



Lesson Aquaponics

UNIT 1 F2F



5/16 Aquaponics

Obj. TSW construct ideas about how the mini aquaponics unit will be assembled and how it works. P. 76 NB



1. How does an aquaponics system work?
2. Read through the assembly instruction: Which step are you unclear about?
3. What is the Nitrification cycle?

Prefabricated Mini Aquaponics Unit



Food Matters Notes Page 77NB

5/18 Mini Aquaponics Unit

Obj. TSW develop a plan to assemble an mini aquaponics unit. P. 78 NB



1. What are the benefits of an aquaponics system?
2. How does it “fit”, into our sustainable model?
3. What concerns do you have about assembling one?

Aquaponics Benefits

- Efficient use of space
- Reuse matter and Nutrients
- Recycling Waste (nutrients)
- Experience Symbiotic Relationships between organisms
- Grow your own food

Aquaponics Unit

Assigning Tasks – Nelson / Pade Mini Aquaponics System

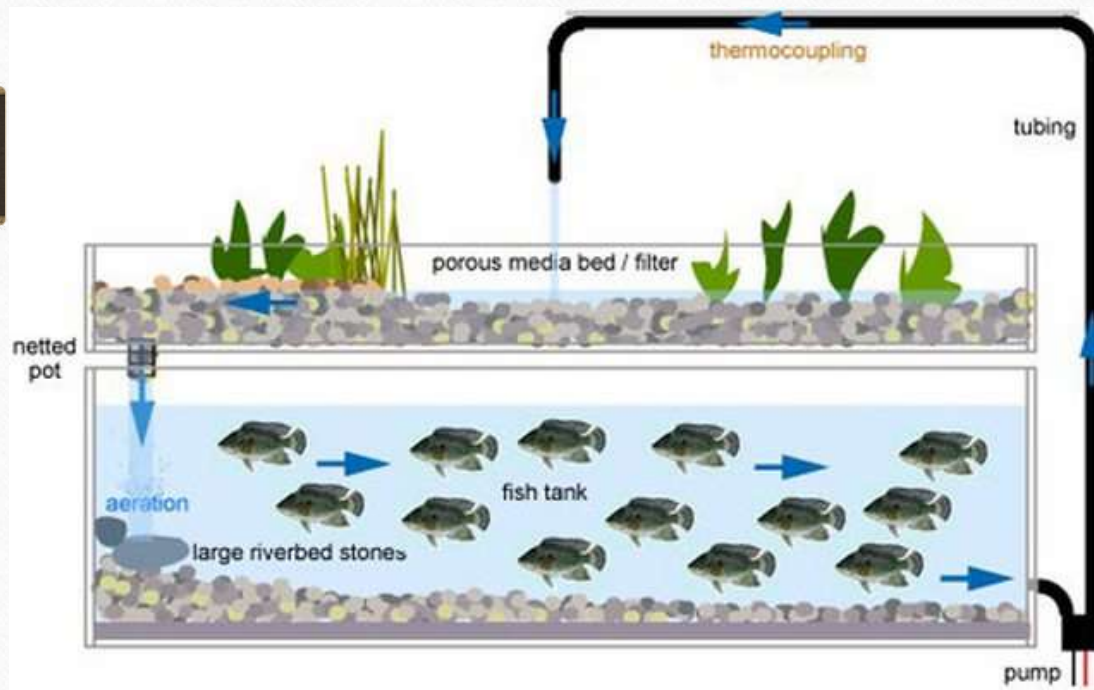
Read through the directions as a team. Decide who will have what roles.

Write down questions (**RFI – Request For Information**) that you have or highlight parts of the directions you need clarification on. **P. 79 NB**

- **(1) Foreman:** Read ALL directions and assigns tasks to construction crew and Gopher and makes sure ALL tasks are carried out appropriately.
- **(3) Construction:** Responsible for cutting supplies to appropriate length and assembling the aquaponics unit.
- **(1) Gopher:** person responsible for set up, clean up and getting the appropriate supplies.

