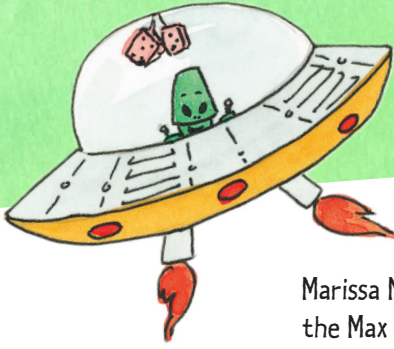


The MAX DISASTER Series

by Marissa Moss



CLASSROOM ACTIVITIES

Marissa Moss, creator of the Amelia's Notebook series, has created a winning new character to star in the Max Disaster series. Facing troubles with a pimply older brother, good parents who get into bad fights, and a teacher who wants to confiscate his creations, Max turns to his own book—a science journal—to jot down his mixed-up thoughts and brilliant ideas.

SCIENCE JOURNALING

Marissa Moss has been talking to teachers about journaling and science together for a long time and knows what a hot topic it has become in recent years. The Max Disaster books give teachers a unique opportunity to talk about writing and science. Here are some science journaling exercises the author has developed with teachers in Indiana and Arizona that can help to get you started.



The Nature of Experiments

Max Disaster is filled with fun, interesting ideas for experiments. Demonstrate the scientific method to students (making hypotheses, testing experiments, and recording results) using the following example:

1. Begin by asking the question “What happens if . . . ?” For example, ask students “What happens if you microwave a marshmallow?”
2. Make a list of everyone’s hypotheses (most will say it will explode or splatter).
3. Then try it and see! Are the results what you expected?
4. Talk about why even when a hypothesis is proven wrong, you learn something. In science you don’t need to be right—you need to be curious, to ask questions, and then see what happens.

Afterward, ask students to record the experiment in their journal, showing the steps of the scientific process. Suggest different ways to write out this experiment:

- as a recipe
- as a comic strip
- as a step-by-step explanation

After the students have journaled, ask them to share their entries with the class. Discuss with the class the different ways they have chosen to show the same process. Ask which ways worked best for them and why.

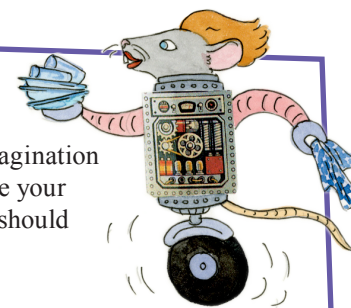
Extension:

Discuss as a class: Max wants to prove his theory that aliens built the pyramids. Is this something he can use research and experiments to prove? What question would he need to begin with? How would he test the hypothesis? Can he find empirical evidence? Explain that empirical evidence is from experiment and observation rather than from theory.



Illustrations copyright © 2009 by Marissa Moss

Inventions



Imagine an Invention

Most kids love inventions and the idea of creating something out of nothing. Max has a large imagination and has already invented numerous handy things (often out of materials he has in his desk). Have your students develop their own dream inventions. The inventions don't have to be realistic, but they should address a problem.

Two Paths to a Great Invention:

#1: Problem first:

1. Ask students to describe a problem in their science journals.
2. Have them use their journals to brainstorm ideas for solving this problem—any idea can be part of a brainstorm, no matter how outrageous!
3. Finally, ask them to design an invention that is a solution to the problem. Encourage them to use drawings and descriptions rather than simply writing alone.

For example:

Problem: Making a heavy backpack easier to handle

Possible inventions: A backpack on wheels or on a hover board; a compactable and expandable backpack

#2: Idea first:

1. Ask students to draw and describe some type of machine they've always wished existed—or to make up one now.
2. Have them consider and explain the problem(s) this invention solves.

Extension:

Working on invention activities presents a great opportunity for class discussion and research about some great past inventors and their role in history. You might have students research Thomas Edison, Benjamin Franklin, Leonardo da Vinci, or another inventor.



