

MEME: <http://167.172.147.247:3000/#/>

### **Club session 1, 4:30pm -5:45**

- a. Introductions- **4:15-4:25** introductions (10 min)
- b. Games (10min) **4:25-4:35**
- c. What are models? Examples of models and show model (7min)- **goes through examples of models.**
- d. Videos - (8 min) **4:42-4:50**
- e. Demo of meme showing model 1 - (10min) **4:50 - 5:00**
- f. Discussion of model and ideas about how it works and what we might want to add (10 min) - **5:00 - 5:15**
- g. Discuss what evidence do they want or next time **5:15-5:30**

### **Club session 2, 4:30pm -5:45**

1. Make sure we have recording power (make all researchers co-hosts)
2. Record once all kids are there
3. Welcome and agenda (slides 1-3)- **(4:30-4:35)**
4. Introducing Criteria **(4:35 - 4:45)**
  - a. Give them the 4 criteria (supported, shows all steps, understandable, consistent), show the two comparisons and ask them whether and how they meet (or not) the criteria and they can add more criteria if they see fit
5. Fresh perspectives-- Update on new evidence in MEME, request to revise model, and come back with new questions. (Slide 9 )**(4:45 - 4:50)**
6. MEME refresh **(4:50 - 4:55)**
  - a. Point out model bits
  - b. Point out resources
  - c. Show “our ideas”
  - d. Show evidence 2 (summary of scenario/fish deaths)
  - e. Take a note about fish deaths and connect to the fish death model piece
7. Working on evidence and revising models (4:55-5:25)
  - a. Let kids control screen

8. 20 share out and some whole discussion and deciding what evidence we want to ask for from FRESH org (**5:25 - 5:45**)

### **Club session 3, 4:30pm -5:45**

1. Make sure we have recording power (make all researchers co-hosts)
2. Record once all kids are there
3. Fresh Perspectives update- algae are living things, breathe oxygen and need nutrients to grow
4. Evidence- algae and nutrients, new evidence on algae consuming oxygen, simulation.
5. Fix models
6. Debrief whole group- **5:30** requests for FRESH org and next thing coming up-gallery walk

### **Club session 4, 4:30pm -5:45**

We decided to give them the water circulation and fountains in ponds evidence, have them ready the models and then we do a gallery walk with Findustries model.

1. Make sure we have recording power (make all researchers co-hosts)
2. Record once all kids are there
3. Make groups
4. Welcome and agenda (slides 1-2)- (**4:30-4:35**)
5. Update from Fresh perspectives and new evidence slide (slides 3-5)- (**4:35-4:37**)
  - a. New evidence in MEME- sunlight, water circulation and fountains in ponds.
6. Review Criteria - (**4:37-4:40**) (slide 5)
7. Work in groups on new evidence and getting models ready for gallery walk (**4:40-5:20 - take 5 min break if needed**)
8. Get together and do a demo gallery walk for Shark Findustries model (**5:20-5:35**)
9. Debrief (**5:35-5:45**)

### **Club session 5, 4:30pm -5:45**

1. Make sure we have recording power (make all researchers co-hosts)
2. Record once all kids are there
3. Make groups
4. Welcome, agenda, and Fresh Perspectives (slides 1-4) **(4:30-4:40)**
5. Clean up models and get ready 15 min **(4:40-4:55)**
6. Review of gallery walk norms 5min **(4:55-5:00)**
7. Gallery walk review **(5:00-5:30)** Groups
  - a. Grp 1 gets Grp 2; Grp 2 gets Grp 3; Grp 3 gets Grp 1 (15min)
  - b. Grp 1 gets Grp 3, Grp 2 gets Grp 1; Grp 3 gets Grp 2 (15min)
8. Debrief (saves MEME)- tell them there is new evidence in there (Bubbler and algae and the landscape pond photos - (8 and 15)
9. Go back to groups review comments and new evidence **(5:30-5:40)**
10. Closing -- **5:40-5:45**

**NOTE-** we changed plans and had students begin critiquing right off the bat and then gave them time to clean up their models, revise based on round 1 of comments and then do round 2 of commenting

### **Club session 6, 4:30pm -5:45**

1. Make sure we have recording power (make all researchers co-hosts)
2. Record once all kids are there
3. Make groups
4. Welcome, agenda, and Fresh Perspectives, instructions for group work (slides 1-5) **(4:30-4:40)**
5. In groups: **(4:40-5:10)**
  - a. Respond to new feedback and review new evidence (20min)
  - b. Push breaking news item after they reviewed evidence and worked on models for like 15 min -- slide 7
  - c. Clean up models and get ready to present 10 min
6. Present **(5:10- 5:30)**- 5 min per group

- a. Highlight that similar models is a good thing because it is showing consensus (3 independent groups came to same conclusion based on data)
- 7. Video from FRESH Org **(5:30-5:35)**
- 8. Debrief **(5:35-5:45)** slide 10