



# Great Big Crunch Activity Guide

Student-approved classroom activities and resources



## Kick Off with School PA Announcements

**Planning to crunch in the classroom?** Use a school-wide PA announcement to have the whole school involved.

### **Announcement:**

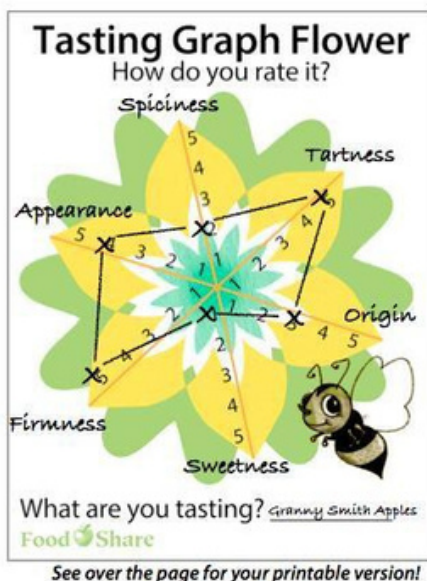
"Today we are crunching down on apples to celebrate Nutrition Month™ and healthy food in schools. Did you know Nova Scotia grows 40 varieties of apples? Our [type] apples are from [farm]. Thank you to the amazing farmers that grow our food.

We are going to crunch our apples at the same time, joining thousands of students across Canada in the Great Big Crunch. Let's count down from 10: 10, 9, 8, 7, 6, 5, 4, 3, 2, 1, **CRUNCH!**"

# Taste Testing with a Spider Web Graph

Use the Spider Web graph for comparing two different tastes. Here are some simple ways to incorporate the graph into Great Big Crunch activities:

1. Choose two separate food items to taste and compare.
  - a. Two varieties of apple; ex. a sweet Royal Gala vs. a tart Granny Smith
  - b. A fresh apple slice vs. a dried apple slice; a difference in both flavour and texture
  - c. Make **apple sauce** in class and compare to store-bought; taste the difference in sweetness and added sugar
2. Copy the graph onto a big piece of chart paper or a white board for the whole class to see, or print multiple copies for students to work together in small groups.
3. As a class, label each branch of the web as a different feature of the taste test: texture, sweetness, sourness, colour, crunchiness, wow-factor, saltiness, smell, aftertaste, mouth feel, etc.
4. Hand out your first sample item to taste test. Have students wait to eat it so they can examine it together. How does the colour look to you? Is it appealing? Does it make you want to eat it?
5. Have a student come up to the front and with a sticker or marker, and rate the colour on the graph.
6. Continue to rate each feature of the first item you are tasting and then compare with the second item. You can use a second graph for the second item, or use a second colour to compare them on the same graph.
7. Review what students liked and didn't like. What might they like more next time? What did they prefer?



## Avoiding "YUM" and "YUCK"

It's okay not to like something, but it's good to know *why* you don't like something.

The graph allows students to say "I really like the colour of this food, but I don't like the texture."

