# Mini Science Notebook

45

Data: You: Check cells – + Iodine

Low

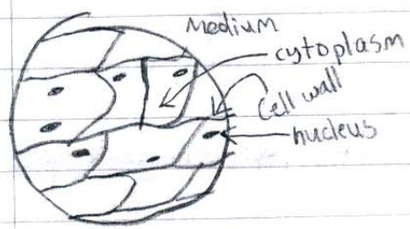
Medium

Description: Transparent, All different shapes

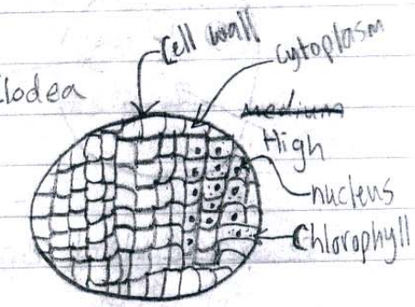
Description: Same as low, but cells are bigger

All Class – Line of Learning

onion



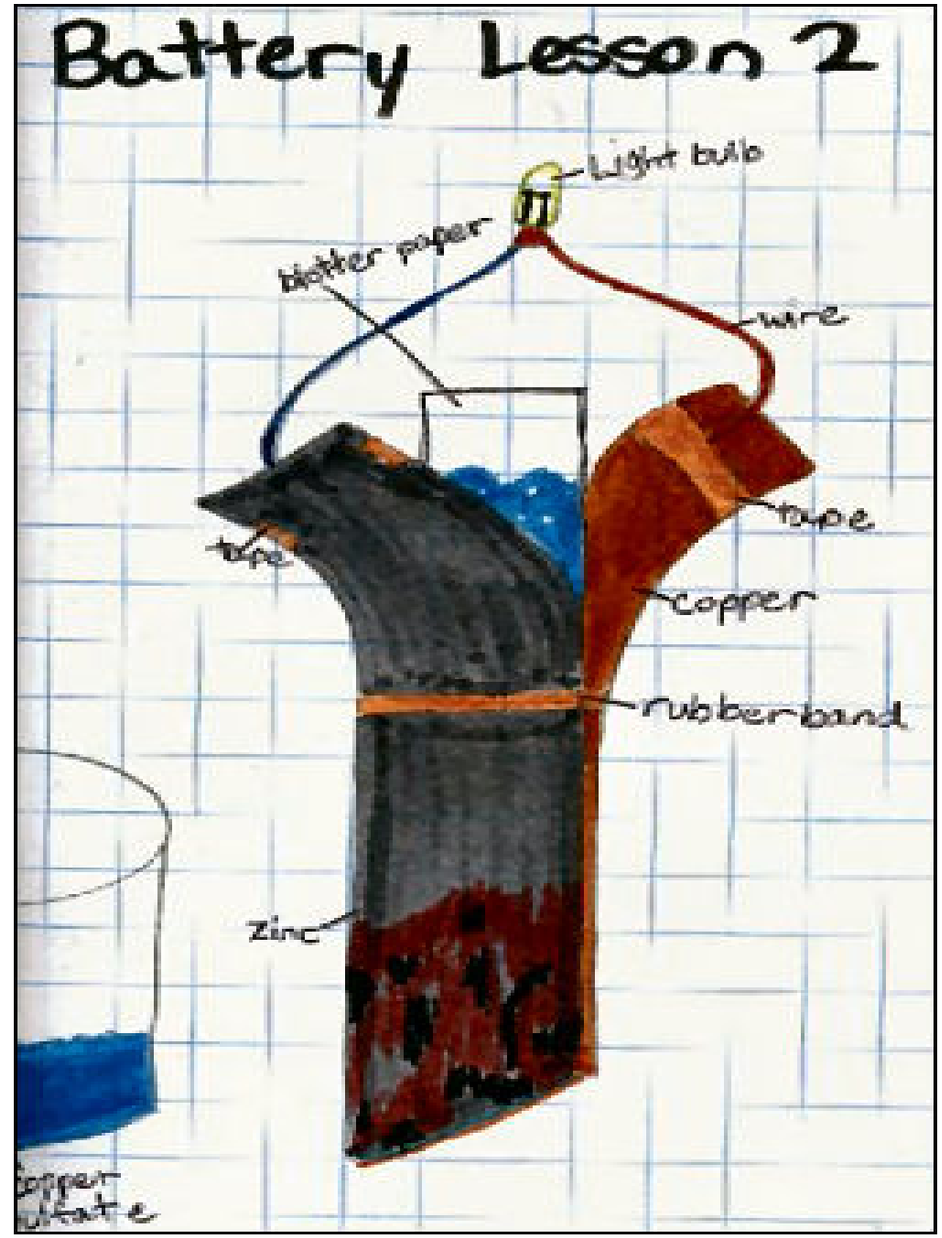

Elodea




Description: retangular, brick shaped, thick outside edge, most have a dot inside (nucleus)

Description: rectangular, very thick outside edge, ~~high~~ Green dots – Chlorophyll





# The Oak and the Cactus

The oak and the cactus are the same because they both are homes to animals.

