



WOODSIDE'S
**SCIENCE
SHOWCASE
GUIDE**



**The Woodside TK-5 Science
Showcase is a chance to showcase
what you learn and or LOVE about
SCIENCE!**

BE A SCIENTIST!



INFORMATION FOR SCIENCE HELPERS & SUPERVISING ADULTS

The Science Showcase is an event to encourage students to look around the world and see the science, to explore nature, to create models, to perform experiments, to question, to wonder, to marvel, to observe, have fun, and then SHOWCASE what they have learned.

For K-4th grade the Science Showcase is voluntary, but all fifth graders will conduct an experiment and participate in the Science Showcase. No judging will take place. All classes, teachers, and staff are invited to observe the projects during the school day.

If you have any questions, please don't hesitate to contact your classroom teacher or

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SCIENTISTS

Here is a plan for conducting an experiment!

ASK A QUESTION-HMMMM??? What do you wonder? Find a topic that interests you! Ask a question that can be tested. Do you want to learn more about...

- nature and where you take hikes?
- experiments and chemistry?
- the solar system or black holes?
- animals like birds or your pet cat?
- the human body & why do you burp?
- volcanoes and eruptions?
- bugs, butterflies and why they migrate?

COLLECT INFORMATION-How can you find the answer to your question???

- Ask your parents or family.
- Take a trip to the school or public library.
- Ask a teacher.
- Use a computer with the help of an adult.
- Read a book.
- Draw a picture.
- Watch something and make observations.
- Take a field trip.

MAKE A HYPOTHESIS-After collecting information, take a guess, and make a prediction. What do you think or predict might happen??

TEST IT!-DO THE EXPERIMENT

- Make sure you have the materials needed for the experiment.
- Design an experiment or investigation.
- Follow a plan or set of directions. Use steps.
- Be sure to carefully follow the directions and

- wear safety gear if needed. An adult can help.
- Don't make too much of a mess or make a mess, but be sure and clean it up. ☺
- Make observations as you go, you may forget.
- REPEAT THE EXPERIMENT TO SEE IF THE SAME RESULTS HAPPEN AGAIN!

OBSERVE - What did you see? Did the color change? Was there an explosion? Were there bubbles? Did it make a sound? Did something amazing happen?

- Write it down.
- Draw a picture.
- Take a photo.
- Make a chart.

RECORD & STUDY YOUR DATA - REALLY, what did happen? What changed? What stayed the same? What science made it happen?

- Write it down or draw a picture or diagram.
- Make a chart, table, or graph.

DRAW A CONCLUSION - WHY do you think it happened? What patterns did you see? Was there a relationship or BIG idea? How did your results compare to your hypothesis or prediction?

SCIENTISTS (K-4)

Here is a plan for COLLECTIONS/REPORTS

ASK A QUESTION-HMMMM???? What do you wonder? Find a topic to interest you! Ask a question that can be tested. Do you want to learn more about...

- nature and where you take hikes?
- experiments and chemistry?
- the solar system or black holes?
- animals like birds or your pet cat?
- the human body & why do you burp?
- volcanoes and eruptions?
- bugs, butterflies and why they migrate?

COLLECT INFORMATION-How can you find the answer to your question???

- Ask your parents or family.
- Take a trip to the school or public library.
- Ask a teacher.
- Use a computer with the help of an adult.
- Read a book.
- Draw a picture.
- Watch something and make observations.
- Take a fieldtrip.
- Go for a walk around your house or school.

OBSERVE-WATCH and make observations. What did you see? Did the color change? Was there an explosion? Were there bubbles? Did it make a sound? Did something amazing happen?

- Write down observations.
- Draw a picture of what happened. (A before and after picture)
- Take a photo or a series of photos.
- Make a chart to show how something changed.

DRAW A CONCLUSION - WHY do you think it happened? What patterns did you see? Was there a relationship or BIG idea? How did your results compare to your hypothesis or prediction?

NOW

SHOWCASE WHAT YOU LEARNED!

What is the best way to share and showcase your findings??? How will you share the information with your parents, teachers, and friends??? Use your creative side to show the school and the world your findings!

- A poster?
- Will you bring in your materials, magazines, or articles from the internet?
- A model?
- Books you used to research?
- Pictures you drew or art you created.

***CHECK OUT THE LIBRARY**

- There are so many books!
- Mrs. LaCrosse is so amazing at helping Woodside students find the perfect book for anything.

***VISIT THE INTERNET**

Here are more websites:

<http://www.sciencemadesimple.com>

<https://www.sciencekids.co.nz/>

<http://sciencewithme.com>

<http://www.sln.org/resources/index.html>

<http://www.sciencebuddies.org>

<http://www.hhmi.org/coolscience/>

<http://www.madsci.org> <http://www.reekoscience.org>

***DISPLAY GUIDELINES & GENERAL RULES**

1. Be sure to include a **NAME, GRADE, TEACHER, and TITLE.**
2. No water or gas outlets will be provided at the Science Showcase .
3. No mistreatment of animals will be tolerated.
4. No flammable, explosive, toxic materials, or poisonous chemicals are to be used at the science showcase.
5. If you bring objects such as books and/or objects for display, remember they may be handled by interested students and parents. Do not leave valuables.
6. Be sure food is in sealed containers.

***TEMPLATES/GRAPHIC ORGANIZERS TO HELP WITH THE PROCESS BELOW**

USING THE SCIENTIFIC METHOD TK-3

1-ASK THE QUESTION*What do you want to know? State the question.

2-COLLECT INFORMATION*What do you know, observe, or infer? What information did you gather from your research?

3-FORM A HYPOTHESIS*What do you predict will happen?

4-TEST YOUR HYPOTHESIS *How did you set up the experiment?

5-OBSERVATIONS *What did you see? What happened? Explain.

6-RECORD AND STUDY DATA *What does the data tell you?

7-DRAW A CONCLUSION *Was your hypothesis correct? Why or why not? What did you learn from the experiment??

SCIENTIFIC METHOD REFERENCE-THIRD/FOURTH GRADERS

TOPIC:

QUESTION: What are you wondering? What do you want to know? State the scientific question.

COLLECT INFORMATION: What do you know, observe, or infer? What information did you gather for your research?

MATERIALS:What did you use to conduct your experiment?

Step #1: Make observations: What are you curious about? What are you noticing about the materials or experiment that make you wonder?

Step #2: Form a hypothesis or make a prediction: From your observations, what are some thoughts you have about the outcome of this experiment?

NOW IT IS TIME TO PERFORM THE EXPERIMENT!!!

Step #3: Conduct the experiment: Record what you notice throughout the experiment. Be thorough and as unbiased as you can.

Step #4: Draw a conclusion: What did your experiment show? Did the experiment confirm your hypothesis? What would you do differently? What questions do you have now?

COLLECTIONS AND REPORTS K-4

1-STATE THE QUESTION-What do you want to know?

2-COLLECT INFORMATION-What do you know, observe, infer? What information did you gather from your research?

3-OBSERVE-What did you see? What happened? Explain?

4-DRAW A CONCLUSION-What did you learn from the experiment?