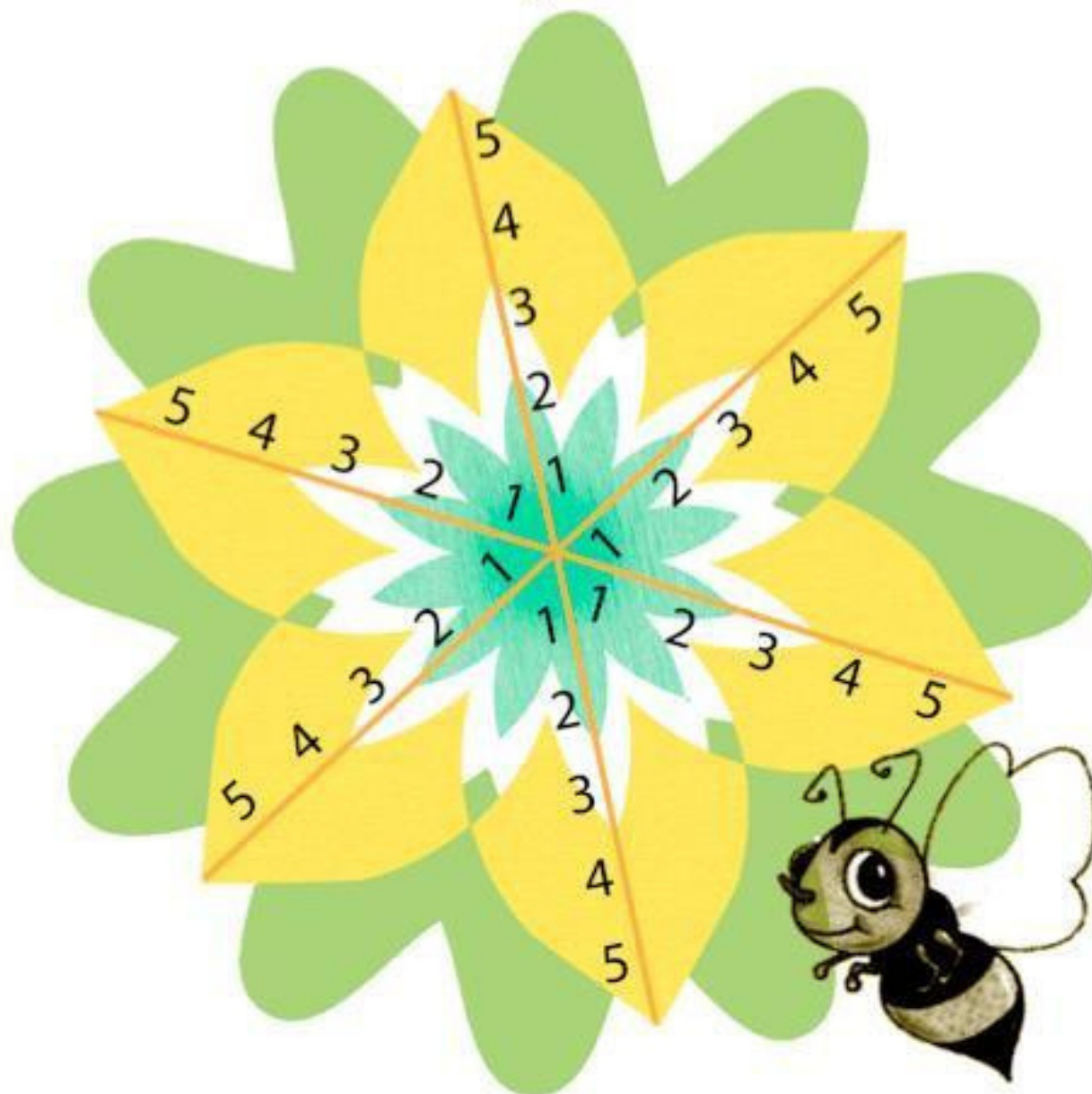
Maybe next time they need to try the same food with a different texture - if it was cooked (soft), they can try it raw (crunchy).

# Taste Testing with a Spider Web Graph

*Print this!*

## Tasting Graph Flower

How do you rate it?



What are you tasting? \_\_\_\_\_

Food  Share



# Science Experiment: How to Prevent Your Apples from Turning Brown

Images and lesson plan adapted from [coffeecupsandcrayons.com](http://coffeecupsandcrayons.com)

