Science Experiment

Which Color Banana Tastes Sweeter?

Complete Kit

SCIENCE

ReneeDAWN

Science Experiment

Which Color Banana Tastes Sweeter?

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Science Experiment - Science Fair Project

Which Color Banana Tastes Sweeter— Yellow or Brown?

Introduction

A science experiment for your science fair! This is a complete science fair project, including printables for your tri-fold, photos of the bananas in this science project, and possible student hypotheses. How to Present the Lesson, step-by-step.

Just print out, add your class name, additional children's quotes or drawings (if you'd like), and glue onto a tri-fold, which you may purchase at an office, school or craft supply store for about $5.00.

The standard tri-fold, 48" w X 36 h" is ideal.

The writing is on borderless paper so you may customize and choose which pages to use, as well as the layout. The Tri-fold pages total 20.

It's a great way to teach kids how to create a science fair project using the scientific method.

The full experiment will take about one week to complete. You can do the experiment in one day if you start with a yellow and a brown banana.

Common Core Aligned!

For a large, colorful view of these pages, simply open the PDF on your Smartboard.

I hope you enjoy this…and if you would kindly leave your rating and feedback at
www.teacherspayteachers.com/Product/Science-Fair-Project-Science-Experiment-Tri-Fold-Which-Banana-Tastes-Sweeter-1689391
it would be greatly appreciated!

Suggestions for Use

For the Tri-fold:

- Print out the tri-fold pages. You may print in color or grayscale.
- Print the photos of the bananas in color for best results.
- PHOTOS: Many pharmacies and office supply stores can print a single photo from a page on this PDF file.
- Fold and cut off the excess paper on the bottom of each sheet, as necessary.
- Arrange in order on the tri-fold, as seen in the Completed Tri-fold Sample.
- Cut the photos of the bananas and arrange in the center section of the tri-fold, next to the materials and procedure sheets. Use either two large photos or the single small photo.
- Add the number of children who guessed one way or the other in the Hypothesis section.
- Add your own class name.

Optional:

- Print onto various colored papers.
- Mount sheets onto colored papers before you glue to the tri-fold.
- Re-create the title out of decorative letters.
- Add children's hypotheses, observations, or results on typed sheets or hand-written by children.
- You may include a graph of children's hypotheses, or guesses. Cut paper tickets on which children write their names, draw a banana, and color it yellow or brown. Line these up in two rows according to color.
- Add your own yellow and brown bananas to the display. Bananas will take about 7 days to turn brown.
- *The Science Standard included may vary by State. You may use the writing standard, which is universal, instead.*

Present the Lesson, part 1:

1) Buy one banana. 7 days later, buy another banana.
2) Display your two bananas to the children. Ask, "What do you notice or wonder about these bananas?" You may write down their observations and questions.

3) Say: We're going to do a science experiment together.
4) Scientists look at the world and then ask questions—just like we did.
5) Let's choose *one* question we want to answer: Which color banana tastes sweeter, yellow or brown?
6) Next, a scientist will guess the answer. We call that a *hypothesis*.
7) We want to know what you *really* think will happen, so don't tell anyone. Just think: which banana do you imagine will taste sweeter—yellow or brown?
8) You will write your name on this ticket—very neatly and very small—and then draw a banana with your pencil. (Demonstrate)
9) Color your banana yellow or brown, and remember: don't show your friends!

10) Children will follow the directions.
11) You may have all the kids with yellow pictures hold up their tickets, then all the browns. Ask which is more, yellow or brown? You may count the raised hands, or collect the tickets and glue them on to a bar-graph to show which is more.

