What is a computer?

- How start making sense of this question!? 

Videos for KB

- Bubble computer
- Dan Meyer TED Talk – finding interesting problems
  - Intro bit
  - Start ~ 2:35 to ~ 10:20

Knowledge Building

We want to better understand our world:

1. What curiosities do you have about computer networks? …about the Internet?
2. What do you want to be doing to develop your ability to build knowledge?
   - To find and frame problems
   - To engage in collective idea improvement
   - To engage in *meta-discussion* on your p
3. How do you want to structure idea improvement and knowledge building for this semester?
   - How do you want to organize yourselves?
Using Knowledge Forum

- KF URL:
  - http://128.100.72.137:8080/kforum/home.xhtml
- Access code is: flyingpackets
- Things to do:
  - Make new views (rarely)
  - Post notes
  - Comment on others’ notes (build-on)
  - Make “Rise-aboves”
  - Use built-in tools

Discussion for KB

- What questions, or problems, are of interest to you (collectively)?
- How do you want to pursue these questions this semester?
- Start with a 2-week warm-up with Knowledge Forum
  - From now until Sept 24/26 work on questions of your choosing
  - Use scaffolding and built-in tools
  - Do some rise-aboves
  - We will regroup in class after these 2 weeks

Knowledge Building Questions

- A question that asks why, or how
  - not a simple yes/no question
- A question for which you can propose or develop theories
- A question that encourages everyone to investigate further and increase your collective understanding
  - And improve your ideas
- A question that encourages the community to engage in meta-discussion
  - Whether or not the group is making progress in terms of your question
  - If you need to develop a new question or have the current question evolve to reflect your improved understanding

Knowledge Building Principles

- Pushing at the knowledge edge
  - Identify holes and inconsistencies in (your own and) the group’s knowledge, and ask productive questions.
  - Pose problems that extend the edge of the understanding of the community.
  - Pose problems with potential for continual discussion and inquiry.
- Progressive problem solving
  - Show sustained inquiry. Keep asking questions
- Collaborative effort
- Monitoring your own understanding
- Constructive uses of authoritative sources
  - Help explain why you introduce a citation or link, rather than just posting for others to figure out the significance.
Possible KB Starting Points

- The Deep Web (Dark Web) and TOR
- Privacy and/or security issues
- Heartbleed bug
- Open PGP (pretty good privacy, for email)
- Net Neutrality