# Winter Break Science Project

Watts Learning Center 8th Annual Family Science Night
Thursday, January 22nd 2015
4:00pm-6:00pm

### Goals:

- Understand the steps Scientific Method
- Understand how to conduct a science experiment
- Understand the materials needed to create a science project display board

### The Scientific Method

Understanding and Following the Steps in the Scientific Method is essential to having a successful Science Project Experiment!

**USING THE** 

## SCIENTIFIC METHOD

### 1 QUESTION

Ask yourself, "What do I want to learn more about?", or "I wonder what would happen if . . .?"

### 2 HYPOTHESIZE

Research to help you make an educated guess, or hypothesis, and then answer your question.

### 3 EXPERIMENT

Test your hypothesis by making a plan and conducting an experiment.

### 4 OBSERVE & RECORD

Make careful observations and write down what happens.

### SANALYZE

Use your information to draw conclusions about your experiment. Was your hypothesis correct?

### 6 SHARE RESULTS

Explain your results by presenting your experiment, observations, and conclusions.

# Step 1 (planning)

Question, Problem or Purpose

# Step 2 (planning)

Your <u>Hypothesis</u> should answer the question- it's an "educated guess". It must be something that can be tested!

"If I \_\_\_\_\_ (do this), then \_\_\_\_\_ (this) will happen."

\*Now is the time to make a list of the materials you will need for your experiment!

## Step 3 (experimenting)

Conduct an experiment using materials you gathered.

As you are conducting your experiment, you should be completing the next step...

# Step 4 (experimenting)

#### Observe and Record:

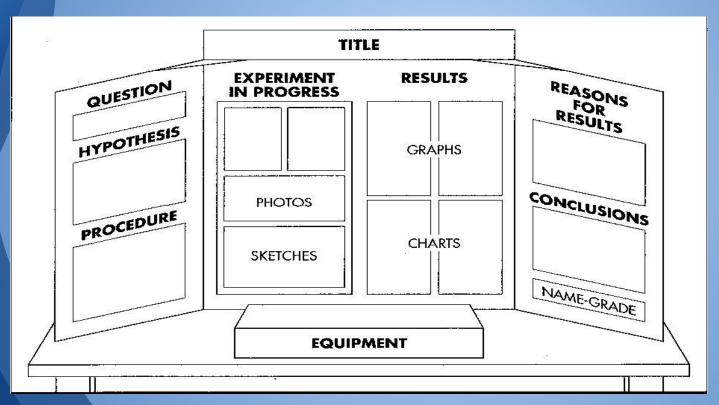
- Take photos, draw Pictures, take Notes
- Complete charts & graphs
- Draw & Write down what you see happening!
- The data you record will become a part of your display- so make it look nice!

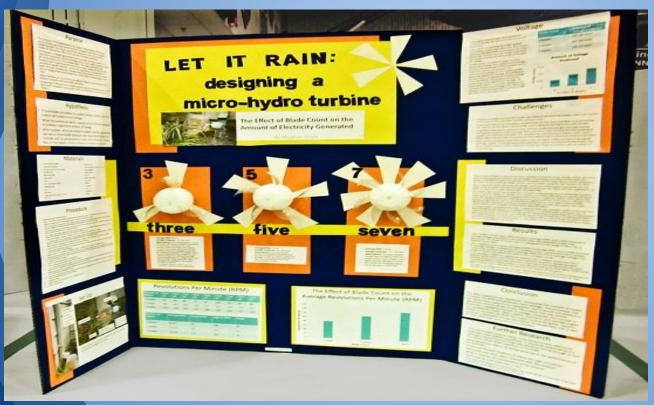
## Step 5 (data analysis)

