

FIRST DAY OF SCHOOL INFORMATION

Did you know? Weird or Useless Fact.

Quiz for the day

will not be everyday
receive a 1 extra credit point for solving

Supply Cabinet

yours to use
keep it clean, organized, and return supplies, glue bottles

Expectations

seating chart
talking
cell phones on desk - turned **OFF**
sharpening pencil
basketball court
emergency water
late assignments vs. absent
supplies for class
pencils only, notebook, folder, calculator
bathroom
gum/pop/candy
NOT FAIR

Folders

Syllabus

Earth Science Syllabus

Earth science is the study of Earth and its place in space. Earth science is divided into four specific areas: geology, meteorology, astronomy, and oceanography. This is a required course for all eighth graders. During this course you will be required to complete daily assignments, projects, quizzes, and tests.

Book

Each student will be assigned a book.
The books are new and we want to keep them in perfect condition.

Supplies

notebook
pencils – NO PENS
folder

Grading

I believe that your grade should not depend on how bright the members of your class are, or how hard they work in the course. I am using my professional judgment to set the standards that must be met: the class itself should not set the standards. Your grade should reflect your performance, no one else's, with respect to the subject matter in earth science. If you are in a class with high achievers, you should not suffer for it. neither should you profit by finding yourself among classmates that are poorly prepared or choose not to do the work. I do not want you to feel that you are competing with your classmates, but yourself. Learning should be cooperative, at least part of the time. I do not want to discourage you from helping each other, not copying or giving someone the answers but actually helping your classmates by forming study groups. I use the grading scale listed below. With this scale, the student will know how he or she did on each test, assignment, quiz, or project.

*Straight Percentage

95-100 = A	77-79 = C+
90-94 = A-	74-76 = C
87-89 = B+	70-73 = C-
84-86 = B	67-69 = D+
80-83 = B-	64-66 = D
	60-63 = D-
	59 and under = F

Lab instructions

<http://www.biologyjunction.com/lab%20safety.ppt>
Assign Textbooks

Scientific Method

Eyeball Benders

Paris

in the

the spring

http://www.grand-illusions.com/opticalillusions/amazing_dots/

http://www.grand-illusions.com/opticalillusions/scintillation_grid/

<http://www.coolopticalillusions.com/build-an-impossible-triangle.htm>

Page 3 - optical illusions

Can you answer these questions???? Page 4 Sheet

Are you FBI material?

Trays

What did you have to do to solve the problems?

observant

When making observations what do you as a human use to solve the problem?

senses

Two types of observations:

Qualitative

an observation that does not use #'s or measurements

Quantitative

an observation that does use #'s or measurements

A Stranger has Landed

After the complicated maneuvers that were necessary to avoid detection, Zed finally landed on Earth. He stretched himself to his full height of 198 cm and yawned, relaxing after the difficult journey. Next came a quick meal. He eagerly began preparing to leave the spacecraft that had been his home for the last three and a half years.

As Zed collected his belongings, he felt a thrill of excitement. Would Earth be similar to Nebulos, which was trillions of kilometers away? Would it be a refuge or a place of danger? Now Zed was ready to leave his spacecraft. He proceeded slowly toward the door, his face a picture of concentration, wonderment, and anticipation. Zed pressed the door activator with his six fingers that made up his left hand. The door slid open, and Zed saw Earth up close for the first time.

The first thing Zed noticed was all of the color-the vivid reds and yellows of flowers; the waving greenery of the trees; and the pale, delicate blue of the sky, which was very much like the color of his skin. "Before venturing farther," Zed thought, "I must observe and try to make sense of this world. Later-perhaps much later-I will make contact with the beings who populate this lovely planet.

Find the qualitative or quantitative observations.

What is Zed doing to be scientific?

When you are being observant you are distinguishing properties of a material?

What are we talking about when I say **properties**:


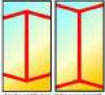
color, texture, temp, materials that make it, scratch

Are observations always correct?


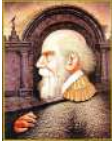
YES!!!!!! Why?????


What you observed.

Which dot is bigger?

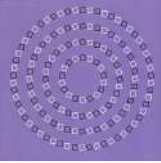
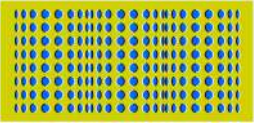


Are the vertical bars of the same height?
Yes they are!