Present the Lesson, part 2:

12) Say: Now we will *test* our guesses, or hypotheses. How should we do that? (Taste the bananas and compare our impressions)
13) You may cut thin slices, enough for each child, and give them out on a napkin.
14) Remind kids that scientists use their five senses.
    - What do you see? (Yellow, Brown, mushy spots)
    - What do you smell? (Sweetness, banana scent, fruity scent)
    - What do you feel? (Hard, soft, mushy, jelly)
    - What do you hear? *Can* you hear a banana? (The squishy sound it makes when you touch it or taste it)
    - What do you taste? (Sweet, bitter, no taste)
15) Ask: Which banana tasted sweeter? (Brown)
16) Did most of us guess correctly what would happen?
17) That's what a scientist does: guess, test and tell what happens.
18) A scientist is happy if the first guess is wrong, because that means that he or she has learned something new.
19) A scientist never stops wondering about the world.
20) What might you conclude? *Why* do you think the brown banana tastes sweeter? (Maybe the starch in the banana turned into a sweet tasting sugar as the banana ripened over 7 days.)

To Customize the Tri-Fold Writing:

If you would like to type and print some of your own sheets, for instance, to customize the student hypotheses, these are the fonts used:

- All print is Arial style font.
- Font size is 44. Title Page font is size 54. Hypothesis, Data/Observations and Results font is size 36.
- Page layouts are "landscape," on standard printing paper printed horizontally.

Tech Tip:

- For easy, paperless, and large-print access, open this PDF on a Smartboard.
- Simply place the PDF onto your Smartboard desktop.
- Click to open the file, and type your page number or click the down arrow to find your page.

How To

Make Your Tri-Fold "Pop"

Suggested Presentation

- Use a colorful tri-fold background: neon, pastel or classic-colored.
- Create a title using large craft-letters, with bright colors, glitter, multi-colors, or designs.
- Add a decorative border around the tri-fold.
- Mount some or all of the information, photos and objects on white, neon, pastel, or classic-colored paper or cardstock. Then glue it to your tri-fold.
- Add decorative arrows—straight, curved or squiggly—for instance, pointing from the materials list to the photos of materials. Arrows are included in this kit.
- Add a giant craft cutout of something from your experiment; e.g., a single large banana.
- Add a photo of your entire class studying a banana.
- Add 3-D elements in your display, for example, yellow and brown bananas.

The Scientific Method

1) Problem (Question)
   What do you want to find out?
   What problem do you want to solve?

2) Guess
   What do you think will happen?

3) Materials
   List everything you used. Be specific.

4) Procedure
   How did you test your guess? Write it out step by step.

