

Student Science Daybooks

Sample pages you might see in a
science notebook

Teacher Handouts



What's in a LAB WRITE-UP?

Every lab report must have the title of the lab and the date at the top of the page

Every lab report must contain the following things, not necessarily in this order:

1. Question or Purpose
2. Hypothesis (statement)
3. Materials
4. Procedures (written step-by-step)
5. Observations
6. Data (numbers, graphs, pictures, etc)
7. Analysis of Data
8. Conclusion

MOST labs will have each of these things more than once and in any order. Learn to be clear about what you have done, observed and learned!

While You Were Out

Name: _____

Date: _____

Warm-Up Question: _____

What did we do in class? _____

What do YOU need to do? _____

What do you need to TURN IN? _____

Other important announcements: _____

Forms

Direction Sheets

Anemometer lab
purpose: to build a device that will
measure wind speed ✓

MATERIALS

- clay, modeling
- cups, paper, small (5)
- hole punch
- marker, colored
- pencil, sharp, with an eraser
- ruler, metric



- scribers
- stapler, small
- straw, straight plastic (2)
- tape, modeling
- thumbtack
- watch (or clock) that indicates seconds

3. Cut off the rolled edges of all five paper cups. They will then be lighter they can spin more easily.
4. Measure and place five equally spaced markings 1 cm below the rim of the paper cups.
5. Use the hole punch to punch a hole at each mark so that the cup has equally spaced holes. Use the sharp pencil to carefully punch a hole in the center of the bottom of the cup.
6. Push a straw through two opposite holes in the side of the cup.
7. Repeat step 5 for the other two holes. The straws should form an X.
8. Measure 3 cm from the bottom of the remaining paper cups, and mark with a dot.
9. At each dot, punch a hole in the paper cups with the hole punch.
10. Color the outside of each of the five cups.
11. Slide a cup on side of the straws by pushing the straw through the hole. Rotate the cup so that the bottom hole is to the right.
12. Fold the end of the straw, and staple it to the inside of the cup.
13. Repeat steps 11-12 for each of the remaining cups.
14. Push the straws through the intersection of the two straws at the bottom hole of the cup.

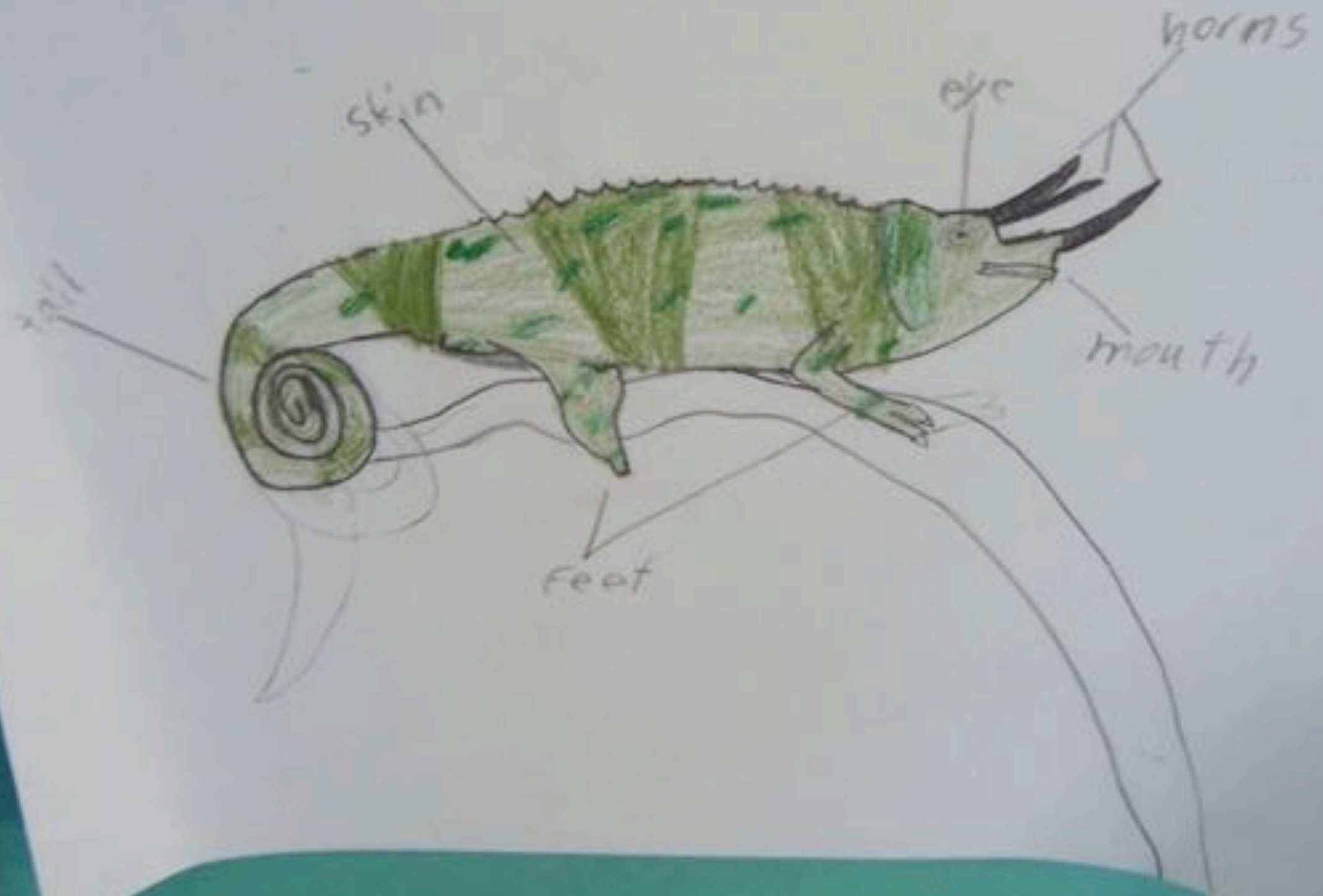
**Diagrams: Even a
1st grader can do it!**

