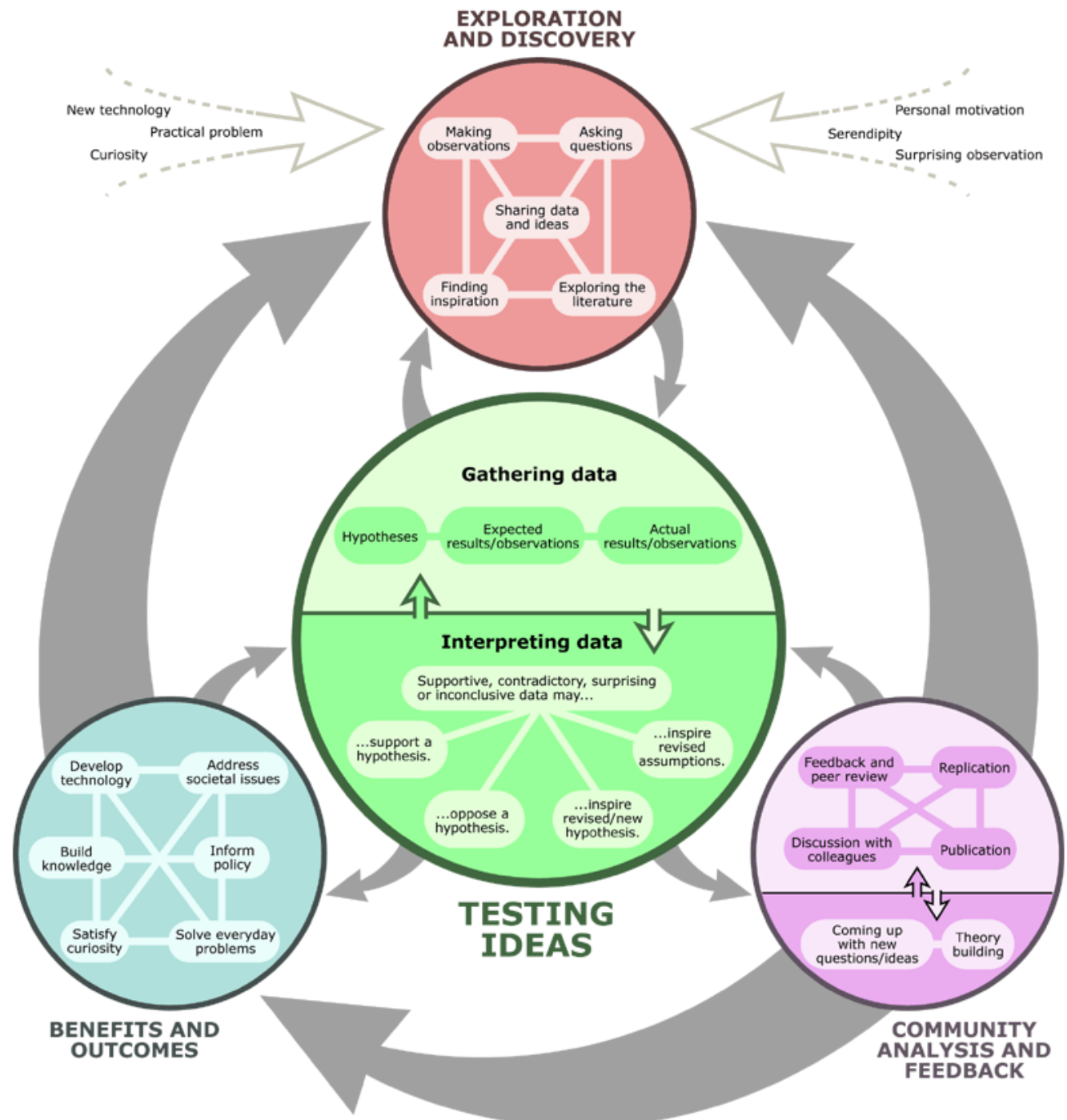


Science Exploratorium

Testing Ideas About our Natural World Through Scientific Inquiry



Where or how do scientists start?