5/19 Getting started with the Mini Aquaponics Unit

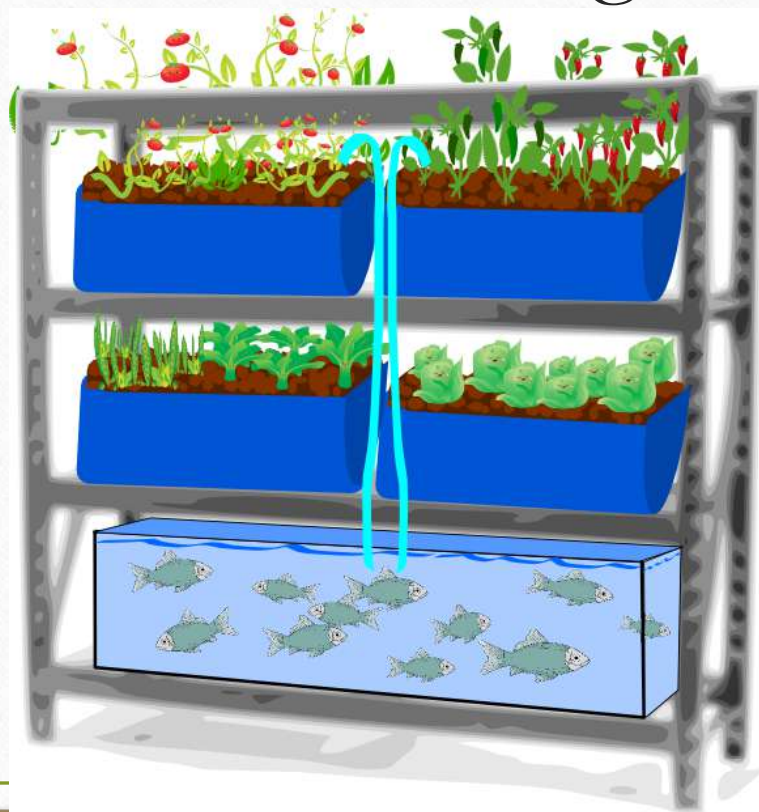
Obj. TSW learn first hand skills assembling a mini aquaponics unit. P.80 NB



1. What was the construction of the mini aquaponics unit like yesterday?
2. Draw a sketch of what your mini aquaponics unit will look like.
3. What safety measures were taken to make sure McAllister did not lose her mind or have heart complications?

5/20 Mini Aquaponics Reflection

Obj. TSW reflect on their experience building and assembling the aquaponics unit. P. 82 NB



1. How can Aquaponics benefit people throughout the world?
2. What would you do differently with your mini aquaponics unit?
3. What was one of your successes?

Aquaponics Article p. 81 NB

1. Do you think the general tone of the article is optimistic or pessimistic?
2. Why did Morgan travel to Haiti after the 2010 earthquake?
3. What is the main reason the Haitian people face food shortages?
4. Who is George Powell?
5. How do the teenagers at Stonewall Jackson help?

Transcript P. 59 NB

- Tape your transcript to page 59 NB.
- Write three short term goals you want to accomplish before the end of the year.
- Write three long term goals you want to accomplish before you graduate/
life goals.

Internships.com

P. 71 NB

- Where are you interested in working?
- What type of work?

Top 10 most Common Interview questions

p. 73 NB

- <http://money.usnews.com/money/careers/slideshows/the-10-most-common-interview-questions/11>
- Choose 3 of these 10 questions and write our you answer on page 73 NB.

5/11 Aquaponics

Obj. TSW realize one of the solutions to feeding the world is aquaponics. P. 72 NB



1. What is aquaponics?
2. What skills might you need to build an aquaponics unit.
3. Describe some characteristics (steps) of building an aquaponics unit.

Final Project – Garden Plants

- **PART 2 DUE** McAllister needs to review your progress of your project before **May 27TH**.
- **Introduction**
- Briefly review your project for us.
- **Data**
- Qualitative Data: Words, Descriptions, Pictures, Video
- Quantitative Data: Tables, Charts, Graphs
- **Data Analysis**
- What does the data mean?
- What were some things that you learned from mistakes you made?
- What would you do differently next time?
- **Conclusion**
- Explain what your project meant to you and how the class Farm 2 Fork has helped you gain a better understanding of your project/ gardening caring for plants/& or soil . If you were in charge of feeding the world, or creating more sustainable practices worldwide how you would go about it?