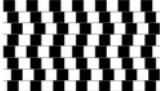
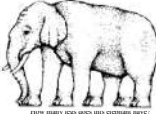






YELLOW BLUE ORANGE
BLACK RED GREEN
PURPLE YELLOW RED
ORANGE GREEN BLACK
BLUE RED PURPLE
GREEN BLUE ORANGE




Check out the spiral...except it is not a spiral, just circles.
Don't believe me? Use your finger to follow the false spiral.
The tilt of the boxes fools your brain into believing it is a spiral.




How many legs does this elephant have?
Are the lines parallel or sloped?




Woman's face or man playing violin?




Which man is the tallest?



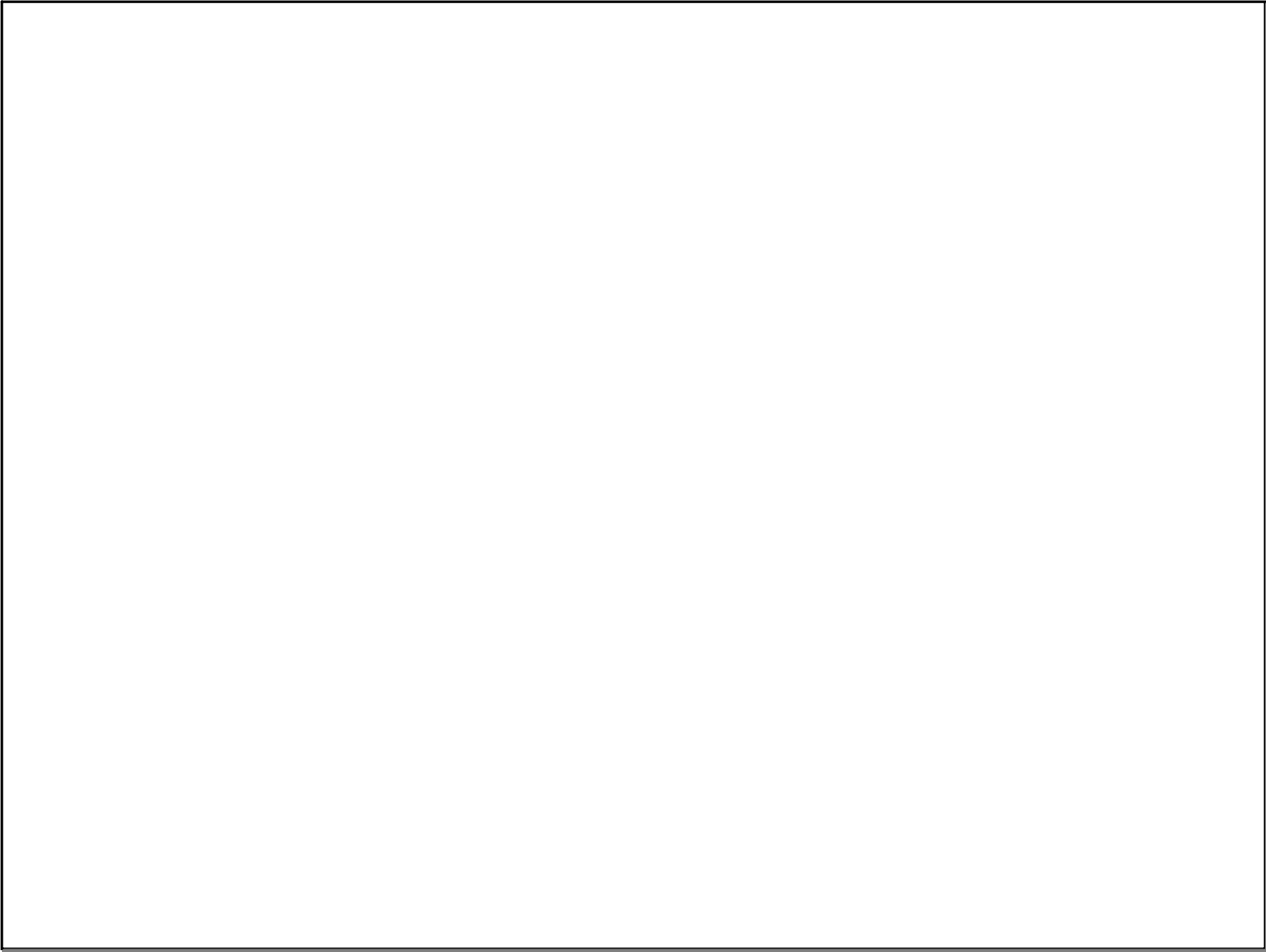
What do you see?



How many horses do you see?



Is this object possible?



