

Genius Hour: Before You Begin!

So You Are About To Try A Genius Hour (GH) Project...

I'm very excited that you are going to give this project a try from home. Although things will look a little different than it would if we were at school, a GH project at home might be a great way to spend your time while you learn from home! Before you begin your project I'd like you to read these pages over (preferable with an adult) and spend some time watching the videos and listening/watching the stories that I have included. These will be helpful to both students and parents. This information will help you learn about what Genius Hour is, what Design Thinking is and will inspire and help you get started with your own project. I know this seems like a lot of information. Please use it in a way that feels right for you and your family. I don't expect you to look through every single thing, but it's here if you need it AND you can also revisit as needed!

What is Genius Hour?

What is Genius Hour? Introduction to Genius Hour in the Classroom

<https://www.youtube.com/watch?v=NMFQUtHsWhc>

You Get to Have Your Own Genius Hour by John Spencer

<https://www.youtube.com/watch?v=COF-bqZuE-I>

What is Genius Hour? An Overview of Genius Hour and 20% Time in the Classroom

<https://www.youtube.com/watch?v=2n7EeIMbzGO>

Genius Hour Inspiration!

A Pep Talk from Kid President to You!

<https://www.youtube.com/watch?v=l-gQLqv9f4o>

How to be an Inventor! Kid President

<https://www.youtube.com/watch?v=75okexRzWMk>

Obvious to You. Amazing to Others

<https://www.youtube.com/watch?v=xcmI5SSQLmE>

Caine's Arcade

<https://www.youtube.com/watch?v=faIFNkdq96U>

Audri's Rube Goldberg Monster Trap

<https://www.youtube.com/watch?v=OuDDEEHdf1Y>

Books to Read (or listen to on YouTube!)

What Do With Do With An Idea by Kobi Yamada

<https://www.youtube.com/watch?v=oxtvhISKsR8>

What Do You Do With a Problem by Kobi Yamada

https://www.youtube.com/results?search_query=what+to+do+with+a+problem+read+aloud

The Most Magnificent Thing by Ashley Spires

<https://www.youtube.com/watch?v=UM8oN4yzJqw>

The Dot by Peter Reynolds

<https://www.youtube.com/watch?v=t5mGeR4AQdM>

Rosie Revere Engineer by Andrea Beaty

<https://www.youtube.com/watch?v=3sNVhNThxcc>

Iggy Peck Architect by Andrea Beaty

<https://www.youtube.com/watch?v=18B8WMJdTCQ>

Room 123's Version of Genius Hour!

-I've included some "How To" videos/audios for you on Seesaw. These should help you with the process as you work from home!

-I'm here for you for whatever you need...but I also know that whatever you decide to will be great :)

-I really want you to focus on things that you are interested in, but I also want to see how you can connect those ideas in a way that can also "help" the world as a whole in some way.

-What can you/we create to make an improvement in our world?! This focus on **sustainability** can be connected to: the environment, to health, or to society (the people of the world). This will be part of the "empathy" section on your Design Thinking Planner.

Speaking of Design Thinking:

Design Thinking is...a process and plan that we can use to determine a need or a problem and ultimately be able to find ways to solve that problem in a creative way!

John Spencer is an expert in the field right now! He has created many great resources.

Below is the link to one of those resources! Scroll down to watch two videos to learn more

1) Why Students Need to Learn Design Thinking and

2) The LAUNCH Cycle: A Design Thinking Framework for Education.

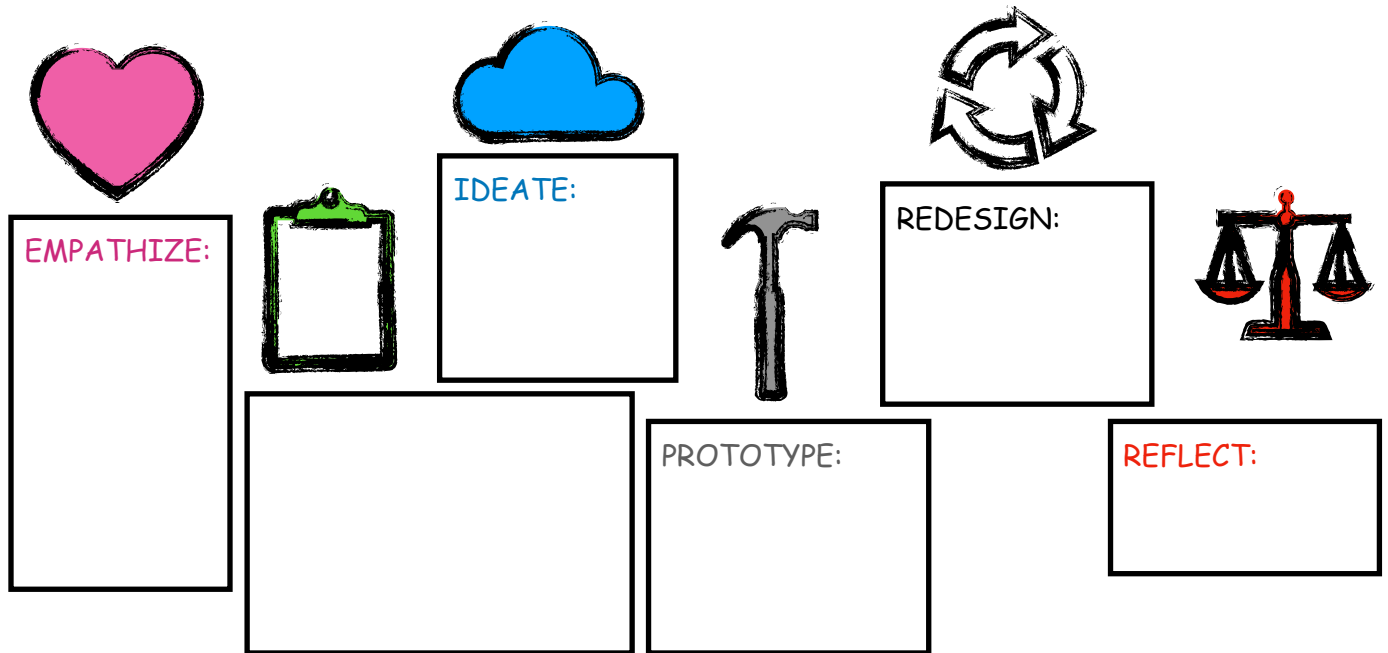
<http://www.spencerauthor.com/what-is-design-thinking/>