Final Project - Aquaponics Unit

- **PART 2 DUE** McAllister needs to review your progress of your project before **May 27TH**.
- **Introduction**
- Briefly review your project for us.
- **Materials:** List them
- **Procedure:** Step 1... Step 2... Explain how you put it together.
- **Data**
- Qualitative Data: Words, Descriptions, Pictures, Video
- Quantitative Data: Tables, Charts, Graphs, Flow Rate
- **Data Analysis**
- What were some things that you learned from mistakes you made?
- What would you do differently next time?
- **Conclusion**
- Explain what your project meant to you and how the class Farm 2 Fork has helped you gain a better understanding of your project/ gardening caring for plants/& or soil . If you were in charge of feeding the world, or creating more sustainable practices worldwide how you would go about it?

What would be good questions to ask during an interview? P. 73 NB

- Read the article, “How to prepare for an Entry-Level interview”

If you can't get enough...

- There are yet more Service Learning Opportunities at the Farmer's Market.
 - Thursday May 19th from 5 – 7 pm
 - Thursday May 26th from 4:30 – 6:30 pm (this is the last one... or not)
 - Just kidding...
 - June 4th & 5th Join the Relay for Life Team to fight Cancer
 - A member(s) of our RCHS Ag team will be walking the track continuously for 24 hours to raise awareness of cancer, education, prevention, treatment and in memory of those who have lost their battle.

What other local businesses support the Farm to Fork movement? P. 41 NB

- Research 3 businesses within 100 miles that raise, grow, sell, buy, and distribute local produce and meat, including dairy cattle?
- Explain what they do and how they do it.
- Some of this information can be included in your 1 – 2 page paper.

Omnivores Dilemma

How Corn Took Over America & The Farm p. 47 NB

- How is the supermarket like a field of corn? P.10
- Name some products made from corn. P. 11
- How much biodiversity was lost from 1920 – 2002? P. 26 NB
- Discuss a result of growing so much corn. P. 26 - 27

1 – 2 page paper Due May 12th

Where does your food come from?

- Where does your food come from?

- Discuss where your family buys food. Discuss what Farm to Fork is and its benefits.

- Why is it important to know where your food comes from?

- Include examples, explanations, and show the significance of where our food comes from.
 - Maybe include ingredients such as High Fructose Corn Syrup, salt, fat, sugar in our diet.
 - Discuss the video: Fed Up.
 - Include notes from Kari Pina's Guest presentation about how she sources healthy fresh food for 7700 students.
- Include the difference between processed and natural foods. Why is that important?
- Include companies, businesses that are part of the solution to eat healthier, and companies that could improve to become part of the solution. How are companies trying to change their image?

- APA Style: purdue.owl.edu

www.cacareerzone.org

p.49

- Begin the Career Assessment
- Write an occupation you are interested in.
- One sentence describing the job in your own words
- Describe the preparation required for that occupation
- What is the range of salary?
- What is that occupations outlook? Expanding, stagnant, decreasing?
- What are the common College Majors?

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P. 51NB

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- Read: “Things they need to be able to do”
 - Write one - three skill(s) or job description that you are good at.

Entry Level Research P. 53 NB

- Find 3 Entry – Level employment opportunities from the Skills Profiler of California Career Zone
- State your skill that will be an asset to that type of work.

Omnivore's Dilemma

CH 3 From Farm to Factory

Turning bombs into Fertilizer p. 57 NB

- What is Agribusiness? P. 29 NB
- What is the main ingredient in fertilizer?
- How is recycling fertilizer in a natural loop different than applying ammonium nitrate?

California Department of Food & Agriculture

p.75 NB

- <https://www.cdfa.ca.gov/>
- <https://www.cdfa.ca.gov/employment/>
- View the above websites.
- Write in your notebook a summary of what the website has to offer.
- What are some available employment positions offered in the CDFA?

Assembling the Ramp for
loading the garden beds with
soil.

May 15th, 2016



Still building the ramp...
Finally we get to move soil, even the puppy dog
gets to help.



I hope my future
students appreciate all
the hard work that went
into building the garden
beds and moving soil
into them!



McAllister gets to play in the soil!!! 😊
Silly Goose...



Thank you!

- West Sacramento Rotary, Centennial – Tony, Matt & Chris
- Cheryle Sutton – Culinary Teacher
- Jesus & Reshe- Student Volunteers