EXPLORATION AND DISCOVERY

New technology
Practical problem
Curiosity

Making observations

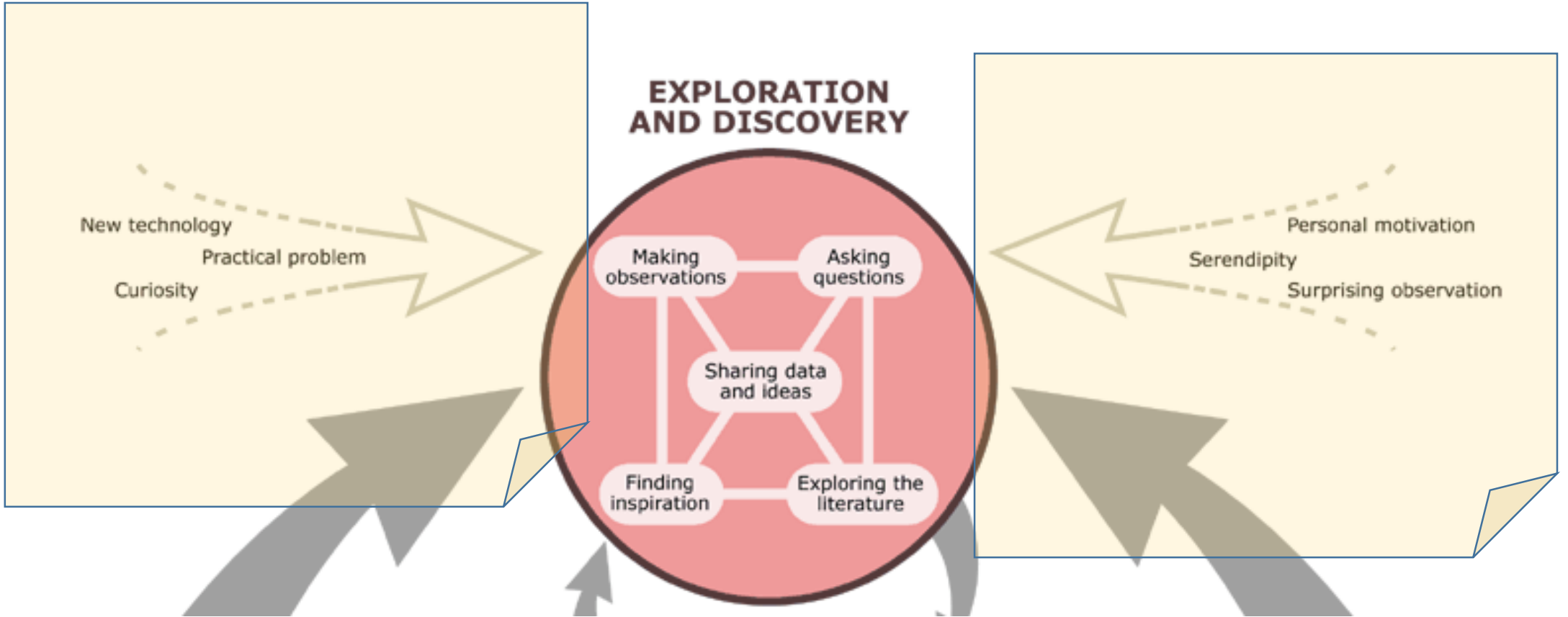
Asking questions

Sharing data and ideas

Finding inspiration

Exploring the literature

Personal motivation
Serendipity
Surprising observation









Personal Motivation

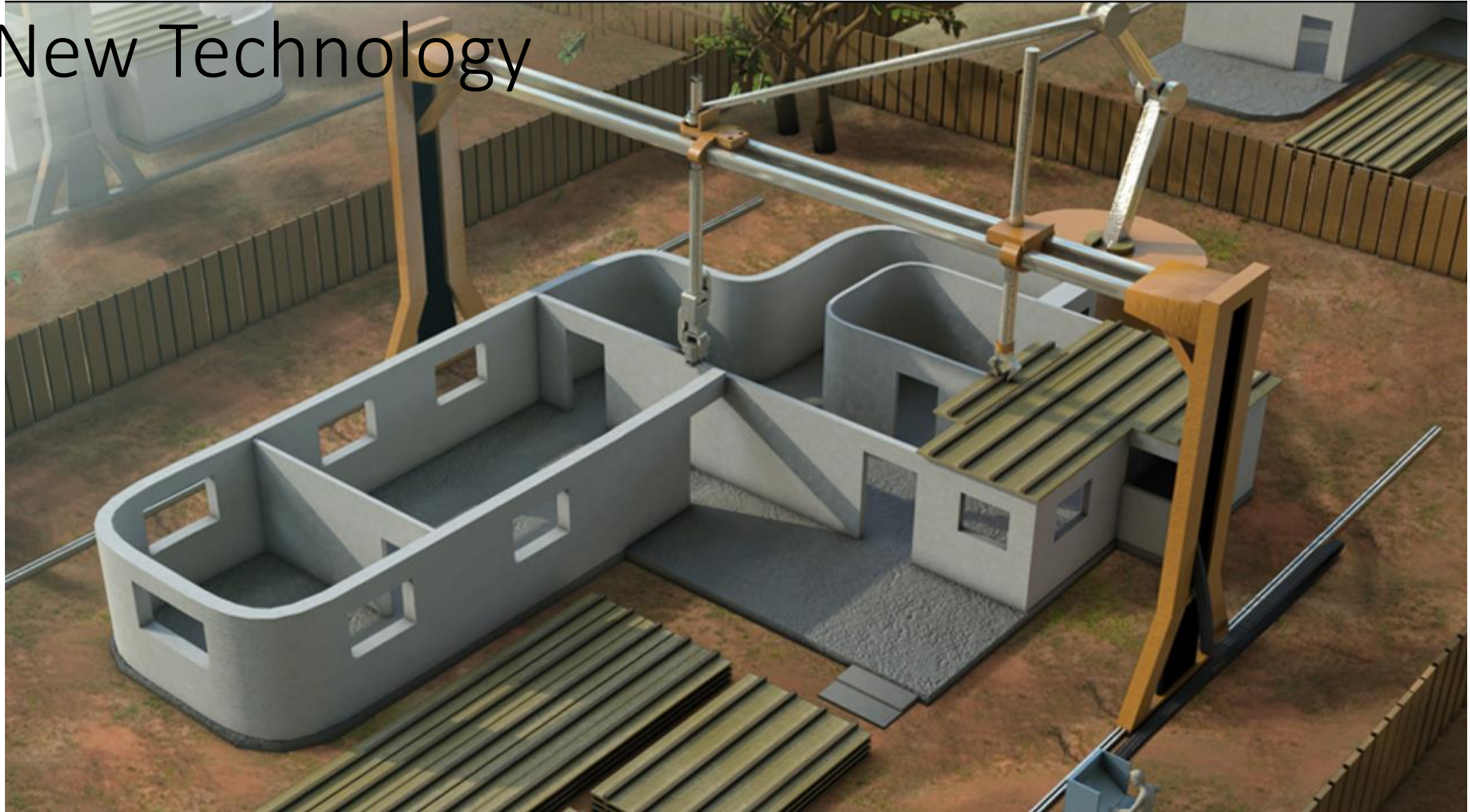


HEALTHREACH

Cholesterol Chart



New Technology

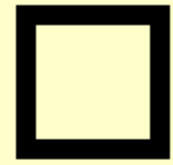




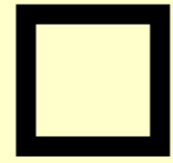
Science checklist:

How scientific is it?

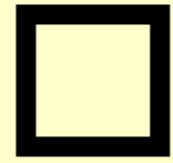
- Focuses on the natural world
- Aims to explain the natural world
- Uses testable ideas



