacher, will review and research the role that Technology plays when we are discussing, maintaining, monitoring and considering our personal health. We have provided suggested resources below, as well as a suggested lesson ideas. Keep it simple as you can get lost out there in all the books, articles, etc.

SUGGESTED RESOURCES, LESSON IDEAS and ACTIVITIES:

- **What are the Benefits of Workout Machines(all grades):** <http://www.livestrong.com/article/289790-what-are-the-benefits-of-workout-machines/>
- **High Tech Weight Loss Tools (all ages):** <http://www.realsimple.com/health/fitness-exercise/weight-loss-tools-00100000070963/index.html>
- **Monitoring Health with Mobile Devices(6-12):** http://www.nytimes.com/2012/02/23/technology/personaltech/monitoring-your-health-with-mobile-devices.html?_r=0
- **Heart Rate Monitoring App Technology(9-12):** <http://vator.tv/news/2012-08-09-cardio-unveils-touchless-iphone-heart-rate-monitor>
- **Body Fat Calculation(6-12):** <http://exercise.about.com/od/weightloss/a/weightlosstrack.htm>
- **How Technology Helps you Lose Weight - Tracking, Social Media, etc. (all ages):** <http://www.prevention.com/weight-loss/weight-loss-tips/7-ways-technology-helps-you-lose-weight>

Step 2: Discussions and Exercises/Projects with Students Around Health (1-2 hours)

Spend at least 2 hours discussing and teaching students the role that Technology now plays in our personal health. Here you are laying the foundation for the concepts they will put into their games. Suggested topics to discuss:

- How can we use tools like computers, wristbands, and our mobile phones to track our health goals (weight loss, exercise tracking, etc.)?
- How might joining a social community that is focused on health help you reach your health goals (support, accountability, showing off results, competition...)?
- What are the benefits or the disadvantages that technology or machines present when addressing your personal health? For example, is it better for you to use a treadmill or run on the ground? Can one become overly obsessed with tracking their health? Can we depend too much on machines to do all the work for us as if they are the magic fix?
- How does technology now play a role in researching disease prevention and cure?

Section 3: Develop the Video Games

Step 1: Teacher Registration on Gamestar Mechanic website (5-30 minutes)

Visit this link (http://gamestarmechanic.com/teachers/get_started) and follow the below steps:

- On this page, you will locate and click on the “Use the Free Edition” button in the **Use the Free Edition** box (see image below):

Use the Free Edition

Sign your students up to use the Free Edition of Gamestar Mechanic and they'll have access to the same free learning experiences and content available to all Gamestar Mechanic users. Premium Educational features not included.

[Use the Free Edition](#)

(Note: If you wish, you can choose the *Exclusive Educational Package* offered on this page for a small fee per student.)

1. Complete the “*Create a Teacher Account*” and “*Tell us about Your School*” sections and click the “*Validate User and Create Your Class*” button.
2. Complete the “*Create Your Class*” section and click the “*Validate and Create Class*” button.
3. Upon completion of these steps, you will see a page like the below, letting you know you have successfully registered and completed setting up your class on the Gamestar Mechanic website :

Success!

Congratulations! Your class is now set up so your students can join and start using Gamestar as part of your class.

You have successfully setup the class **Green Ribbon Schools Team!**

Information about your class

NAME: *Green Ribbon Schools Team* SHORTNAME: *GRSteamwill*

Free Student Activations

REMAINING STUDENT ACTIVATIONS: *Unlimited*

Get your students signed up
Tell your students to visit this url to register with Gamestar Mechanic with your permission. If your students already have Gamestar accounts, they can use them to join your class. If they don't, they'll be able to create new ones. They will not receive premium benefits, but they will be attached to your class should you choose to upgrade later.

<http://gamestarmechanic.com/join/GRSteamwill/free>

[Manage your class from your Workshop](#)

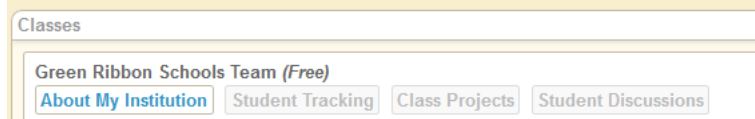
[Teaching Resources](#)

Step 2: Student Registration (30 min-1 hour)

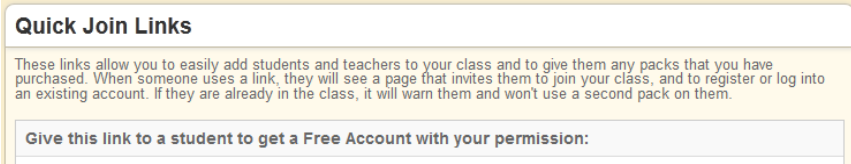
- Now that you have set up your “Class” you will receive an email from Gamestar Mechanic with a ***Student Invite Link***. Share this link with your students. They will follow that link and complete registration, connecting them to you and the Class you set up.
- If you lose your email from Gamestar Mechanic or it does not arrive, you can locate the ***Student Invite LINK*** by logging into your Gamestar account and clicking on **WORKSHOP** in the top navigation bar:



Then locate the “Classes” section on this page and click the “About My Institution” button:



Then locate the “Quick Join Links” section of this page and you will see the *STUDENT INVITE LINK*:



- Once your students have visited the *STUDENT INVITE LINK* you gave them and finished registration, they will click into the QUEST area of their account on Gamestar Mechanic. This will begin the Quest Tutorials on how to Design Games.