Experience observation
HARD
DESS.
LUCILIAVOCANDOO



Diagrams, Observations

Fārid Del cid

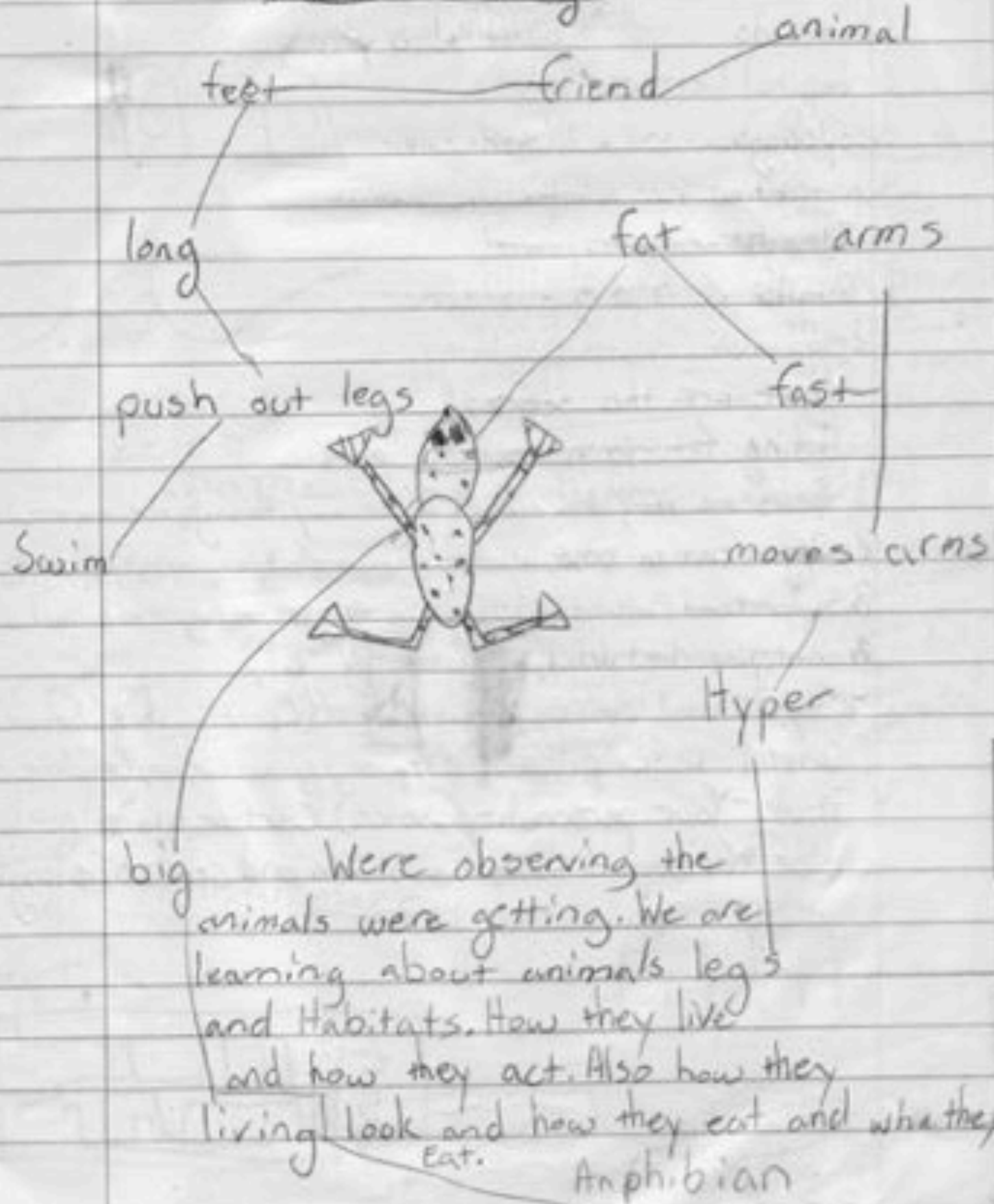


Diagrams

october
10-17-06

45

Picture of frog



Diagrams



(Acid can burn you!)