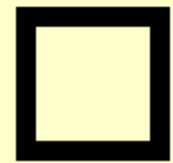
Relies on evidence



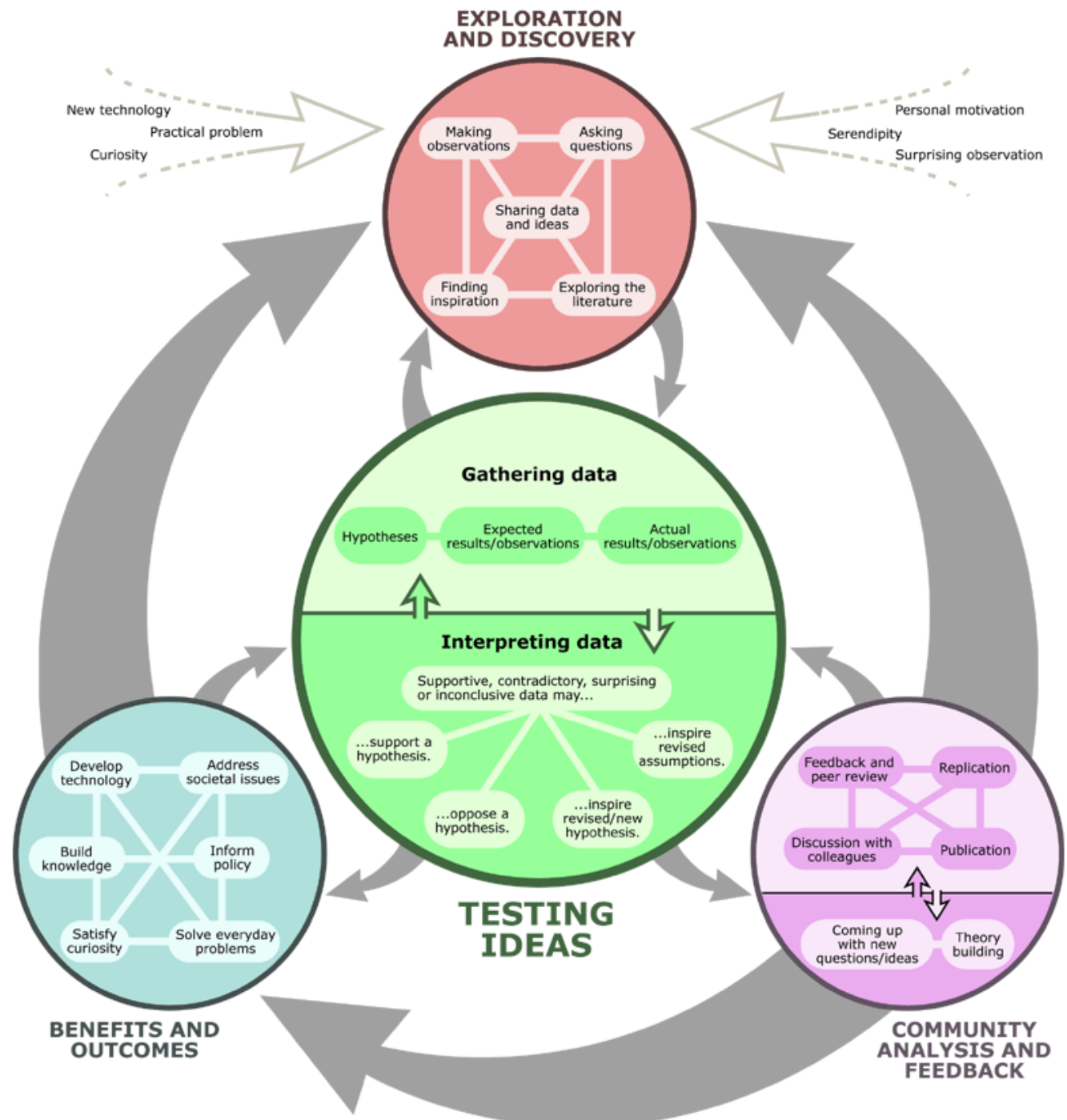
Involves the scientific community



Leads to ongoing research



Benefits from scientific behavior



Focused on Biology

Investing the natural world as it related to biology.

Beneficial

Top groups will apply to present at the Wisconsin Society of Science Teachers in La Crosse, WI. April 21st

Testable

Can be replicated and requires science data logger or specific process.

Collaborates with an expert

E-mail or phone conversations with an expert in this particular area is required.

Fits our timeframe and budget

1-2 weeks of materials list and waiting for order to arrive. 1 week Setup
Investigation 4 Weeks of collecting data. 1 Week of Drawing Conclusions.

Overall budget for all projects and materials need for ALL 7th and 8th Grade groups is \$800. The remaining items covered by group.