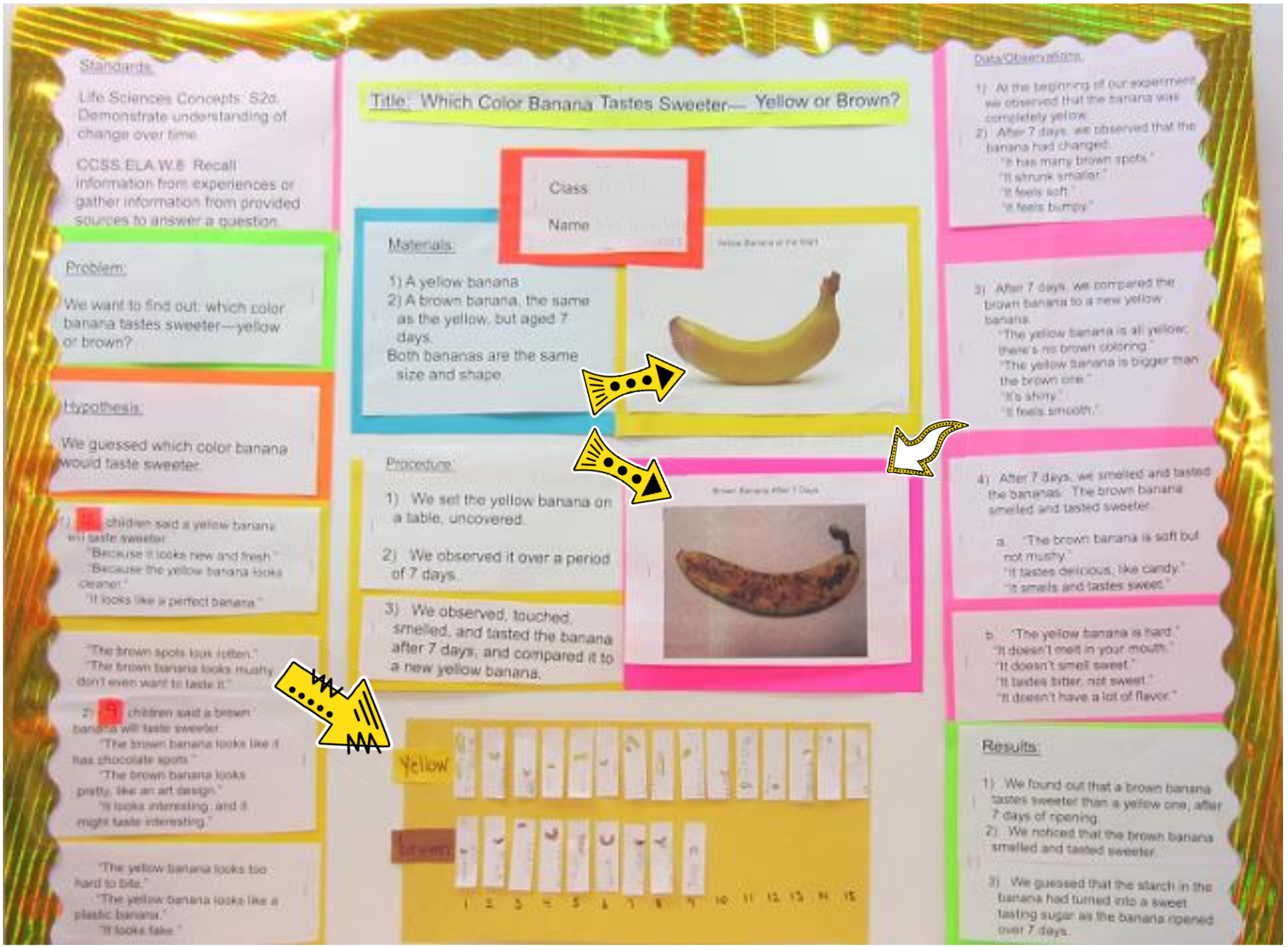
5) Observations & Data
   Write, draw, or use photos, graphs, tables, charts, diagrams.
   Use your 5 senses.

6) Results
   What happened? What did you see? What did you learn?
   What conclusions did you make?