Warm Ups

warm ups



- 1/3 look at something up close with them.
- 1/5 Smooth Bones and thousand of tiny little cells
- 1/4 unicellular is made up of one cell
- 1/10 body is made of 206 Bones. muscles contract

10/12



□ - Brick

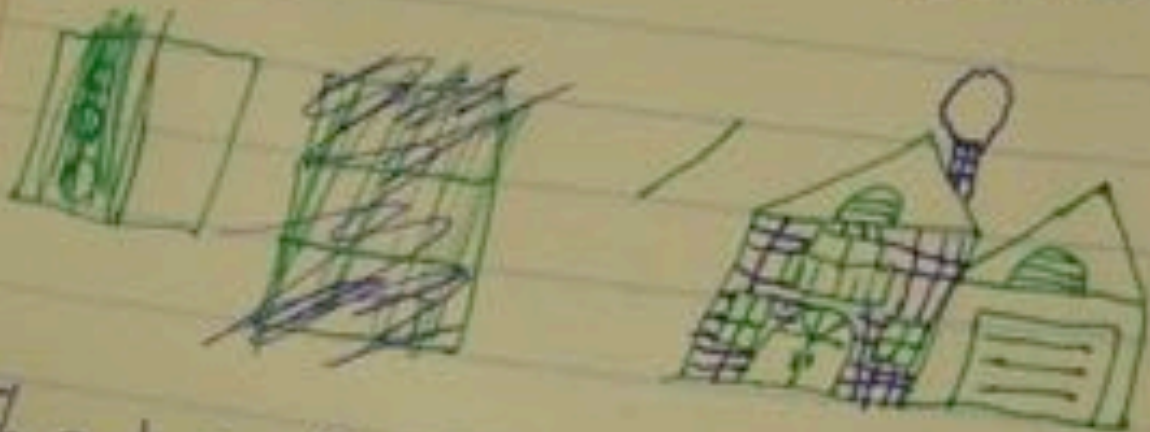
10/13 the brick keeps the house together

Warm Ups

Warm-Up

11/10: ~~Write~~ 2 things I remember from Friday on ~~Friday~~ the video is the involuntary and voluntary muscles and how they work. I

11/12:



11/13 The house is made of bricks and wood. The outside of the house is made of bricks and the door is made of wood. The inside walls are made of ~~wood~~ the things everybody houses walls are made of. The walls make up rooms and halls.

11/17 How I learned about the human body is by a book and also ~~by~~ by ~~some~~ telling me about it.

Experiment Data

9/7/17

Test tube	color of water	Total amount of water
A	light pink	$3\frac{1}{2}$ ml
B	light orange pink	11 ml
C	yellow	11 ml
D	light Green-Blue	11 ml
E	Blue	10 ml
F	lavender	11 ml

Experiment Data

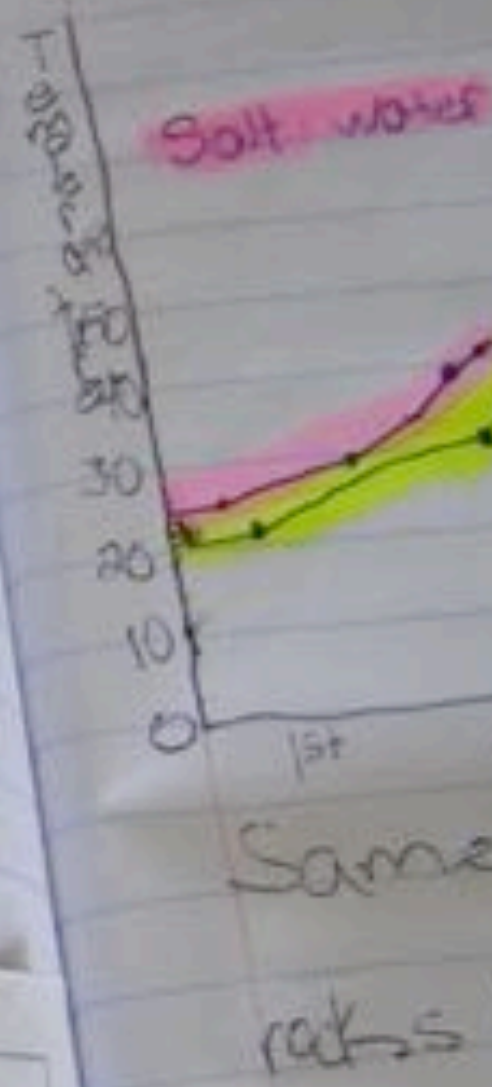
~~Greenhouse effect~~ Greenhouse effect
 purposes To study the Greenhouse effect