Step 3: Students Complete the Gamestar Mechanic Quest Tutorials (5 hours)



(This is the QUEST button students will see after logging into the Gamestar Mechanic site)

Once logged into the Gamestar Mechanic website, students will click on the **QUEST** button to enter the QUEST area of their account. Through the completion of the Quest, students will learn how to create video games and earn sprites/characters to use in their games. **The Quest Tutorials are set up so that students can complete them at their own speed, and they require no instruction from the teacher to complete.** They are:

- Lesson 1: Terms and Concepts - 1 hour
- Lesson 2: Core Design Elements - 1 hour
- Lesson 3: Balance - 1 hour
- Lesson 4: Design - 1 hour
- Lesson 5: Playtest and Iterate - 1 hour

HEALTHIVORE™ SPRITES: Your students can get a free package of exclusive Healthivore sprites/characters, to use in their game designs, by clicking on this link: <http://gamestarmechanic.com/?activation=HGVAXUOKZA>



If you're not already logged in to the Gamestar Mechanic website, it will ask you to do so. Once you've followed the link and logged in, you will get a confirmation message indicating that you now have access to the Healthy Sprites. When starting a game in the Workshop, you will now be able to use those sprites.

Step 4: Students are put into groups to Plan their Game (1-2 hours)

Put students into teams of 3 or less (max of 3 laptops will be awarded to students of winning team - See [PRIZES](#)). Students may also work individually if you prefer. Have the students plan what their game is going to be about and how they are going to put it together. Questions that should be answered during this pre game design planning phase are:

- Who is the audience: Other students and kids? Adults? Unhealthy people? etc.
- What lesson about how Technology plays a role in our health do you want to teach in your game?
- What is the story behind your game? (Timmy needs to avoid the bad influencer guys who are trying to talk him into eating hamburgers and ice cream as he is trying to make it to the park to play football with his friends.) Another example: SAM the Super Antioxidant Man is fighting off free radicals inside of the human body. He collects the good fruits and vegetables that are high in antioxidants and shoots all the bad free radical guys. Here is a link to this game for reference: <http://greenribbonschools.org/activity-detail.php?id=863>
- What is the objective of your game: Is it that the main character has to stay alive for 30 seconds by eating certain sprites to get more energy? Is it that you have to collect all of a certain sprite that represents healthy food before you can beat the level? Is it that you have to avoid bad guys and reach the end of a level?

Step 5: Games are created and Published on the GM website (2-3 hours)

Each team of students will implement their plans from Step 4 by designing an actual game. Once the game is finished they will publish it on the Gamestar Mechanic website.

Section 4: Green Ribbon Schools – publish submission and let the world see it!

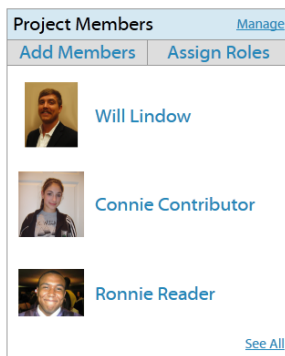
Step 1: If not completed in Section 1 of this Lesson Plan -Teacher Must Register on GRS and Start the Healthivores Project (5-10 minutes)

If the teacher has not yet registered on the Green Ribbon Schools website or Started the Healthivores Project on GRS, you must visit [Section 1: Step 2 and Step 3](#) before continuing to Section 4: Step 2.

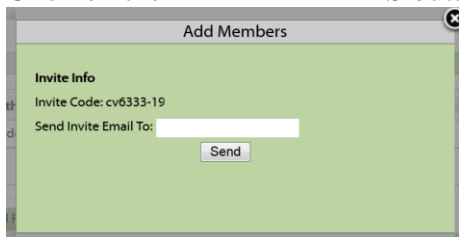
Step 2: Students will now register on the GRS website and join the Healthivores Project started by the teacher (0-1 hour) - [INVITE STUDENTS - HOW TO VIDEO](#)

This is a private project and no one can see it unless you invite him or her in. **To invite students into the project:**

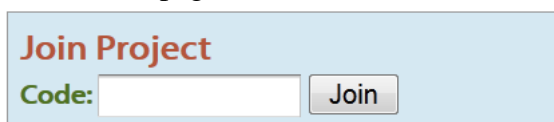
1. Login to the GRS site and click on the name of your Healthivores project on your **My Projects** page
2. Once inside the Healthivores Project you started, locate the “PROJECT MEMBERS” widget on the right side of the page:



3. Click on the ADD MEMBERS button in this widget and the ADD MEMBERS pop up will appear:



4. Email, text, IM, or write the INVITE CODE for this project on the board for the students. Students will login to the GRS website and enter that Invite Code into the JOIN PROJECT box on their MY PROJECTS page:



Step 3: Students Create Results pages on GRS and Submit to Teacher (1-2 hours) - [CREATE RESULTS PAGES - HOW TO VIDEO](#)

THIS IS THE BIG FINISH: At this step students will build their "presentation page" or RESULTS PAGE to show off what they learned and to display/Embed their game (see this as an example: <http://greenribbonschools.org/activity-detail.php?id=863>).