Tri-Fold Set-Up

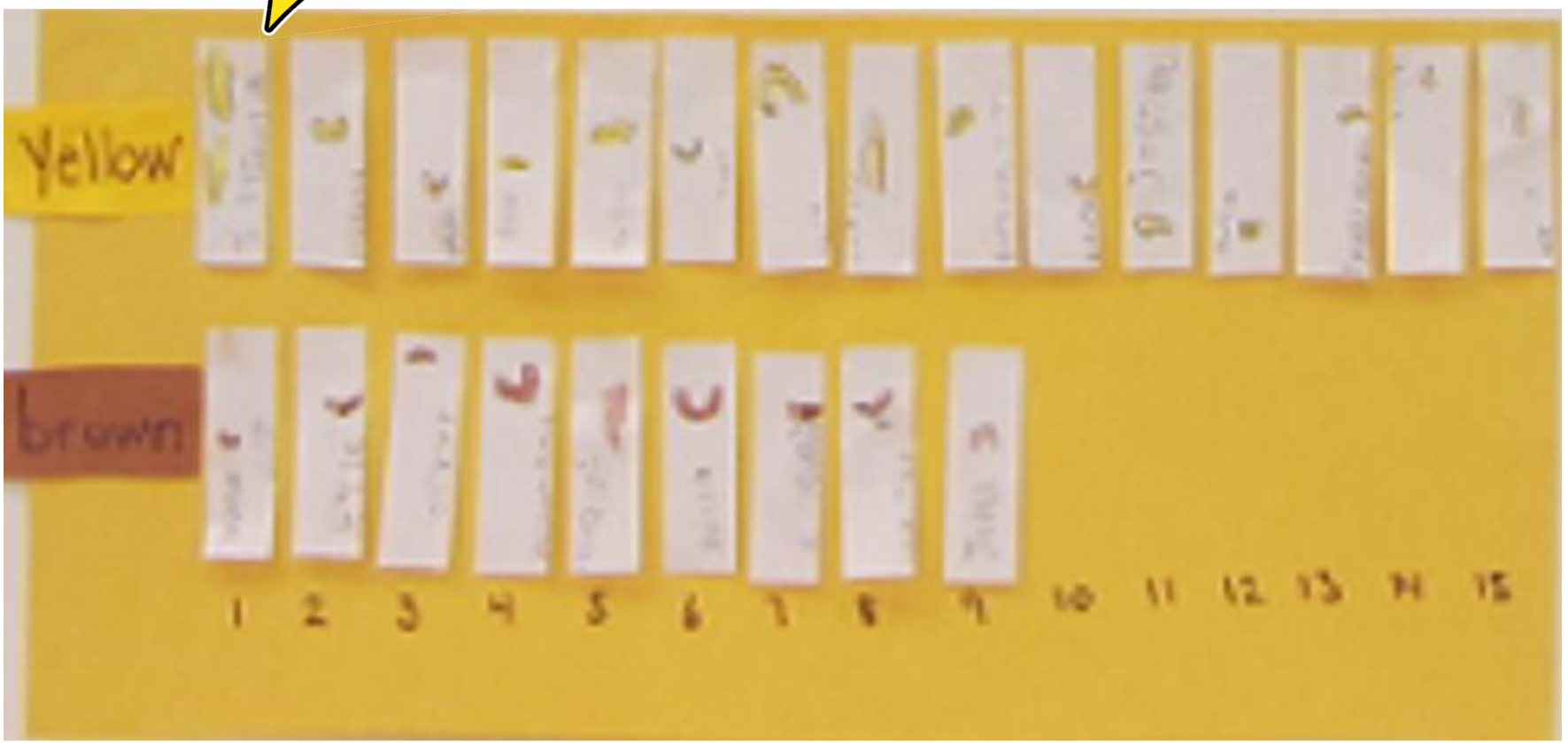
<u>Standards</u> CCSS <u>Problem</u> What do you want to find out? <u>Guess</u> What do you think will happen?	<u>Title</u> May be the same as your problem. <u>Materials</u> List everything you used. <u>Procedure</u> Tell the steps in your experiment.	<u>Observations & Data</u> Write, Draw, add Photos, Graphs, Charts, Diagrams. <u>Results</u> What happened? What did you learn? Name Class

Completed Tri-Fold - Sample



Which Color Banana Tastes Sweeter?

Children write their names on a ticket, draw a banana, and color it yellow or brown.



Which Color Banana Tastes Sweeter? Overview p. 1

Title: Which Color Banana Tastes Sweeter—Yellow or Brown?

Standards:

Life Sciences Concepts: S2d.
Demonstrates understanding of change over time.

CCSS.ELA.W.8 Recall information from experiences or gather information from provided sources to answer a question.

Problem:
We want to find out: which color banana tastes sweeter—yellow or brown?

Hypothesis:
We guessed what might happen.

1) ( ) children said a yellow banana will taste sweeter.
   "Because it looks new and fresh."
   "Because the yellow banana looks cleaner."
   "It looks like a perfect banana."
   "The brown spots look rotten."
   "The brown banana looks mushy. I don't even want to taste it."
2) ( ) children said a brown banana will taste sweeter.
   "The brown banana looks like it has chocolate spots."
   "The brown banana looks pretty, like an art design."
   "It looks interesting, and it might taste interesting."
   "The yellow banana looks too hard to bite."
   "The yellow banana looks like a plastic banana."
   "It looks fake."

Materials:

A yellow banana
A brown banana, the same as the yellow, but aged 7 days.
Both bananas are the same size and shape.

Which Color Banana Tastes Sweeter? Overview p. 2

Procedure:

1) We set the yellow banana on a table, uncovered.
2) We observed it over a period of 7 days.
3) We observed, touched, smelled, and tasted the banana after 7 days, and compared it to a new yellow banana.