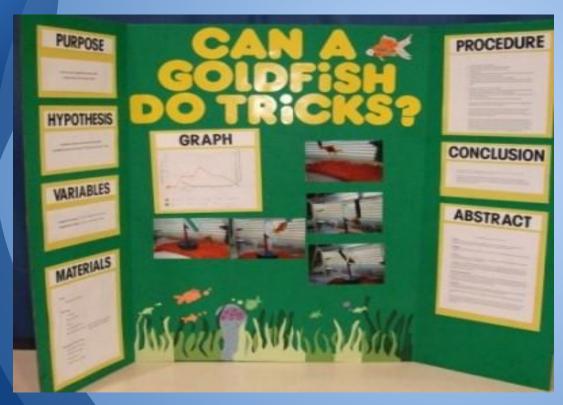
Analyze results and Draw conclusions

- -What happened? Why did it happen?
- -Was your Hypothesis TRUE or FALSE?
- -A false hypothesis is not a wrong answer! It's okreal scientists test many hypotheses.

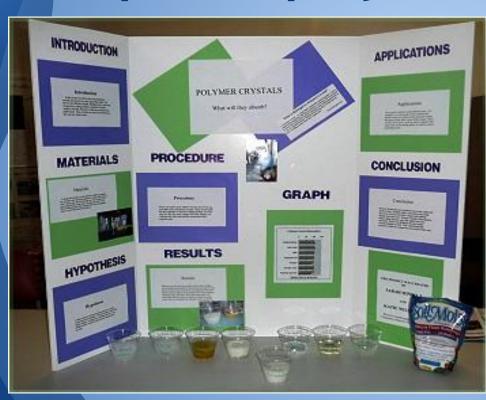
Science Projects- Brain Pop Video

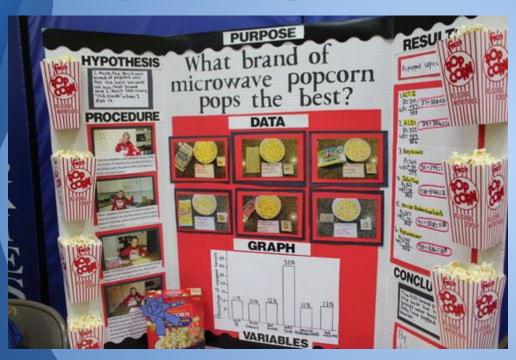


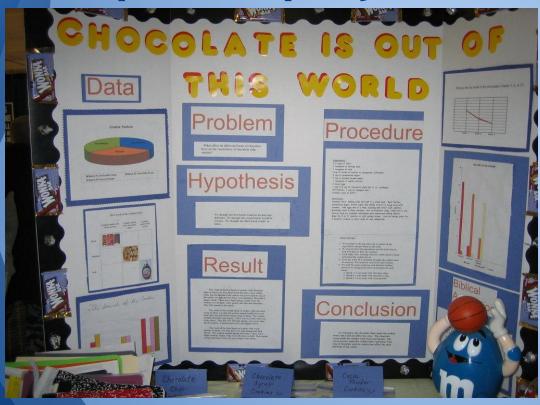


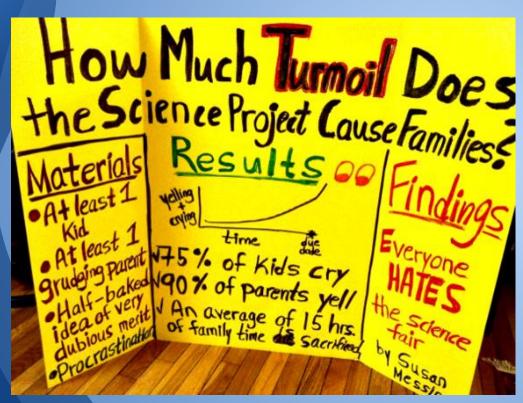












### Reminders

- Grade Level Appropriate
- Don't wait until the last minute- know your due date!
- Appropriate questions and hypothesis
- Bring materials on Science Night if you can

### WLC Website www.wattslearningcenter.org

4th Grade Science Project