Here is the process they should follow:

- Have students download or create/take images and video that represent the healthy lessons they want to teach with their games (right now they are just saving these to their computers and will insert these images/videos into their results page in a couple steps).
- Have students Log In to the www.greenribbonschools.org website and click on the Healthivores project listed on their My Projects page.
- Once inside the project on the Project's Dashboard page, you and the students will see a big open blank with a toolbar labeled "RESULTS PAGE BUILDER". This is where the presentation or RESULTS PAGE is created. Have them enter a fun and creative title for their Healthivores Results Page and then have them click into the big blank.
- Have students **EMBED** their game into their Results page using the **INSERT GAME** button. Here is how:
 1. Students will go to the Gamestar Mechanic website and locate their published game in the GAME ALLEY. Next to their game you will see the *SHARE THIS GAME* section. Click on the **EMBED** button and copy the entire code (the EMBED code is extremely long so be sure to copy the entire thing).
 2. Go back to the Green Ribbon Schools website and click into the big Results Builder blank. Then click on the **INSERT GAME** button. In the pop up, Paste the Embed code you just copied from Gamestar into the blank and click the "SAVE and RETURN TO BUILDER" button.
 3. You will see a big grey box appear where the game has been inserted. DO NOT resize or move this box now that it has been inserted.
- Have students enter all required text from the [SUBMISSION CHECKLIST](#) including:
 1. **The story or narrative behind the game:** (example: Super Antioxidant Man wants to eliminate all of the free radicals in the human body. So he is put inside of a sick person's body to get rid of them all and collect all the antioxidants)
 2. **The objective or goal of the game** (examples: stay alive for x amount of time, get to the end goal by avoiding the bad guys, collect all of the apples in the level)
 3. **The healthy eating, exercising and/or lifestyle choice lesson being taught with the game** (foods that are high in sugar can turn into fat, antioxidants eliminate free radicals in the body and keep you healthy, exercising burns calories and makes you a smarter student, etc)
 4. **The intended audience for the game** (examples: other students, parents, everyone, etc)
 5. **Team Members:** List the First Names of all Team Members who worked on this Game and GRS Results Page.
- Then have students insert their pictures and/or videos by clicking on the INSERT IMAGE and INSERT VIDEO buttons in the toolbar.
- Have the student review for spelling errors and final looks and then have them click the **PUBLISH PAGE** button.

[HEALTHIVORES SUBMISSION WALKTHROUGH - How To Video](#)

Step 4: Teacher Reviews and Publishes Results pages (1 hour) - [PUBLISH RESULTS - How To Video](#)

Students have now “submitted” their pages to you (the teacher) and you must now **PUBLISH** them to make them a completed submission and to send them to the PUBLISHED PROJECTS area of the GRS website for everyone in the world to see.

Here is how to PUBLISH:

- Login and click on the Healthivores Project you started.
- Locate the **PROJECT PAGES** widget on the page and click the Green Publish button This will show you the most Recently Submitted and Published Pages from your project(*see image below*):



- Click the [See All](#) link in the widget to bring up the PROJECT PAGES pop up, where you can see all of the pages currently submitted and or published for this project (see image below):



- Click on the name of any “Submitted” page to Preview it and to make sure the student has completed all requirements stated on the [SUBMISSION CHECKLIST](#).
- Click the **PUBLISH** button in the ACTIONS column for each page you want to Publish. The entire line will turn Green and that page is now PUBLISHED (making it a completed contest submission).

YOU ARE DONE! (once you Publish the Results page(s) including all of the requirements from the [SUBMISSION CHECKLIST](#), the submission(s) is complete)

You can now locate your published work on the PARTICIPATING SCHOOLS page of the GRS site by visiting: <http://greenribbonschools.org/schools.php> , clicking on your school’s name in the list and then the name of your Healthivores project. You can also search for it using the PUBLISHED PROJECTS area of the site: <http://greenribbonschools.org/publishedprojects.php>.

[HOW TO VIDEOS - How to Complete these Steps](#)



Acknowledgements: Special thanks to the following for their efforts in developing this Lesson Plan: the AMD Foundation, Pflugerville Independent School District, and Cyberways and Waterways, a non-profit 501-c3, developing Green Ribbon SchoolsSM.