The Design Thinking Visual:

I created a visual for Design Thinking for one of my previous courses...



Genius Hour Project:



These are the basic steps of Design Thinking that we will use for our Genius Hour project. The package that you have at home is an updated version of this. One that we think should work for us!

Ready to Start?!

As you start to think about some ideas for your GH project, take some time reflect on these questions...

Ask yourself:

- What "real world issue" do you have
 - a) compassion for? (wanting to help someone in need)
 - b) curiosity for? (want to learn about something you are interested in) and
 - c) **empathy** towards? (being able to understand how someone else is feeling in a given situation)
- Go ahead and think of your ideas (in your notebook)
- Could any of your ideas help to solve a "real world problem"?
- If not, what could you do to make a change to an idea so it shows compassion, curiosity and/or empathy?

Let's Talk a Bit About Sustainability:

Sustainability is providing the best for people and the environment both now and in the indefinite future. (<http://encyclopedia.kids.net.au/page/su/Sustainability>)

Need more information? Try watching this video called What is Sustainability? By Mocomi Kids <https://www.youtube.com/watch?v=gTamnlXbgqc>

Six Examples of Sustainability Problems in the Real World

(<https://www.reusethisbag.com/articles/a-kids-guide-to-understanding-sustainability/>)

Ancient civilizations were built on using raw materials such as rock, water, oil and gas. But as time has gone on, some of these raw materials have become rarer or harder to find. These are not sustainable. However, we are slowly replacing some of these older raw materials with some that can easily be replaced or will never run out. Sustainability affects many areas of our lives. Here are some of the most important.

1. Energy
2. Agriculture & Deforestation
3. Plastics
4. Waste
5. Overpopulation
6. Biodiversity (the balance between all lifeforms in an area or on the planet)

Your project might connect to one of these 6 world issues, or something else such as health or finding ways to make the world a better place for people and animals!

Example of A GH project using the Design Process:

Empathy- The bees are in trouble and without the bees, people are in trouble. We are at risk of losing certain foods if we lose our bees. We need to protect our bees!

* I will write this on the Design Thinking for Students page

Define-How might we protect the bees better so they can continue doing their jobs such as pollinating, helping plants grow and producing food.

* I will write this on the Design Thinking for Students page

Ideate- 1) Get people seeds for flower seeds that they can plant 2) Make a "bee fountain" to give bees a safe place to drink from 3) Become a beekeeper

*I'll do a quick sketch of each of these on my Ideate/Prototype page and write it in point form on the Design Thinking for Students page

Prototype-I'm going to choose to make a "bee fountain". I will do some research about bees and their needs. I'll look for ideas to help me decide what the bee fountain should look like, be made out of, where it should be put, etc. I will then draw up my plan, make a list of materials and build a fabulous bee fountain!!

*I will do my research in my research book, write down where I got my resources from in my Research Log and draw out my detailed drawing on my Ideate/Prototype page and in point form on the Design Thinking for Students page

Test-After I make my bee fountain I will think about what I could have done differently, and make the changes (if possible)

*I will go back to the Design Thinking for Students page and add those details

Developing that "Guiding Question"

Thin vs Thick Questions:

Thin Questions

- are answered quickly (could be one word) and easily (by asking one simple question)
- doesn't take a lot of thought or discussion to determine the answer
- are what we can call "Google-able" because you can simply "Google It"

Example:

- Who plays the main character in Harry Potter?
- What is the capital city of Canada?

*Usually start with the words: Who, what, when and where

Thick Questions

- are more challenging to answer
- need proof (research)
- need to have some background information and a basic understanding of the question to get an answer
- can be called "open-ended"
- may lead to more questions and not be able to be answered
- are not "Google-able"

**The guiding question for your Genius Hour project will need to be a "Thick Question".

Here are some examples of how thick questions can begin:

- How might...
- What if...
- What is the impact...
- What is the effect...
- What would happen...
- What is the cause...
- How can you improve...

Final Thoughts:

-Use the pages that were sent home in your "Work Package" for your GH project! I have a version I can email you if you need :)

-Use the videos/audios to help guide as you go through the process

-Your prototype could be but is not limited to: cardboard, LEGO, movie, book, etc.

-Have fun! I can't wait to hear and see what you will come up with as a family