Find a New Purpose

Children have been inventing simple toys for millennia: turning sticks into guns, rocks into dolls, coffee cans into cars, rubber bands into balls. Challenge the class to see something in a fresh light and use it in a way other than its original purpose.

1. Ask each student to find something in the classroom (in a desk, on the shelves, etc.) or bring something from home and describe its purpose in his or her journal.
2. Give students the opportunity to brainstorm a new way to use this item and describe it in their journals.
3. Finally, allow students to show their items and describe the new uses to the class.

Scientific Classification and Description

Ask students to imagine your classroom as the site of an archeological dig.

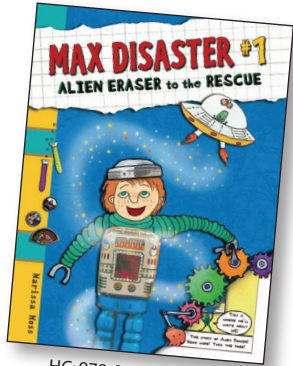
1. As a class, collect and label objects in the classroom (such as a pencil, a doorknob, a compass, and more) and explain their use using objective language. Write a list of objects and their descriptions on the board.
2. Ask students to consider how an alien civilization would interpret these objects. Try to create new perspectives and break away from cultural assumptions. If they had no idea what this object was for, what might they guess it was for? Write those descriptions next to the first ones the class came up with.
3. Ask whether the first set of descriptions on the board would provide enough information for an alien to understand the objects' purposes. If not, improve on those descriptions as a group.
4. Last, describe a familiar object (for example, a chair, a table, or a book) without telling what it's used for or what it's called. See if the students can guess your mystery object.



MORE JOURNAL ACTIVITIES

Here are some more Max-Disaster-related journaling ideas inspired by subjects other than science:

Max Disaster #1: Alien Eraser to the Rescue

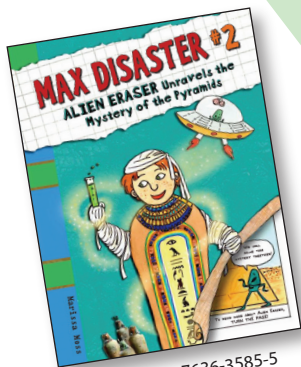


HC: 978-0-7636-3577-0
PB: 978-0-7636-4407-9

Have students work in their own journals using the following ideas as launching pads:

- Write from the perspective of an imaginary identity (such as a scientist or an alien eraser).
- Draw robot versions of themselves (like Max's perfect robot family) and describe any special abilities or powers their robot selves have.
- Write and draw comic stories with a plot (beginning, middle, and end), using the comics in Max Disaster as a model.
- Write about things that make them sad (as Max is sad when his parents fight) and what cheers them up.
- Write about their family structures, and compare them to the new family Max has to adjust to when his dad moves out.

Max Disaster #2: Alien Eraser Unravels the Mystery of the Pyramids

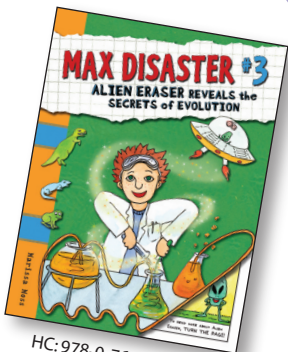


HC: 978-0-7636-3585-5
PB: 978-0-7636-4408-6

Max wants to travel back in time to ancient Egypt. Have students work on the following projects that involve research on ancient Egypt and other great past civilizations from around the world, keeping notes and information in their journals:

- The pyramids preserved dead bodies as mummies. Ask students to research and write about other ways to preserve ancient things.
- Max does a project on the pyramids. Introduce the class to other great architecture, such as the Leaning Tower of Pisa, the Taj Mahal, and Stonehenge. Ask students to research and write about a famous structure of their choice.
- Max brings back an old family tradition by asking his parents to toast to wish him good luck on his Egypt project (secretly giving them a love potion). What traditions do students' families have?
- Max and Omar interpret a depiction of the sky goddess in Ramses IV's tomb to mean that aliens visited ancient Egypt. Ask the class to write or talk about what they think the image means.