In addition they both grow from a seed.

They are different because the oak has a acorn as a seed and the cactus has black seeds.

Also the oak has leaves but the cactus does not, whereas they both have protection.



10-13-04

# Adding vineger and Iodine

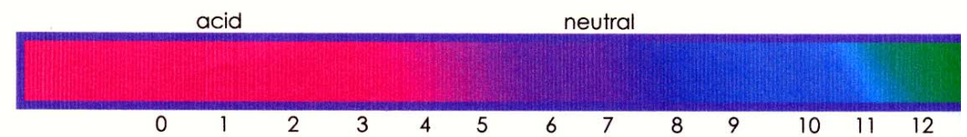
I observed that the baking soda and baking powder Both fizzed when we added vineger.

there is starch in this paper.

I noticed the baking powder and corn starch both turned black when we added iodine.

To our great surprise the baking powder turned black and fizzed when we added iodine. We know this now is because the iodine was mixed with water and when we looked at the ingredients of baking powder we see it has corn starch in it!

**Colors of Cabbage Juice:**



4

9-1-04

More observations

I observed a pencil that was 6¼" Long and ¼ wide and it is a hexagon.

I noticed the pencil smells like wood.

I reminds me of a long skinny stick.

I Wonder what would happen if I put it in water.



## EXPERIMENTAL DESIGN PLANNING SHEET

The **question** we are investigating is:
how does the sun's shadow change even half hour?

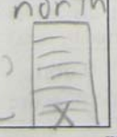
Our **prediction** is:
The shadow will move East to west as time passes.

The **materials** we will use are (include measuring tool):
gnoman
Paper
pencil
compass

The **changed variable** is: (manipulated variable):
every 1/2 hour

The **measured variable** is: (what we are measuring):
where
The shadow is

These are the **controlled variables:** (things kept the same):
faced paper north
the gnoman on the



The step-by-step **procedure** is:
1. Put a crayon in to a lump of clay.
2. Gather materails.
3. Draw X in center bottom of papper.
4. Go outside on a sunny morning.
5. put paper on flat surface.
6. use paper to postiosn paper facing north.
7. Postion gnoman on x.
8 trace the gnoman shadow and laple whith time.

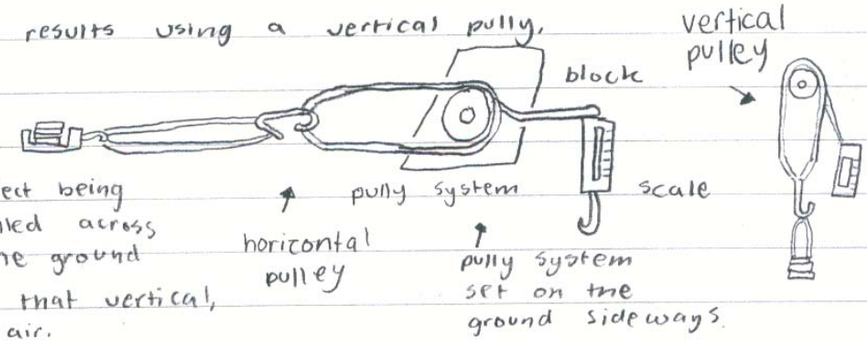
SE WA LASER Alliance

WASL-Based Experimental Design Planning Sheet for Elementary Students

11-15-05

Inquiry 12.1 – Extra for an A

if the results are the same, or similar to our results using a vertical pully,




rather that vertical, in the air.

prediction: I think that the input work will increase, because of friction, but I also think that all of the data collected for Input work will all be based around an average like it was when we used a vertical pully

Lesson 7 wrap up

10-4-05

In this lesson I corrected my misconception that batteries arranged in parallel formation would provide more electrical ~~out~~ lift to different objects. Actually, series provides more current, and parallel provides more volts. That basically means that if the batteries are arranged in series the motor can lift more washers, but the batteries will burn out faster.