- materials
- 2 jars
- 2 thermometers
- various materials

hypothesis: which of the jars will be hotter than the other?
 hypothesis 8

DATA:

JAR	1 st TEMP	2 nd TEMP	5 th TEMP	6 th TEMP
Outside Temp.	23	35 35	44	47
EMPTY	23	35 35	44	47
BLACK	23	35 35	44	47
WHITE	23	35 35	44	47
SAND	23	35 35	44	47
DIRT	23	35 35	44	47
ROCKS	23	35	44	47
SALT WATER	23	35	44	47
FRESH WATER	23	35	44	47
METAL	23	35	44	47
PLASTIC	23	35	44	47



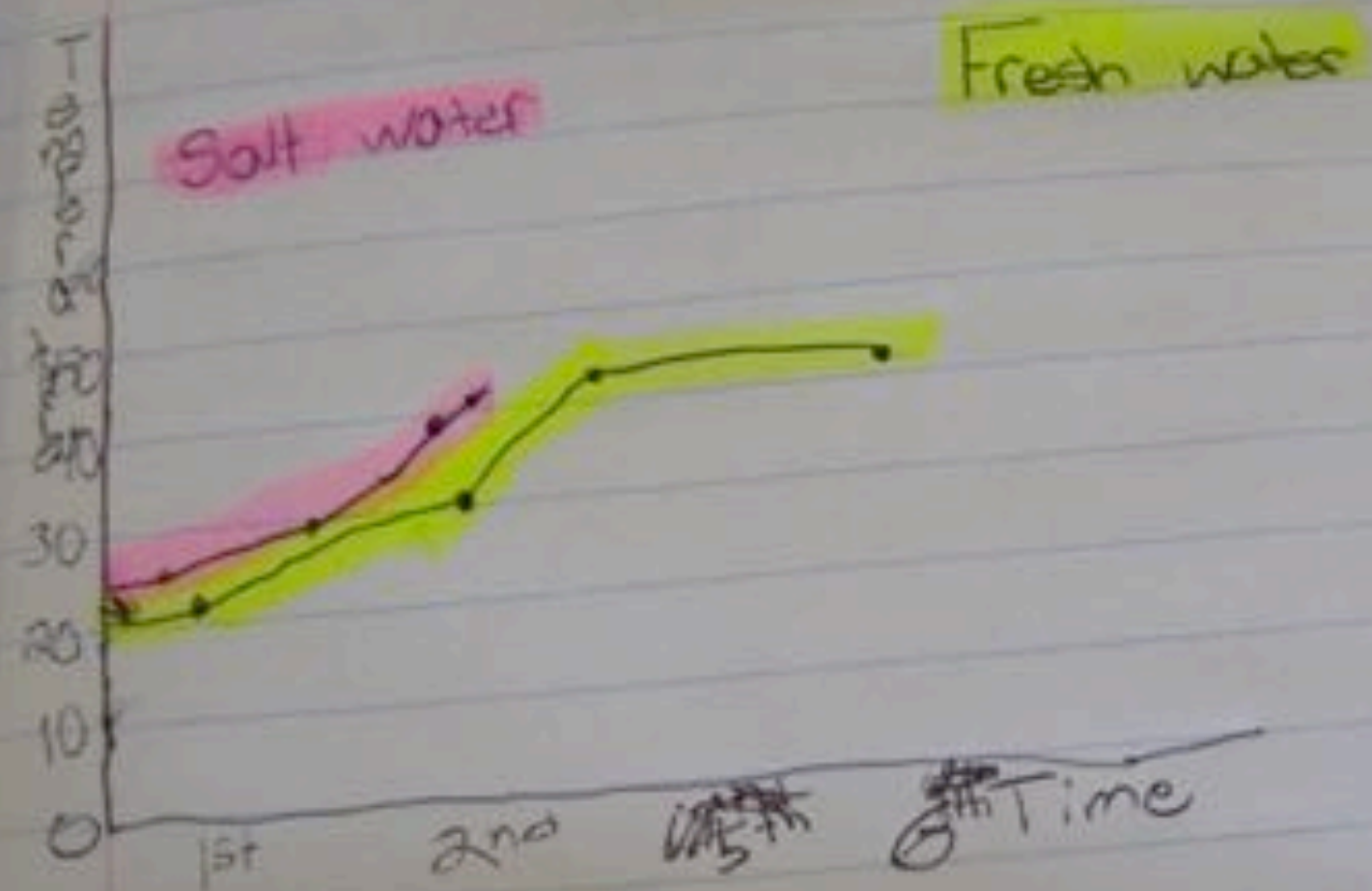
Experiment Data

the start lab
start

will be

TEMP

~~Distillation~~ analysis



Same temperature

radiation hotter entire time

Lab Procedures

Wires V Batteries V Lightbulb VOW. Note:

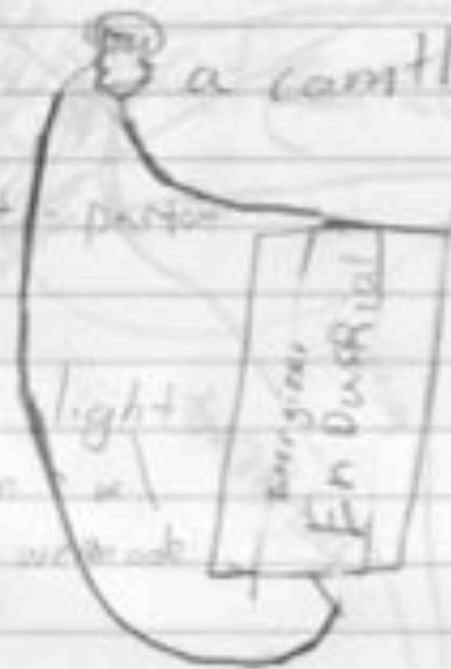
I tried putting one wire on one side of the bulb and the other wire on the other side, then sticking them both on the bottom of the light bulb

I needed to put one wire on the side

● circuit - a complete, etc

- complete - part of
switching

- to make light
turn on
I wire went
around



filament
stays up when the
electricity
goes through
and heats
up until it
glows

● Bulb holder, holds bulb for cell
cell holder

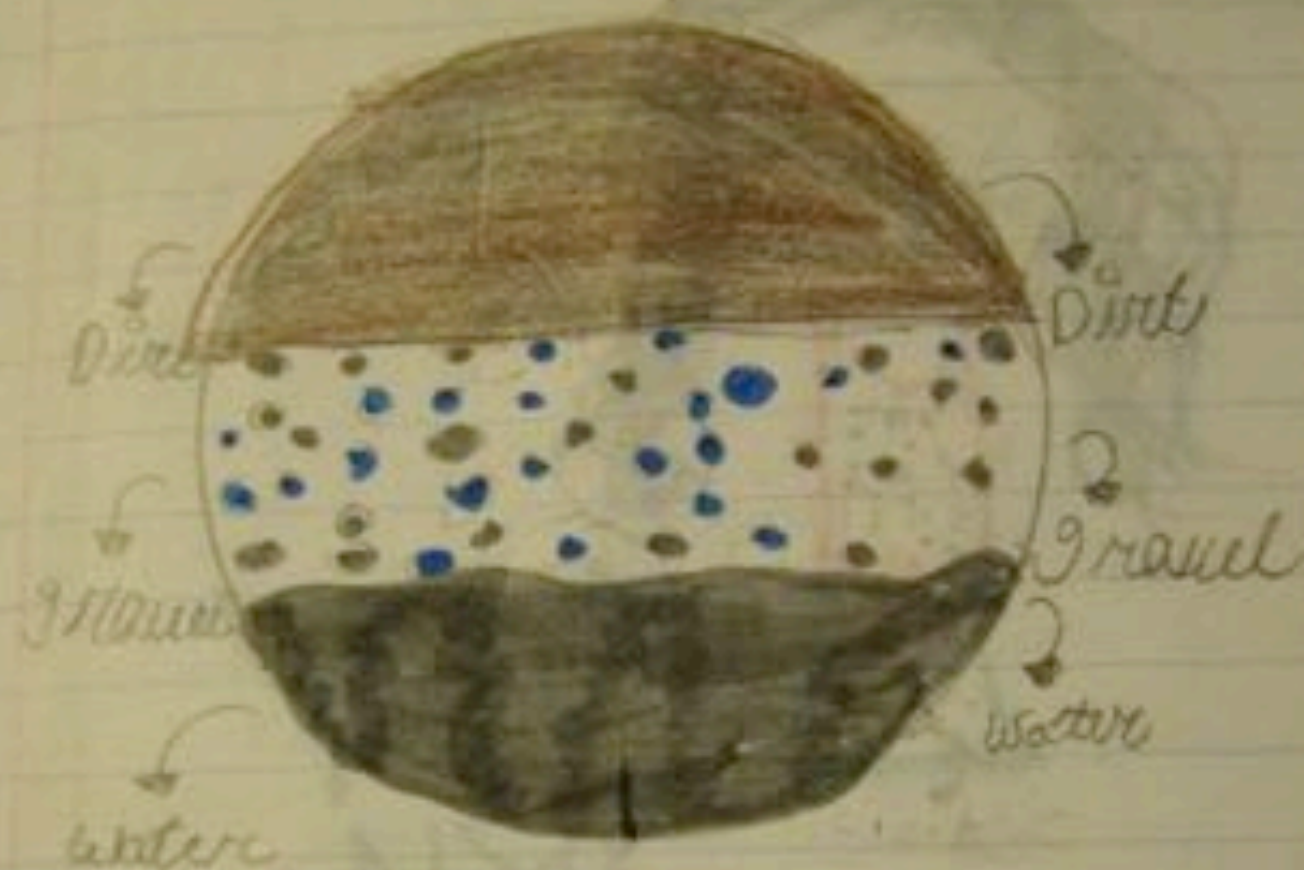
Procedures

SOUND

1. Vibration makes sound.
2. Sounds can go off wall.
3. Not all sounds vibrate.
4. The sounds are high and low.
5. Sound can travel.
6. Sound repeats and its called an echo.
7. You can measure sound in decibels.

Lab Notes

Science lab



The water settle first because it went in first.
Dirt went next because it was easy to settle. Gravel settle next because there's Rocks.

Lab Notes

- Electricity & magnetism

-6 weeks

at the end: I will know electricity magnetism and have a power point presentation.

How has electricity changed life in North Carolina

- What is electricity ^{magnetism?}

How is electricity generated

where does electricity come from

What do we use electricity for

what would happen without electricity

- What did we do before electricity

Lab Notes

Solid	Liquid	Gas
rock	water	air
ice	gatorade	oxygen
Desk	blood	
paper	milk	
overhead		
book		
Jelly		
peanut		
Butter		
heart		
me		

Lab Notes

10 concept of long-term & short-term

short term effects	body part	long term effects
impaired judgment, reasoning, memory slowed reaction, slurred speech, alcohol poisoning, death, unconsciousness	1. brain	addiction, brain cell destruction, memory loss, nervous system disorders
process may become unbalanced	2. liver	scarring, destruction of tissue, liver cancer, cirrhosis, lead to death
increased heart rate, increased blood pressure	3. heart	irregular heart rate, heart muscle damage
increased urination, dehydration, headache, dizziness	4. kidneys	kidney failure
widened blood vessels which creates false sense of warmth	5. blood vessels	high blood pressure, stroke
vomiting, choking, to death	6. stomach	ulcers in stomach lining, stomach cancer

Foldables

2.

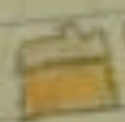
5 food plan 3.

fats

carries nutrients to
your cells, regulates your
body temp., helps body
digest food/ remove waste



water



orange
juice

starches and sugars found
in foods, main
source of energy for