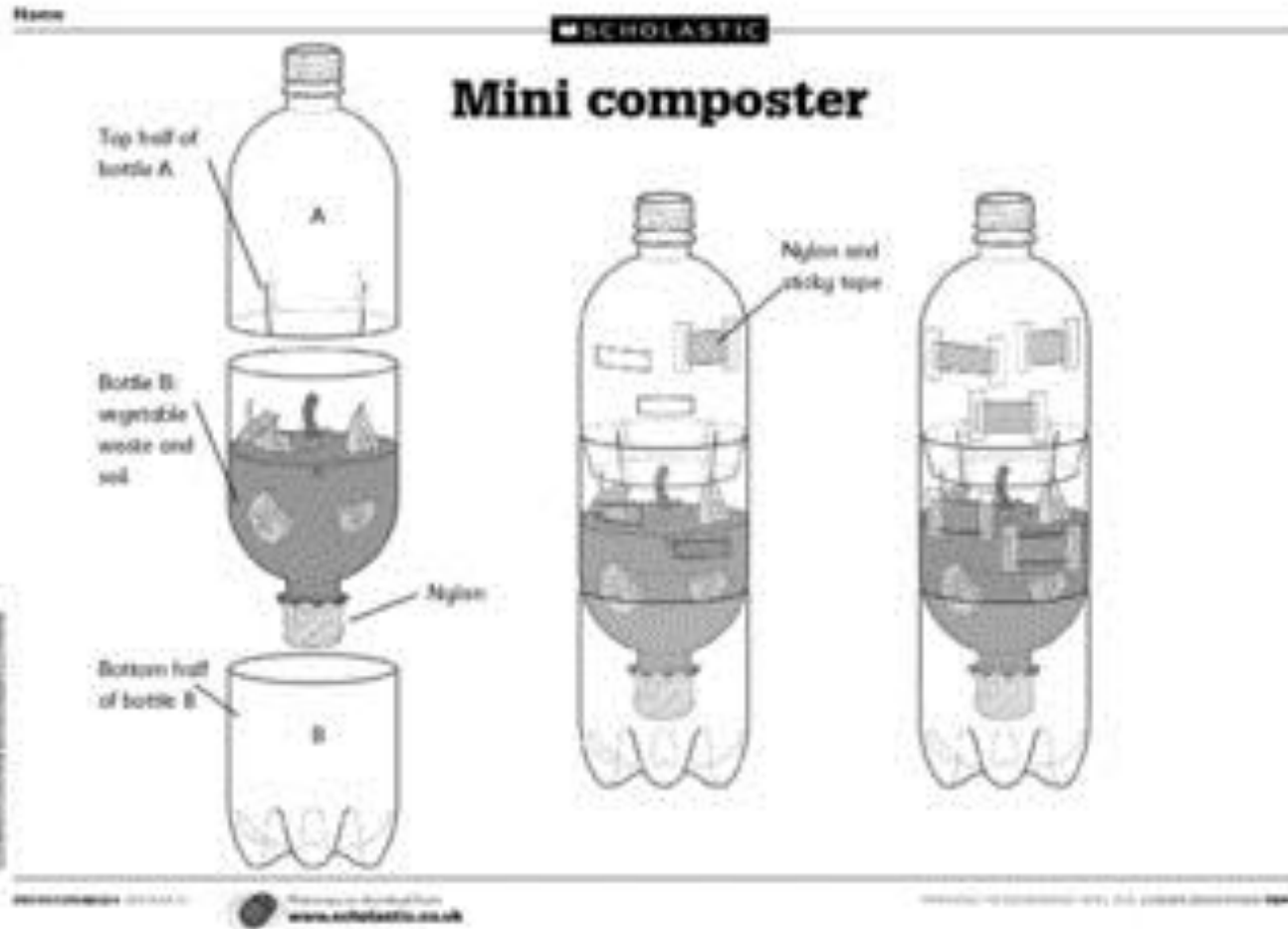
Possible Ideas

- “Turn down that music! You’re going to go deaf!” Mythbusters
- Visible decomposition – what affects rate of decomposition and composter design for a school
- Visible decomposition – why is it important to keep organic material out of landfills.
- Public Service Announcement – Healthy Habits involving germs
- Oh Deer Simulations – carrying capacities and deer management
- Where are the most germs in a school.
- Product test – best kind of mouthwash
- Public Service Announcement – food safety

Possible Ideas - continued

- Lung capacity challenge – who in band has the best lung capacity
- Exercise and focus behavioral study
- Growing food indoors in Wisconsin – **hydroponics**
- Homeostasis demonstration – staying warm and/or cool
- Wildlife survey – scent posts and deer cams -- a couple of locations
- Pollutions affect on fish species
- Classroom fish and **aquaponics** in a closed system

Visible Composter



Monday November 2, 2015

- Seek project approval
- Pre-Investigation Research
- Type up a draft of an abstract. One paragraph that summarizes what your investigation is about.
- Material list with [links](#) and prices of items you are requesting Mr. Hall purchases with the project budget. This should be down in Google so you can share it with Mr. Hall

Pre-Investigation Research

- Explore the web to see if others have done something like this before. If you find an interesting article, video, ... record the link on a slide with a brief explanation.
- [Article from Science News Magazine](#)

Draft of abstract

- One paragraph that summarizes what your investigation is about.

Material list

- Material list with [links](#) and prices of items you are requesting Mr. Hall purchases with the project budget. This should be down in Google so you can share it with Mr. Hall
- Online resources you can look at – Amazon, Caroline Products, Nasco, Flinn Scientific,

Tuesday November 3, 2015

continuing Monday's work

- See project approval
- Pre-Investigation Research
- Type up a draft of an abstract. One paragraph that summarizes what your investigation is about.
- Material list with [links](#) and prices of items you are requesting Mr. Hall purchases with the project budget. This should be down in Google so you can share it with Mr. Hall