

# *Jimi & Isaac*

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**\* = Customize for your school.**

*Jimi and Isaac* are rock stars. They're also epic heroes, intellectuals, soccer players, loving sons, and students in awe of Lipstick, their science teacher. They are wise and foolish, sublime and earthy. They are middle school boys.

**BOOK REPORT - *Jimi and Isaac 3a: The Mars Mission*** is a book whereby my supposedly best friend Jimi Peterson tells about how he built a space probe that flew to Mars. The whole thing was bought and paid for by the very rich Ash Berg. The book is about us while we're in middle school, but it ends on the first day of high school. It's mostly about how great Jimi is.

Other than the obvious errors that Jimi made like he somehow forgot that the whole thing was my idea, this is a pretty good book for kids to read because there isn't any nudity or sexual pornography. If I didn't know about the lying about me part I would like the book because there's a lot of science and thinking involved, and a lot of stuff happens that is mostly pretty real except the part about me.

-Isaac Farmer

**BOOK REPORT -** My best friend Isaac Farmer wrote a book about how he helped this guy named Weeds invent a whole new kind of solar electrical cell that actually really works pretty well. Isaac says that he wrote the book himself, but I think he had some help because the real Isaac is really obnoxious but the Isaac in this book is only sometimes obnoxious.

Isaac figured the best way to win the science fair was to make the judges think he could save the planet, so he did this big display on "green" stuff. He put in everything he could think of (like solar power and wind power and stream power and outhouse power) and made it sound like it all worked and he understood everything. All he really did was copy stuff off the Internet. It fooled the judges and he won, but then Lipstick and the newspaper guy caught him and the principal got involved and then Mr. and Mrs. Farmer got involved and then Isaac had to actually build something that actually worked.

***Jimi & Isaac 4a: Solar Powered*** is a good book for kids because nobody does drugs or gets pregnant. Isaac talks about dog poop a little, but it's part of the story and he doesn't get too gross. I think he got some help on writing that part, too.

- Jimi Peterson

# *Jimi & Isaac*

## Science Fair Plan Overview

The purpose of a science fair is to expose kids to the scientific method. There are two main parts to being a scientist:

1. Do an experiment.
2. Love the truth.

Kindergartners do an experiment called “Will It Float?” The kids need to learn to form an opinion before trying something, and that it’s great to be wrong as long as you learn something.

Primary (1<sup>st</sup> & 2<sup>nd</sup> grade) kids do a bean-growing group experiment. Kids may try to change their hypothesis after the experiment, which is a great chance to explain that a wrong result is just as good, and sometimes better, as a good result. If the group hypothesis is really wrong you will be able to show that experiments are better than voting or discussion for finding the truth. There are two bean-growing experiments so the kids won’t do the same experiment two years in a row.

Visit each upper-grade classroom once, four weeks before the fair, to explain and distribute the rules. Distribute the prize list a week after the rules. Continue in-school promotion to maintain interest. **Please consider using Jimi & Isaac Books to generate interest and as prizes.**

Each primary student receives a certificate showing his or her participation, and each kid that displays a project gets:

1. A certificate with seal and signatures of the School Principal and Science Fair Administrator.
2. A participation ribbon.
3. An ice cream treat certificate (donated).

Give prizes for 1,2, & 3 place in each grade, plus a grand prize ribbon. Award special prizes (from area businesses that donate an hour of their time to show a kid around their plant) to connect science and technology to real life. Encourage these businesses to come pick out their own winner, but have a conference to choose among the kids so that each kid wins a maximum of one special prize. The special prizes are the highlight of the science fair. Try to get lots of areas represented including machine and welding shops, nurseries, physical therapists, doctors, race cars drivers, radio control airplanes, real airplanes, manufacturing plants, food preparation companies, etc.

Get student judges from the high school. Break the judges into teams and have them judge projects by interviewing against the published rules. Have each project judged twice. Then tabulate the scores numerically, pick the six highest scoring projects in each of the three grades, and have all the judges reach consensus on the first, second, and third place winners. In other words, use the numerical judging as a screening process to choose a pool from which to choose the winners.

Make all the participation and merit award certificates on a laser printer and the school copier. Buy blank certificates at Office Max or a similar store. For the kindergarten and primary participation certificates sign the original, run copies, and have the teachers fill in the names. For the main fair copy the certificates, add the ribbon and seals, write in the names with a sharpie pen, and sign each one in blue ink.

Don’t open the science fair area to non-participants until the evening – otherwise the crowd will destroy projects before judging is finished.