your body



grapes



cereal

minerals

eat cereal and coffee for breakfast, no-
alad for dinner. He will drink water and
the day.

eat ham for breakfast, a cheese melt for
lunch, a baked potato and broccoli for dinner.
She will drink milk throughout the day.

eat cereal and coffee for breakfast, eat a large hamburger for lunch,
eat a baked potato and broccoli for dinner. She will drink water and soda

vitamins

eat whole grain cereal and milk for breakfast, only
eat cereal and coffee for breakfast, only
eat a salad without dressing for din-
er and milk throughout the day.

Cornell Notes

Where Does the Garbage
GO

1-24-05

Some people
in New York
City used to
thru garbage
it the sea.

I think it's terrible.

it's great that people shod
people make laeger be more careflle
but dose it get because kids
smally on the mite get sick.
playground.

Cities are having
a hard time finding
landfills. Some cities try
to get rid of their
waste by burning.

I think it's verry
harrible.

Now people ricicle
it's verry good
that people ricicle

it's better.

I recard that
glass, plastic, cans, paper recicl
can be recilyd.

I think we shuld

Cornell Notes

Vitamins E

Minerals

3/11

From text ..

From me...

pg 239 vitamin A keep eyes,
teeth, gums, skin,
and hair healthy

That why I have healthy
hair that's good and
soft.



pg 3-21 ASPIDA

What is that is it a pill?

pg 3-21 like 30 IU^{0/0}

Is that a type of % in
vitamins & minerals?

today's objectives

TSW talk about prior knowledge of bones and share with others

TSW look at bones and describe form and discuss functions.

Today's Agenda

- Warm-Up
- Read Aloud
- Bones: read
 - view
 - describe
 - write!
- Project Time (if time)
- Reflection

Warm Ups

Warm-up

What do you know about BONES?
(not the TV show!)

Tell me as much as you can!!

Labs



Bones

11/18

~~A bone~~ The skeletal system is an organ system whose primary function is to support and protect the body and to allow the body to move. It is also made of bones.

Bones are parts of the body that support and protect other parts of the body. It works with your muscles so you can move. They are made of special material called marrow.

First Drafts

BONES

A bone is things that helps your body. Bones help you do things you run and do other activities. Bones are made of ~~material~~ ^{support} tissues. Bones help you alot, some bones are protected by muscles. Some bones aren't well protected because the bones are near your skin.