Data/Observations:

1) At the beginning of our experiment, we observed that the banana was completely yellow.
2) After 7 days, we observed that the banana had changed.
   "It has many brown spots."
   "It shrunk smaller."
   "It feels soft."
   "It feels bumpy."
3) After 7 days, we compared the brown banana to a new yellow banana.
   "The yellow banana is all yellow; there's no brown coloring."
   "The yellow banana is bigger than the brown one."
   "It's shiny."
   "It feels smooth."

4) After 7 days, we smelled and tasted the bananas. The brown banana smelled and tasted sweeter.
   a. "The brown banana is soft but not mushy."
   "It tastes delicious, like candy."
   "It smells and tastes sweet."
   b. "The yellow banana is hard. It doesn't melt in your mouth."
   "It doesn't smell sweet."
   "It tastes bitter, not sweet."
   "It doesn't have a lot of flavor."

Results:

1) We found out that a brown banana tastes sweeter than a yellow one, after 7 days of ripening.
2) We noticed that the brown banana smelled and tasted sweeter.
3) We guessed that the starch in the banana had turned into a sweet tasting sugar as the banana ripened over 7 days.

Title:

Which Color Banana Tastes Sweeter—Yellow or Brown?

Standards:

Life Sciences Concepts: S2d. Demonstrate understanding of change over time.

CCSS.ELA.W.8 Recall information from experiences or gather information from provided sources to answer a question.

Problem:

We want to find out: which color banana tastes sweeter—yellow or brown?

Hypothesis:

We guessed which color banana would taste sweeter.

[Optional: Include a graph of children's guesses. Cut paper tickets on which children write their names, draw a banana, and color it yellow or brown. Line these up in two rows according to color.]

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“It looks fake.”

Materials:

1) A yellow banana
2) A brown banana, the same as the yellow, but aged 7 days.

Both bananas are the same size and shape.

Procedure:

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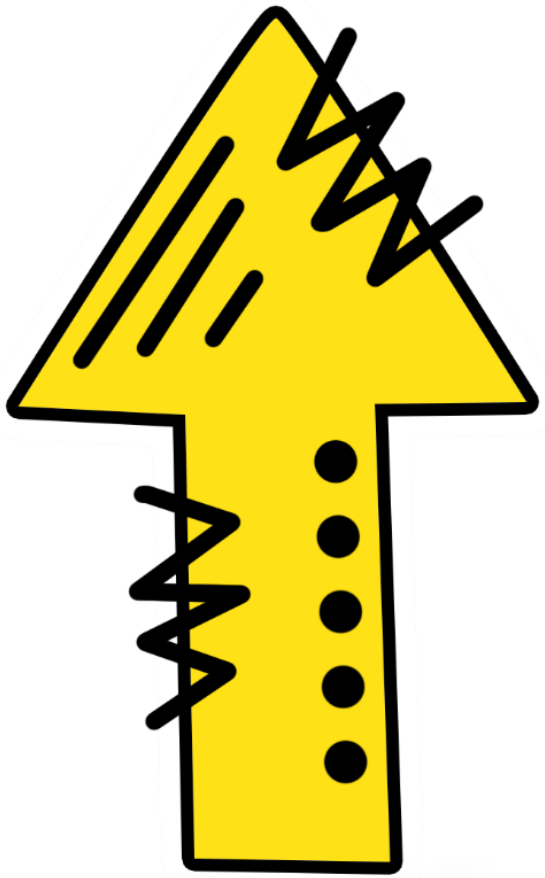
Class:

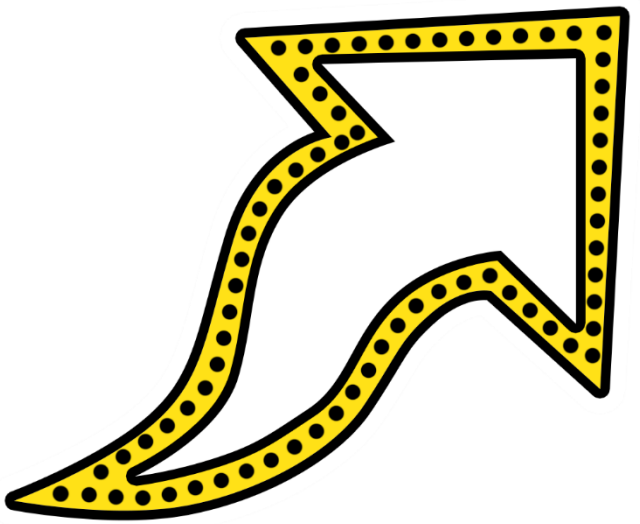
Name:

Yellow Banana at the Start

Brown Banana After 7 Days

Yellow Banana at the Start and Brown Bananas after 7 Days





Add decorative arrows to your tri-fold; for instance, pointing from the materials list to the photos of materials. Print arrows in full color or gray scale; on neon, pastel, or classic-colored paper or cardstock. Cut out the arrows and glue to your tri-fold where desired. For a 3-D effect, put a dab of glue at the point and at the end of the arrow. Instead of laying the arrow flat, move the two ends slightly toward each other and hold down till the glue dries.

Thank you for your purchase !

I hope you enjoy using your Science Experiment.

If you would kindly leave your rating and feedback at
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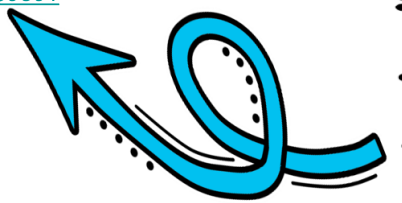

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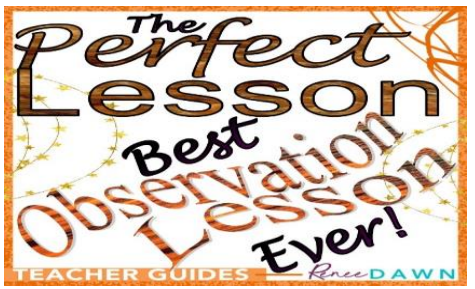