# *Jimi & Isaac*

## Science Fair Rules and Instructions

### Kindergarten Experiment: Will It Float?

#### Objectives:

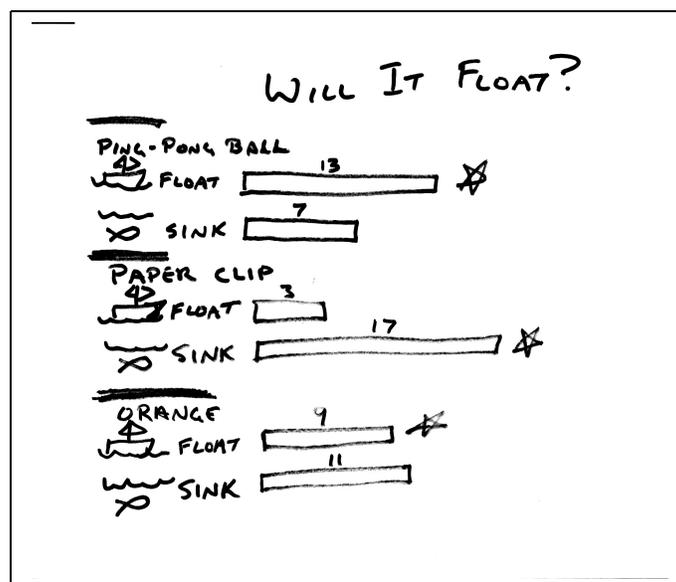
1. To have the kids formulate and express an opinion before trying something.
2. To have the kids do an experiment.
3. To have the kids modify their opinion based on the results of the experiment.
4. To have the kids understand the difference between an opinion and a fact.

#### Timing:

Do the experiment the day of the science fair.

#### Preparation:

1. Collect ten items, different shapes and sizes. Seven should obviously sink or float, three should be difficult to predict.
2. Have the kids vote on whether each item should sink or float.
3. Graph their answers.
4. Once all their predictions are recorded, do the experiments. An aquarium is best, or a very large tub of water. Everyone should see, everyone should get wet hands.
5. As each item is tried, mark the correct answer on the graph with a star.
6. Have the kids re-vote on each item. Point out that now they know the answer, because they did an experiment. Their votes were opinions, the results are facts.
7. Award certificates to the participants.
8. Make sure the items, the graph, and the tub of water are available at the science fair so the kids can show their parents.



# *Jimi & Isaac*

## Science Fair Rules and Instructions

### Primary (1<sup>st</sup> & 2<sup>nd</sup> Grade) Experiment: Do You Know Beans?

There are two separate bean experiments. Alternate years so kids do different experiments.

#### Objectives:

1. To have the kids formulate and express an opinion before trying something.
2. To have the kids do an experiment.
3. To have the kids modify their opinion based on the results of the experiment.
4. To have the kids understand the difference between an opinion and a fact.

#### Timing:

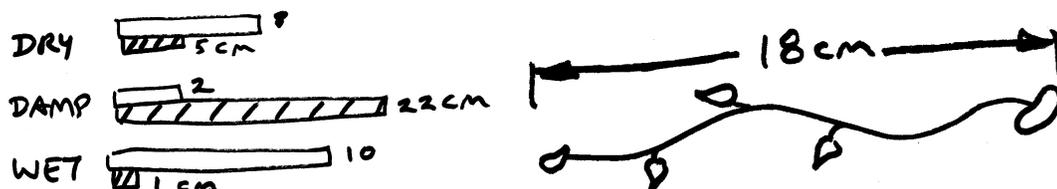
Start the experiment three weeks before the science fair. Complete the experiment and graph the results the day of the science fair.

#### Preparation (three weeks before the fair):

1. Buy a bunch of beans, or bean seeds. You need at least one for each student plus extras.
2. Visit each class, hand out the attached experiment sheet, and
  - a. Have the kids vote which condition is best for growing beans
    - i. Year one: Dry, wet, damp. Year two: salty, sugary, fresh.
  - b. Graph their answers.
3. Divide the kids into three groups. Each kid gets a clear plastic cup marked with their name and one of the three growing conditions. Put a wadded-up paper towel in each cup, then put a bean between the cup and the towel, 1 cm off the bottom of the cup. They will need help.
4. Have an adult add water to each cup according to the experiment. The teacher will need to maintain the cups in their correct condition. The kids will need to keep close tabs on their teacher so the experiment doesn't get messed up.

#### Collect results (the day of the fair).

5. Have the kids measure the length of their own sprout in cm.
6. Tabulate the answers, calculate the average result, and graph against their predictions.
7. Point out that now they know the answer, because they did an experiment. Their votes were opinions, the results are facts.
8. Award certificates to the participants.
9. Make sure the graphs for each class and a few bean sprouts are available at the science fair so the kids can show their parents.