Combination

* 6th Grade Science Fair * 4/1/09

Title: Smell vs. Taste

Question: Does Gender determine taste bud capability?

- what they did
- why they did

Hypothesis: If we test men and women to see which gender can detect the flavor of an air head while smelling a spice, ^{then we think} women will be able to detect the flavor better.

Summary/Conclusion:

The group completing this project blindfolded 5 men and 5 women. Next they put cinnamon up towards their nose as they fed them a blue raspberry airhead. They concluded that their hypothesis was incorrect. There was an even number of men and women who guessed the flavor of the airhead correctly!

4/1 Reflection: Some similarities of this year's and last year's science fair are the groupwork, presentation boards. The projects are different though.

Write science fiction novels in 10 minutes a day

Chapter 1 The Beginning of Everything

Daniela Parada

Kyle, Matt, Carl, Rebecca, and Jessica were all good friends that lived in New York. It has been a long time since they meet even as long as 15 years. Earthquakes have been happening all over the world, but the biggest quake ever though it was in Orlando, Florida. It was recorded as 10.0 and the most dangerous ever of the year 3000. After the most dangerous quake was recorded Jessica and Rebecca called the others for a personal get-together.

"We have to go to Florida, you guys ... to help!" said Jessica

"Yea, let's do that. C'mon you guy! PLEASE, PLEASE, PLEASE!!! We have to." Rebecca suggested.

"Well ... I guess it won't hurt." added Matt. "Don't you think, Kyle?"

"Everyone who wants to go say I." announced Carl.

"I" the group all excitedly said.

"Yes, everyone voted to go." Cheered Jessica

"So, let's all pack up people and go, go, go!!" exclaimed Rebecca.

After three days of packing the group went on the safest plane they could ever afford to go to Florida. Everyone was excited to go especially the girls who planned on having a great time. All they could think about was the orange state know as Florida.

"I wonder what Florida will be like once we get there? It might not be so great because of all the quakes but I heard that it WAS a beautiful place to visit." Kyle calmly said, then added "the trees or cracks, moist or humid, fun or relaxing?"

"None of us have ever gone there so no one knows." Matt said.

"Maybe we can find something spectacular." Carl wondered.

While the boys were talking about what Florida will be like the girl decided to turn on the T.V and watch what's on the news. In their comfy chairs all were relaxed for they had a big day tomorrow. The television was left on and once Florida was mentioned they all watched. The TV announced that in Animal Kingdom, Disney World, a kid named Jamie fell into the huge hole that led to the center of the earth or that is what the scientists thought.

"The center of the Earth? The will be hard. I say hard. H-A-R-D." Matt complained

"This is or will be the best mission we have ever been on!" Kyle exclaimed.

"I hope everyone...especially me, have packed all their belongings we need for this is the BIGGEST, MOST DANGEROUS trip of our lives." Rebecca said.

"Okay, let's all get some sleep for the big day tomorrow. Got it." Jessica commanded nicely but also suggesting.

Everyone fell asleep except for Carl. He was thinking of how he was going to get the reward all to himself. The others never really knew that Carl was mean or bad they only knew that he was really tricky especially in time like this.

Once the plane landed and morning came they all woke up and began going for Disney world. Before entering scientist came up to them with a submarine. He said that the submarine might help for its many gadgets inside of it could be able to help along the way. So they took it. The submarine would also be able to get through the layers of the earth even though the scientists weren't completely sure if it was safe. The scientist only knew that it could only be able to go through a couple of layers. Just looking at the 8ft by 9ft hole in the ground gave everyone chills. The parents came up to them to say that their child was the most important thing in their lives so if she was found they would be so grateful in having them that they might give a reward. After the little talk with the parents a picture of the girl, Jamie, was given of her to them. Jamie was described as little, brown eyes, blue eyes, and was wearing a bow in her hair with sparkly shoes.

"I feel so sorry for the parents of Jamie and herself." Jessica said.

Reflection

I learned that a better way to understand science or some other hard article we should underline or circle our problems and brainstorm or look up that problem and divide it into smaller parts.

Reflections



Our Earth is a beautiful place. It gives us water, shelter, food and everything we need. If we do not take good care of our planet and do not recycle and do not clean up at all our planet will not look like how it does now. So take care of planet!

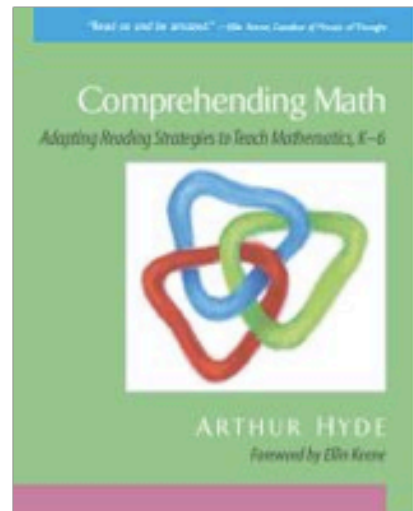
Reflection

Dry Ice

My favorite part of the Dry ice experiment was when Mrs. Boteva was popping the cap off of a water jug because it went all over!