1. On a standard traffic light, is the green on the top or bottom?
2. How many states are there in the USA?
3. In which hand is the Statue of Liberty's torch?
4. What six colors are on the classic Campbell's soup label?
5. What two numbers on the telephone dial don't have letters by them?
6. When you walk does your left arm swing with your right or left leg?
7. How many matches are in a standard pack?
8. On the United States flag is the top stripe red or white?
9. Which way does water go down the drain, counter or clockwise?
10. Which way does a "no smoking" sign's slash run?
11. How many sides does a stop sign have?
12. Do books have even-numbered pages on the right or left side?
13. How many lug nuts are on a standard car wheel?
14. How many sides are there on a standard pencil?
15. Name the 7 dwarfs?
16. How many hotdog buns are in a standard package?
17. There are 12 buttons on a touchtone phone. What 2 symbols bear no di
18. How many curves are there in a standard paper clip?
19. Does a merry-go-round turn counter or clockwise?

1. On a standard traffic light, is the green on the top or bottom?

Bottom

2. How many states are there in the USA?

50

3. In which hand is the Statue of Liberty's torch?

Right

4. What six colors are on the classic Campbell's soup label?

Blue, Red, White, Yellow, Black, Gold

5. What two numbers on the telephone dial don't have letters by them?

1,0

6. When you walk does your left arm swing with your right or left leg?

Right

7. How many matches are in a standard pack?

20

8. On the United States flag is the top stripe red or white?

Red

9. Which way does water go down the drain, counter or clockwise?

clockwise (north) counter (south)

10. Which way does a "no smoking" sign's slash run?

towards bottom right

11. How many sides does a stop sign have?

8

12. Do books have even-numbered pages on the right or left side?

left

13. How many lug nuts are on a standard car wheel?

8

14. How many sides are there on a standard pencil?

6

15. Name the 7 dwarfs?

Sleepy, Happy, Sneezy, Grumpy, Dopey, Doc, Bashful

16. How many hotdog buns are in a standard package?

8

17. There are 12 buttons on a touchtone phone. What 2 symbols bear no dig

*, #

18. How many curves are there in a standard paper clip?

3

19. Does a merry-go-round turn counter or clockwise?

counter

Are YOU FBI Material? (Pencil/Paper Lab)

When we try to explain observations we make **inferences**.

inference: attempts to explain or make sense of an observation

Read - From Observations to Inferences

Zed approached the object with caution. What on Earth could it be? Whatever it was, there it sat by the edge of the road-taller than it was wide, and round, with bumps on it. By standing next to it, Zed estimated the object to be 5 zks high (60 cm). "Nice colors," Zed thought, "red and silver. Perhaps it's piece of art. Maybe it's for sitting on-although it doesn't look very comfortable

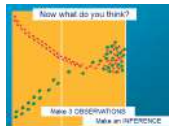
What is the object Zed is observing?

Why? What were his observations about the object?

What are his inferences based on?

Other examples

Observation	Inference
Marie is away today.	Perhaps Marie has the flu.
Eric didn't do as well on test.	Eric probably didn't study for the his test as he usually does.
My flowers grew better at this end of the garden.	The soil must be richer at this end of the garden. Look at these two sets of animal tracks. List 3 OBSERVATIONS Make an INFERENCE



National Geographic ces

Observations

Make 5 observations about this picture:
3 qualitative and 2 quantitative

Inferences

Make 5 inferences about this picture:

When we make observations and inferences we are also making predictions.

prediction – the expected outcome of a future event

Hypothesis

a prediction that can be tested by an experiment

not a fact, it must be tested

Cause

what will be changed

Effect

the expected outcome from the cause

Controlled Experiment

all variables remain the same except one

Control

the group in an experiment that is not being tested
compare the independent variable to the control

Independent Variable

part of the experiment that is being tested
it is changed by the experimenter

Dependent Variable

result of changing the independent variable
affected by changing the independent variable

Aug 31-1:36 PM

What all of this is leading to is what is called the

Scientific Method

Scientific Method

a series of steps scientists take to solve a problem

1. Problem / Question

What do we want to find out?

Written in the form of a question.

2. Research problem

Observe

Find information about your question/problem

3. Form a hypothesis

educated guess to your question

possible answer to your question

be specific

use "If" and "then"

must be able to measured, experimented, analyzed

must not know the answer

4. Write down your procedures

step by step directions to your experiment

list step by step - not in paragraph form

5. Perform the experiment

6. Observe and Record the Results

record data gathered from the experiment

make charts, graphs, data tables

7. Interpret the data

What is your data telling you?

8. State your conclusion

accept or reject your hypothesis by including

research and gathered data

Video - Scientific Method

List steps in order without looking at notes. Try to recall from video. When you get stuck, refer to notes.

Ob-scertainer Lab Results