Max Disaster #3: Alien Eraser Reveals the Secrets of Evolution



HC: 978-0-7636-3579-4
PB: 978-0-7636-4419-2

Ms. Blodge explains that "evolution is how a species changes over time in order to adapt to its environment." List traits that would help animals survive in different environments. Ask students to imagine different settings (such as the desert or the Arctic) and make separate lists of necessary traits for survival in each.

- List as many animals with survival traits as possible, including traits that help them keep predators away. How are these traits similar to the things Max invents to scare away his parents' dates?
- List changes students hope will take place in their lives as they grow up and approach adulthood, just as Max makes a list of all the changes he hopes will happen. Alternately, ask them to list the changes they've already experienced.
- Write about inventions — one of Max's favorite topics — ask students to show or describe how inventions have changed the world over time.

OTHER ACTIVITIES

Here are some discussion topics and projects for other areas of your curriculum:

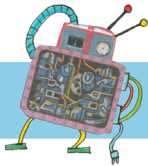


Literacy

Reading Robot

(Max Disaster #2: *Alien Eraser Unravels the Mystery of the Pyramids*)

Max's Reading Robot condenses a lot of words into short summaries. Use this concept to teach the class about summarizing. Explain that each student can be his or her own Reading Robot, extracting the most important information from what they read.



Science

Lightning and Thunder

(Max Disaster #2: *Alien Eraser Unravels the Mystery of the Pyramids*)

Thanks to the Book-to-Brain Zapper, Max knows why you see lightning before you hear thunder. Ask your students if anyone else has noticed this or knows why this happens. You may need to explain!

Max's Homemade Spying Glass

(Max Disaster #2: *Alien Eraser Unravels the Mystery of the Pyramids*)

Have the class build a periscope, like Max's Homemade Spying Glass, and discuss different uses. How have periscopes been used throughout history?

Scale of Judgment

(Max Disaster #2: *Alien Eraser Unravels the Mystery of the Pyramids*)

Max uses a scale of judgment to decide if making the love potion is a good idea. Have students hypothesize and then use a real scale to prove which random classroom objects are heavier than others.

Evolution of Man

(Max Disaster #3: *Alien Eraser Reveals the Secrets of Evolution*)

Alien Eraser claims to have had a hand in the evolution of humans. Use this opportunity to teach about evolution, perhaps showing a simplified list of the stages of human evolution.

Math

Word Problems

(Max Disaster #3: *Alien Eraser Reveals the Secrets of Evolution*)

Ms. Blodge confiscates as many of Max's alien erasers as she can. Create some word problems for students involving eraser confiscation. For example: if Max makes 5 erasers every hour during a 6 hour school day and Ms. Blodge takes half of them at the end of the day, how many of that day's erasers will Max have left?

Chart of Changes

(Max Disaster #3: *Alien Eraser Reveals the Secrets of Evolution*)

The Chart of Changes Max draws is actually also a line graph. Use this chart as an opportunity to discuss x- and y-axes and how to create line, pie, or bar graphs.

Social Studies

Conflict Resolution

(Max Disaster #1: *Alien Eraser to the Rescue*)

Max's class has a special guest, Mr. Cabrillo, come in to talk with them about conflict resolution. Have a class discussion on respect and good manners. Act out skits showing situations that might lead to conflicts, but have students solve the problems in a peaceful way.

How Old?

(Max Disaster #3: *Alien Eraser Reveals the Secrets of Evolution*)

Max thinks his mother is "too old" to date. Have students talk about common activities and how old or young one should be to participate. How old should you be before you can drive a car? Leave the house alone? Run for president?



CANDLEWICK PRESS
www.candlewick.com