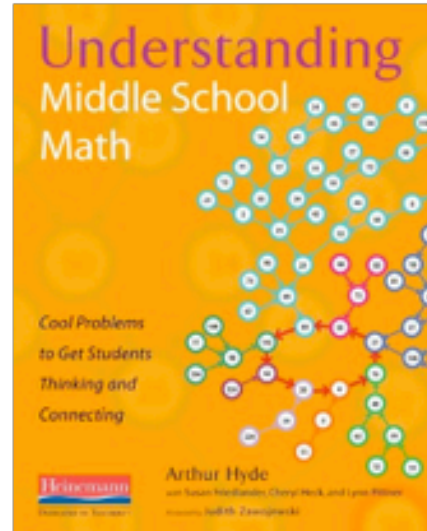


...why is everything so difficult, so different from class to class?

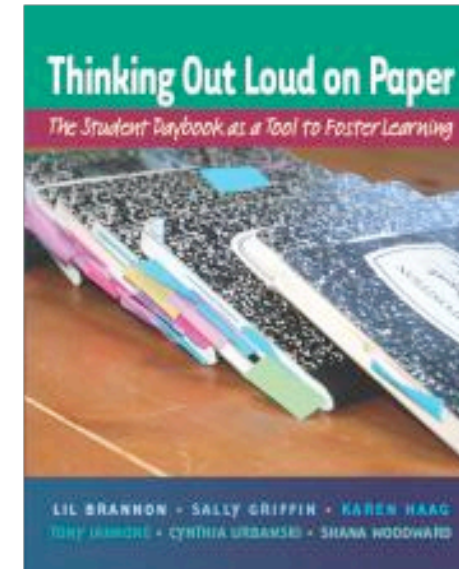


Comprehending Math

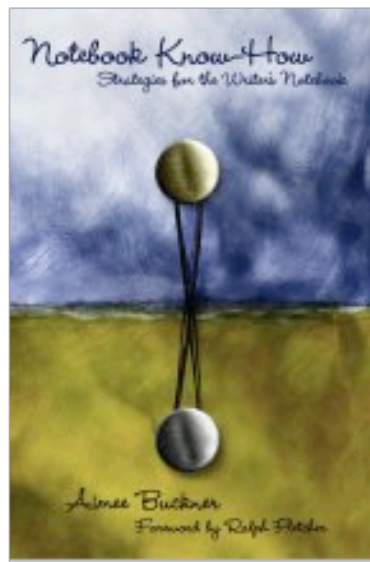
Arthur Hyde



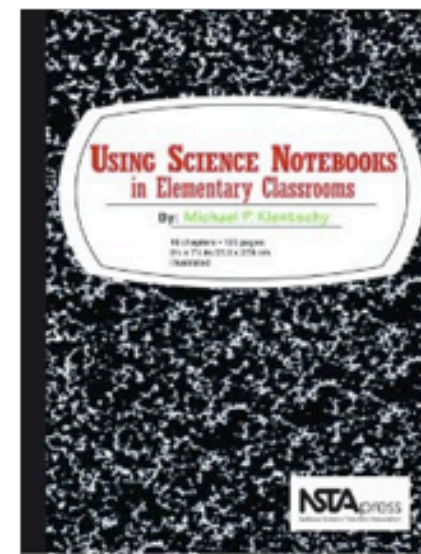
Understanding Middle School Math



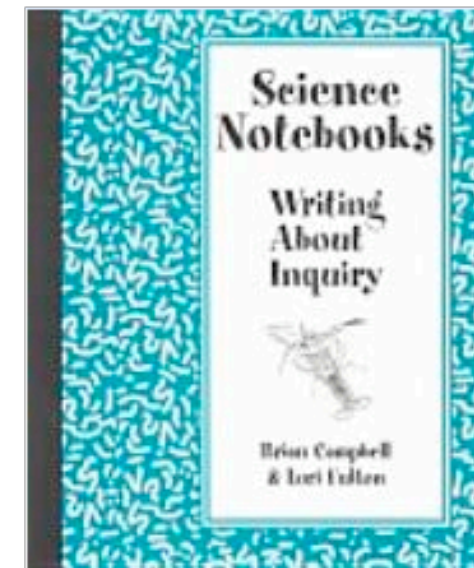
Thinking Out Loud on Paper



Notebook Know How and Notebook Connections
Aimee Buckner



Using Science Notebooks
Michael Klentschy



Science Notebooks
Brian Campbell