# *Jimi & Isaac*

## Science Fair Rules and Instructions

### **Date and Time of Fair:**

Bring experiments in before school XXXX, XXXX

Judging will be done during the day, and awards made at 6:30 PM

### **Purpose:**

To promote science as the organized, cooperative pursuit of truth.

To demonstrate and teach the scientific method.

### **The Scientific Method:**

In all instances, scientists pursue truth.

Have and state (write) an opinion (hypothesis).

Test your opinion (experiment).

Tell people what you did and what you found (publish).

### **Rules:**

Students in K, 1<sup>st</sup> and 2<sup>nd</sup> Grades will do a group science project in class, but are encouraged to also create their own, individual experiments.

### **Each student will do their own experiment, then publish their results in a standard format showing:**

A: Their opinion or prediction of the results (hypothesis)

B: Their description of their experiment

C: Their description of what they found out (their results).

An outside panel of judges will select an overall winner, and winners from all grades (three blue, three red, and three yellow ribbons, plus the overall winner award). All participants will receive awards.

Experiments larger than 3' wide by 2' deep by 3' tall must be coordinated with XXX XXXX before XXXX.

No AC (house) electricity or dangerous chemicals unless you have a really good reason, please discuss with XXXX before XXXX. Use and promote safe behavior and safe equipment.

### **The winners will be chosen on the following criteria:**

Description of their opinion (hypothesis) or purpose. 10%

Description of their experiment and experimental method. 25%

Description of their results and analysis. 15%

How well the experiment tests the hypothesis or fulfills the purpose. 25%

Verbal review of experiment with judges. 25%

**Portions of the experiment performed by parents will not be judged.**

Comments or questions to: XXXX Contact Information.

# *Jimi & Isaac*

# SCIENCE FAIR

# PRIZES!!!!

The reason for the science fair is to have fun learning about and building new things. But prizes are fun, too.

There will be three sets of prizes at the School Science Fair this year.

## **Participant Awards:**

Kindergarten through second grade students will receive a certificate for participation in their class project.

Each student exhibiting a project at the science fair will receive a certificate and a free food coupon, presented by a local company. The food award does not apply to the class projects done by the younger students.

## **Merit Awards:**

Ribbons will be awarded for third, second, and first place in each of third, fourth, and fifth grades, as well as a grand prize for the entire school.

## **Special Awards:**

The following local businesses have donated their time and resources to reward student's special effort. Representatives from each business will select the experiment and student that will most benefit. These awards are not available to the general public, and we are extremely grateful to the companies for their participation.

### **Company Name**

This outstanding company will provide a tour to a student and parent.

### **Company Name**

This incredible business will give a clinic tour to a student and parent.

Please take every opportunity to thank these businesses for their support.

*Jimi & Isaac*  
**SCIENCE FAIR PROJECT**  
**DO YOU KNOW**  
**BEANS?**

**Name:** \_\_\_\_\_

**Hypothesis (Opinion):**

(Please circle one)

I think beans will sprout faster:

IN A DAMP PAPER TOWEL	IN A DRY CUP	UNDER WATER
--------------------------	-----------------	----------------

**Experiment:**

(Please circle the experiment you are assigned)

I will grow a bean sprout:

IN A DAMP PAPER TOWEL	IN A DRY CUP	UNDER WATER
--------------------------	-----------------	----------------

**Results:**

My bean sprout root was \_\_\_\_\_ cm long.

Please draw a picture of your bean sprout:

*Jimi & Isaac*  
SCIENCE FAIR PROJECT  
**DO YOU KNOW  
BEANS?**

**Name:** \_\_\_\_\_

**Hypothesis (Opinion):**

(Please circle one)

I think beans will sprout faster:

IN CLEAN WATER	IN SUGAR WATER	IN SALT WATER
----------------	----------------	---------------

**Experiment:**

(Please circle the experiment you are assigned)

I will grow a bean sprout:

IN CLEAN WATER	IN SUGAR WATER	IN SALT WATER
----------------	----------------	---------------

**Results:**

My bean sprout root was \_\_\_\_\_ cm long.

Please draw a picture of your bean sprout:

# *Jimi & Isaac*

# SCIENCE FAIR

# FRIDAY!!!!

- Bring in your projects before school on Friday.
- Set your project up after lunch, then talk to the judges from 1:45 – 3:00 PM.
- Show your project to other students from 3:00 to 3:30.
- Return to school at 6:30 and stay until 8:00 PM Friday night to show off your project and collect awards.

## **Participant Awards:**

Kindergarten through second grade students will receive a certificate for participation in their class project.

Each student exhibiting a project at the science fair will receive a certificate and a free food coupon, presented by XXXXXXXX. The food award does not apply to the class projects done by the younger students.

