

# What Is Science Inquiry?

Think about the word, inquiry. What does that mean to you?



# What it is.....

**Inquiry teaching is a method of instruction.**

- **Observation**
- **Measurement**
- **Experimentation**
- **Communication/Questioning**
- **Mental Processes**
- **Collecting Data/Evidence**
- **Search for Connections**
- **Critical Thinking Strategies**



## What it is not.....

- Teacher led whole group instruction.
- Worksheets
- Limited to no opportunity for critical thinking. (yes, no responses)
- Using the textbook as the sole purpose for the science investigation.



# Inquiry Activities by Grade Level

Taken from: The Globe Program

## Grades 1, 2

- Students work in a team to do science yet understand the importance of reaching their own conclusions and individually understanding the results.

## Grades 3,4

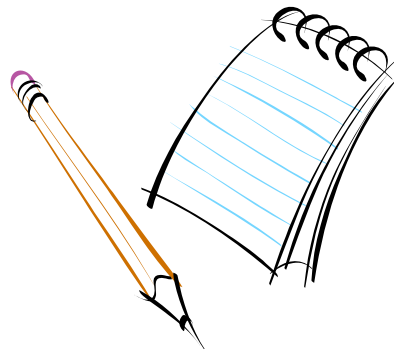
- Students raise questions about the world around them, gather evidence through many types of investigations including careful observations and doing experiments.



# Continuation:

## Grades 1,2

- Students raise questions about the world around them and gather careful observations to answer these questions to formulate explanations.



## Grades 3,4

- Consistently following a procedure and keeping careful records are important to create explanations based on evidence that are understandable to all in the future.

# Still Continuing.....

## Grades 1,2

- In addition to observations, students can design investigations to answer their questions about the world.

## Grades 3,4

- Students connect their explanations to existing scientific knowledge.



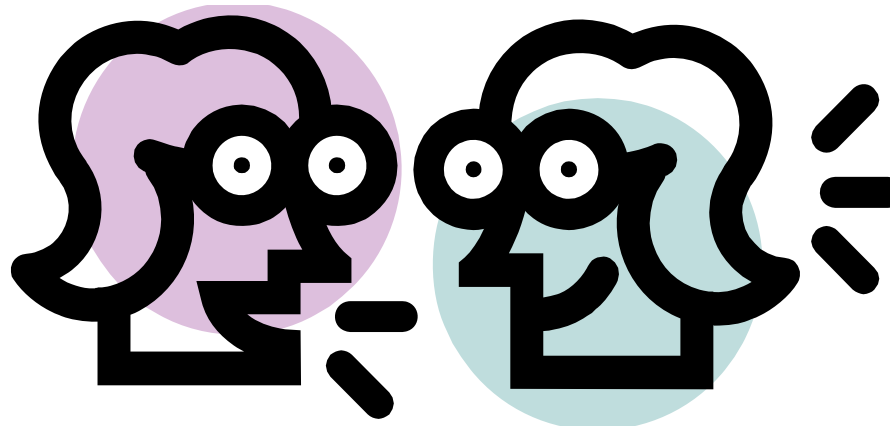
# And Finally.....

## Grades 1,2

- Students communicate their explanations to others.

## Grades 3,4

- Students communicate their explanations to others.



So, what does this all mean?



# Consider your experiences as a learner.

What are some ways you learn best?

- As an elementary student?
- As a high school student?
- As a college student?

As a COMETS teacher, how will you use  
Science Inquiry Based Learning?