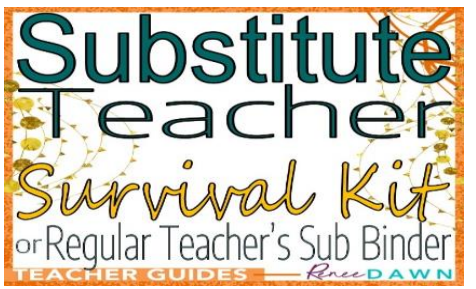

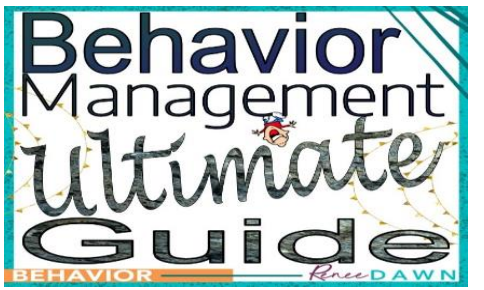

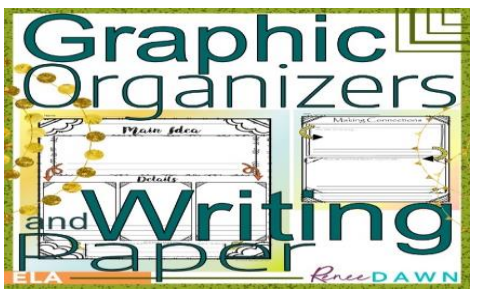

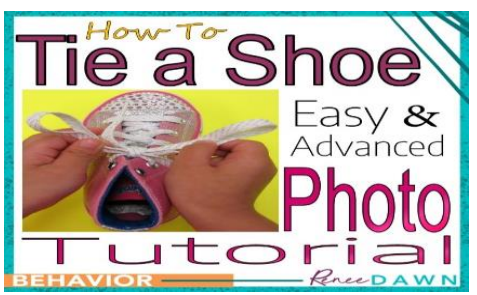

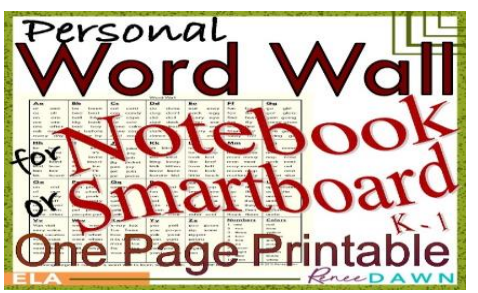

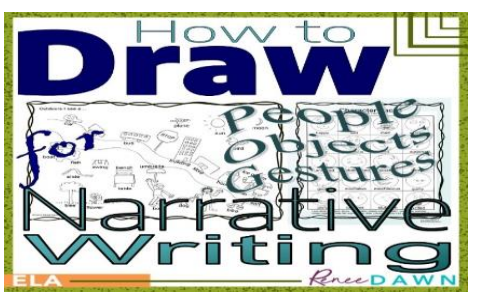

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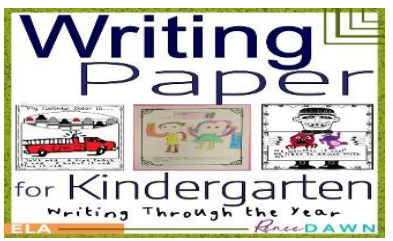

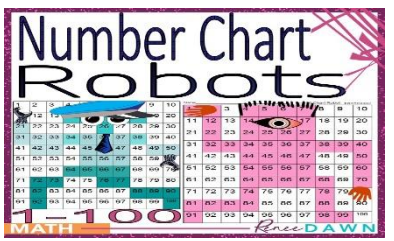

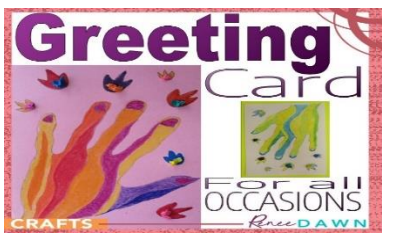

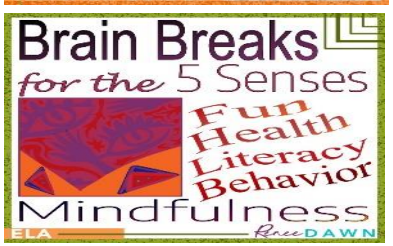

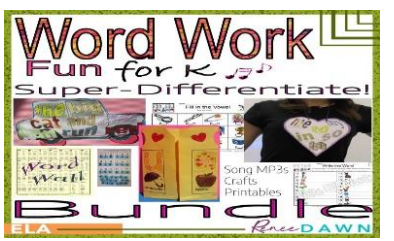

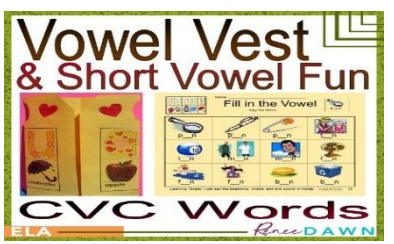

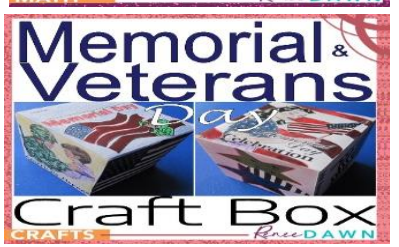

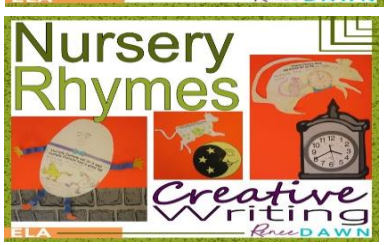

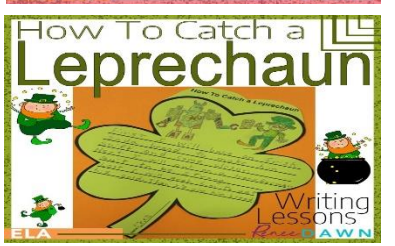

More Resources for

Behavior Management

[School Rules: Checklists and Discussions]

- How to teach rules so they “stick”
- Teacher scripts for teaching rules and routines
- Lesson and bulletin board display with a rubric:
  My Favorite Rule
- Feel CALM and CONFIDENT in the classroom

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