## **Merit Awards:**

Ribbons will be awarded for third, second, and first place in each of third, fourth, and fifth grades, as well as a grand prize for the entire school.

## **Special Awards:**

The following local businesses have donated their time and resources to reward student's special effort. Representatives from each business will select the experiment and student that will most benefit. These awards are not available to the general public, and we are extremely grateful to the companies for their participation.

### **Company Name:**

This leading edge company will provide a tour to a student and parent.

### **Company Name:**

This outstanding company will provide a tour to a student and parent.

**FRIDAY, 6:30-8:00 PM. BE THERE!**

# *Jimi & Isaac*

## Science Fair Judging Sheet

Student's Name: \_\_\_\_\_ Number: \_\_\_\_\_

Judge First Names: \_\_\_\_\_

**Purpose:**

To promote science as the organized, cooperative pursuit of truth.  
To demonstrate and teach the scientific method.

**The Scientific Method:**

In all instances, scientists pursue truth.

- Have and state (write) an opinion (hypothesis).
- Test your opinion (experiment).
- Tell people what you did and what you found (publish).

**Rules:**

**Each student will do their own experiment, then publish their results in a standard format showing:**

- A: Their opinion or prediction of the results (hypothesis)
- B: Their description of their experiment
- C: Their description of what they found out (their results).

An outside panel of judges will select an overall winner, and winners from all grades (three blue, three red, and three yellow ribbons, plus the overall winner award). All participants will receive awards.

**The winners are chosen on the following criteria:**

	Full Score	Score
Description of their opinion (hypothesis) or purpose.	10	
Description of their experiment and experimental method.	25	
Description of their results and analysis.	15	
How well the experiment tests the hypothesis or fulfills the purpose.	25	
Verbal review of experiment with judges.	25	
<b>Total</b>	<b>100</b>	

**Portions of the experiment performed by parents will not be judged.**

**Judge's Comments:**

Let it be known by this document  
that:

---

**KNOWS  
BEANS!**

---

Name  
Principal

---

Name  
Science Fair Chairman

Our Elementary School  
*Jimi & Isaac*  
Science Fair  
Month, Year

Let it be known by this document  
that:

**KNOWS  
WHAT  
FLOATS!**

---

Name  
Principal

---

Name  
Science Fair Chairman

Our Elementary School

*Jimi & Isaac*

Science Fair

Month, Year

Let it be known by this document that:

has advanced the causes of

TRUTH AND KNOWLEDGE

by participating in the

SCHOOL NAME SCIENCE FAIR

DATE

---

NAME  
Principal

---

NAME  
Science Fair Chairman

Let it be known by this document that:

has won

XXX Place, X<sup>XX</sup> Grade

in the

SCHOOL NAME SCIENCE FAIR

DATE

---

NAME  
Principal

---

NAME  
Science Fair Chairman

Press Release:

For Immediate Release:

XXXX Elementary School had it's first ever Science Fair last XXX, XXX XX. Over XX students built equipment and performed experiments to exhibit at the fair. The level of knowledge and craftsmanship exhibited was extraordinary. Principal XXXXX XXXXX was pleased with the turnout: "Most of these kids have never participated in a Science Fair, and it's great to see the enthusiasm and creativity they have demonstrated."

During the weeks leading up to the fair, all the K-2<sup>nd</sup> grade students performed experiments within their classes. The Kindergartners experimented with fluid density and buoyancy, and the 1<sup>st</sup> and 2<sup>nd</sup> graders performed a botany experiment. Both group experiments were wildly successful. Several 2<sup>nd</sup> graders also exhibited at the larger fair, showing their exhibits with the 3<sup>rd</sup> graders.

Several area businesses donated their time to be "prizes" for students whose interests match the businesses activities. The businesses will take their selected student on a tour of the facility, providing crucial "real-world" ties to the student's projects. Please thank these businesses for their generosity. A very big THANK YOU to the 13 students from the XXXXX High School Science Department for spending their Friday afternoon judging and talking with our Scientists.

Award Winners:

3 <sup>rd</sup> Grade	1 <sup>st</sup>	XXXXX
	2 <sup>nd</sup>	XXXXX
	3 <sup>rd</sup>	XXXXX
4 <sup>th</sup> Grade	1 <sup>st</sup>	XXXXX
	2 <sup>nd</sup>	XXXXX
	3 <sup>rd</sup>	XXXXX
5 <sup>th</sup> Grade	1 <sup>st</sup>	XXXXX
	2 <sup>nd</sup>	XXXXX
	3 <sup>rd</sup>	XXXXX

Special Award Winners:

Company 1	XXXXX, XX <sup>th</sup> grade	
Company 1	XXXXX, XX <sup>th</sup> grade	

(end)

For more information:

NAME

Booster Club President

Phone Number