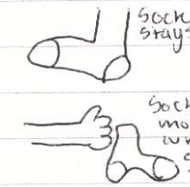
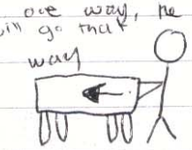
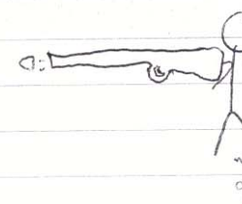
# Micro-Life Video

Objective: Gather Information About Infectious Diseases

1. The tower has 35,000 lightbulbs.
2. President Mckinley gets shot by an assassin.
3. The presidents operation started at 5:29.
4. The president died 8 days later because of an infection in his wound.
5. In 1900, the era of scientific medicine was only beginning.
6. Germs cause disease.
7. Scientists don't know how to destroy germs.
8. All immagrants must be inspected for illness before they enter the U.S.
9. Even after 500 years, there is still no cure for The Plague.
10. The plague is thought to be spread by dirt.
11. March 6, 1900 was the Chinese year of the Rat
12. No one knows how many plague victims there really are.
13. In 1906 a devastating earthquake shakes San Francisco.
14. Rats transmitt the Plague.
15. Fleas carried the Plague.



# Isaac Newton goes skiing

| | Notes | Sketch | own example |
|---|---|---|---|
| First Law | • object @ rest<br>• stays @ rest<br>• object in motion<br>• stays in motion |  | my laundry doesn't get put away unless an outside force picks it up |
| Second Law | • the acceleration of an object depends upon the mass of the object and the force acting upon it |  | when my table is pushed right it goes right |
| third law | • for every action there is an equal and opposite reaction |  | if I hunt and my gun kicks |

10/10 avg acc. and

End 40 m/s starting time 10 m/s

3 s

10 m/s²

End 55 m/s start 5 m/s

5 m/s

10 m/s²

GPE:

weight: 30 N height 10 m

GPE = 300 N-m

weight 9 N height 5 m

GPE = 45 J

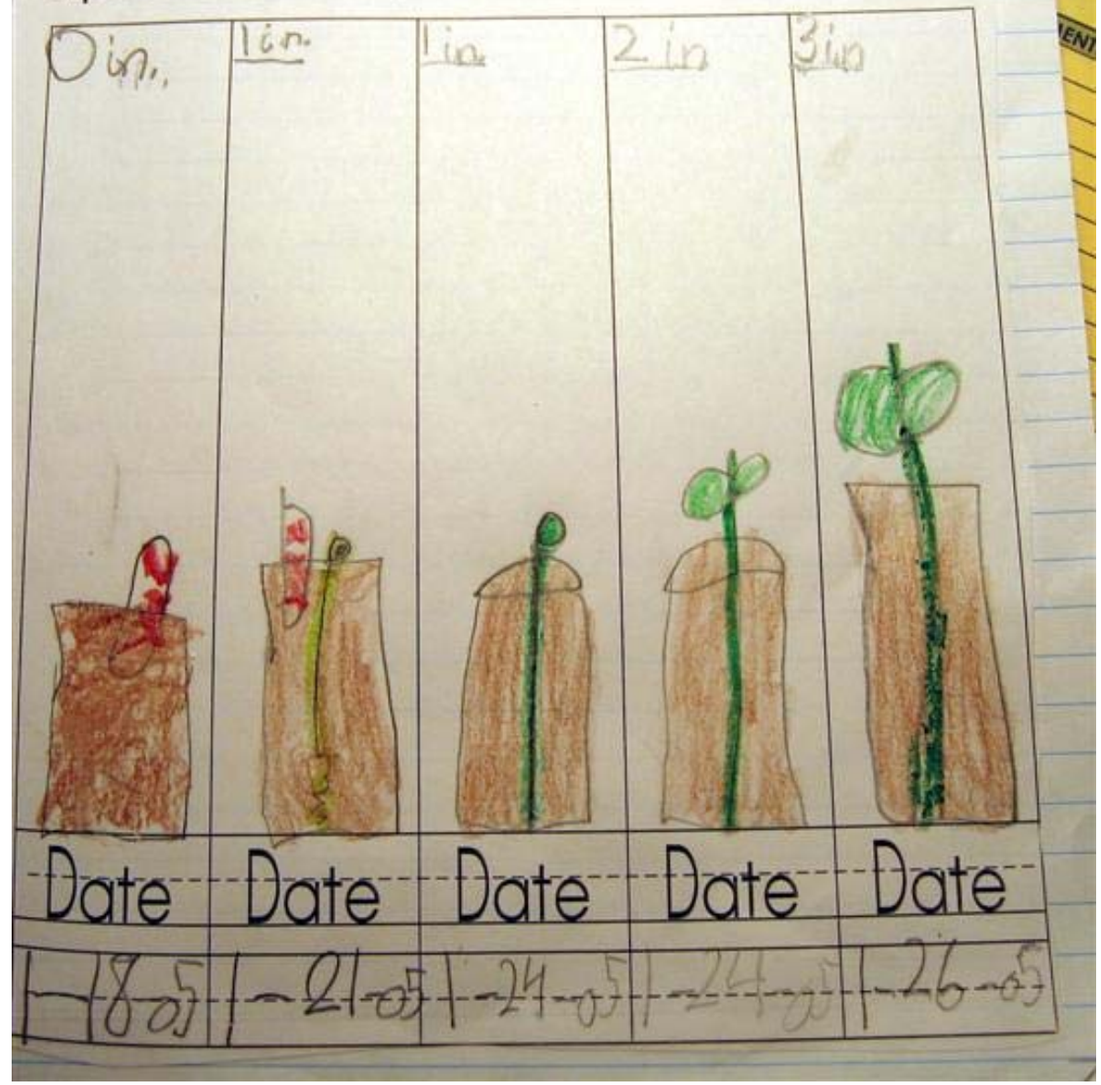
Stored Food Energy

| Food | Grams per Serving | Calories per Serving | Calories per Gram | CALORIES Per 100 GRAMS | Picture |
|---|---|---|---|---|---|
| Cereal Bar | 37g | 140 | 140 ÷ 37 = 3.78 | 3.78 × 100 = 378 | |
| Tuna fish | 56g | 60 | 1.07 | 107 | |
| Ravioli In Tomato in Meat Sauce | 244g | 240 | .98 | 98 | |
| Tomato Sauce | 62g | 15 | .24 | 24 | |
| Chili Cheese Fritos | 28g | 160 | 5.71 | 571 | |
| MONTEREY JACK CHEESE | 28g | 100 | 3.57 | 357 | |
| Fanta Orange POP | 227.4g | 160 | 0.7 | 70 | |
| | | | | | |
| | | | | | |

Charts - Biology



I planted Sunflower.

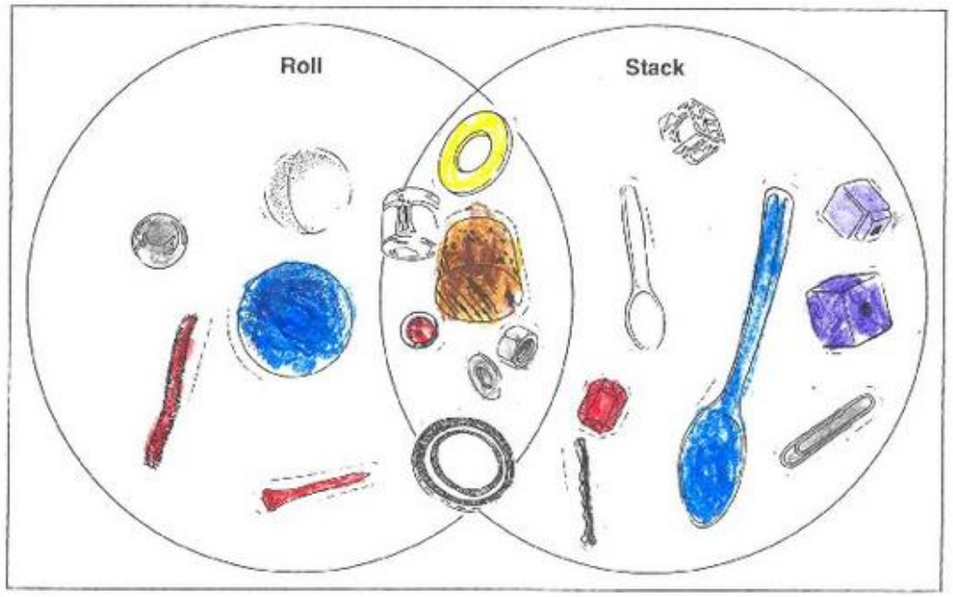


Record Sheet 3–A

Name: Cameron Date: 1-19-06

LESSON 3

**Rolling and Stacking Solids**




STC / Solids and Liquids



(38)

Lesson 9 •Designing a buiding a Vehicle with a sail• 5/20

Materials:

1. LRB
2. bucket of K'nex, goggles, rubberband set
3. standard vehicle
4. teplate, ruler, color pencils
5. student self assessment "A"

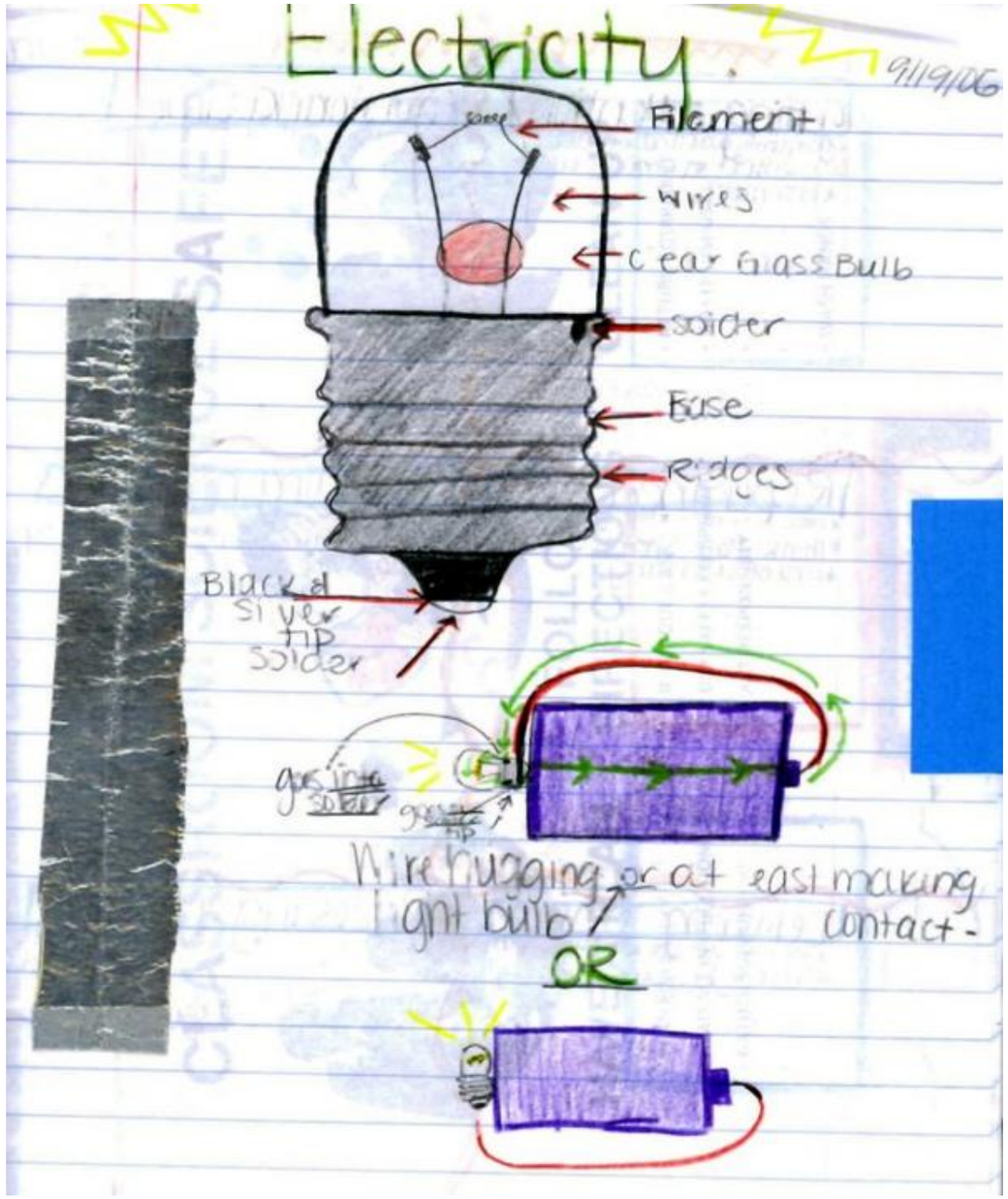
① SLOWER

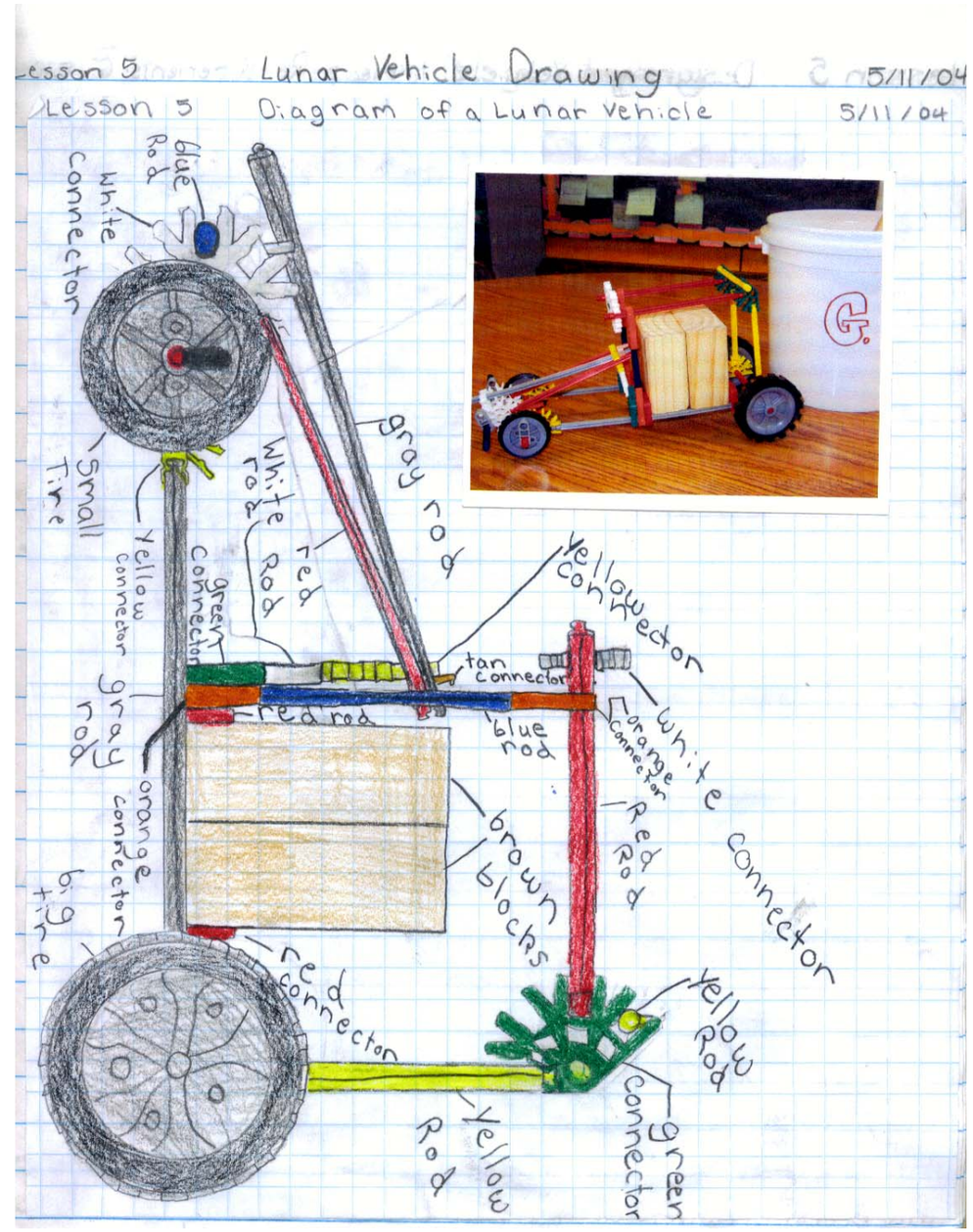
- friction (on the axle)
- loss of force (rubberband energy used up)
- less force (fewer turns of rubberband or fewer weights
- heavier load

FASTER

- more force (extra wa more turns of rubberband
- no load or less load
- no friction on gra wheels

② If I added a sail to my vehicle the motion would be slow if the wind was blowing against it because that would hit the sail and slow it down but if it was blowin behind the sail it would hit the sa and push it forward.


Electricity
9/19/06
Filament
wires
Clear Glass Bulb
solder
Base
Ridges
Black & Silver tip solder
Wire hugging or at least making contact - light bulb
OR


Lesson 5
Lunar Vehicle Drawing
5/11/04
Lesson 5
Diagram of a Lunar Vehicle
5/11/04
blue Rod
White connector
Small Tire
Yellow connector
green connector
White rod
red Rod
gray rod
yellow connector
tan connector
red rod
blue rod
orange connector
white connector
gray rod
orange connector
brown blocks
Red Rod
big tire
red connector
yellow Rod
Yellow Rod
green connector