1. Choose a selection of non-toxic acids ( $\text{pH} < 7$ ) and bases ( $\text{pH} > 7$ ) for your experiment. Here are some suggestions:
  - a. **Acids:** Vinegar (2.2), Lemon Juice (2.0), Orange Juice (3.0), Black Coffee (5.0), Milk (6.6)
  - b. **Bases:** Sea Water (8.0), Baking Soda (8.3), Milk of Magnesia (10.5)
  - c. **Neutral:** Water (7); important for your control
2. Cut up an apple (either a single apple, or multiple of the same type, to keep things consistent) and place in small jars, ready to be topped up with your chosen liquids.
3. Create a hypothesis. This simply means take an educated guess about what you think might happen to the colour of the apple slices after 1 hour, 1 day, 2 days, etc. Write it down.
4. Perform the experiment! You can create simple tracking sheets for your students to fill out during the experiment. Depending on their age, create tables or graphs to demonstrate the results.
5. Compare and contrast the results with your original hypothesis. How might these results help you when using apples in the kitchen?



## Learn These Key Words

**Acid:** A substance with a pH less than 7.

**Base:** A substance with a pH more than 7.

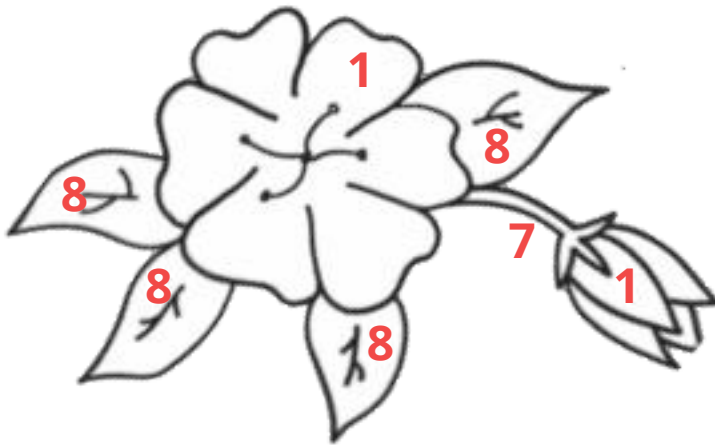
**Placebo:** In this experiment, a substance that will not have any effect and serve as a point of comparison.

**Hypothesis:** An educated guess about what the results of an experiment might be.

# Apple-Themed Colour-By-Number: An Exercise in Art, Math & Life Science

Inspired by [notimeforflashcards.com](http://notimeforflashcards.com)

Use the colouring sheet on the following page, download one, or create your own for this art activity. Depending on the age of your students, you can adapt it in different ways to transform it into a challenging math quiz followed by a lesson in life sciences! Here's how:

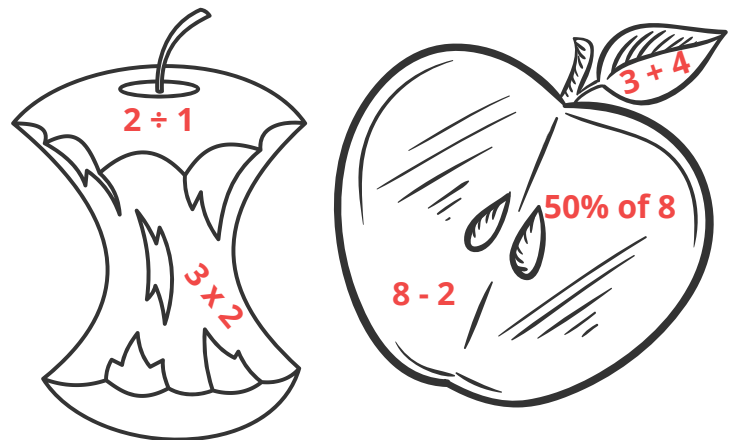


## For Younger Students:

Add the corresponding numbers directly onto the page, like this example. You can then photo copy enough for the whole group.

## For Older Students:

Instead of using numbers, challenge students with math questions instead!



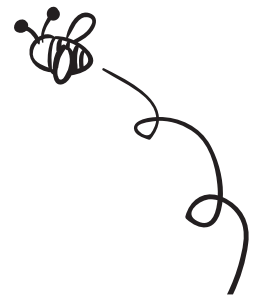
## A Lesson in Life Cycles:

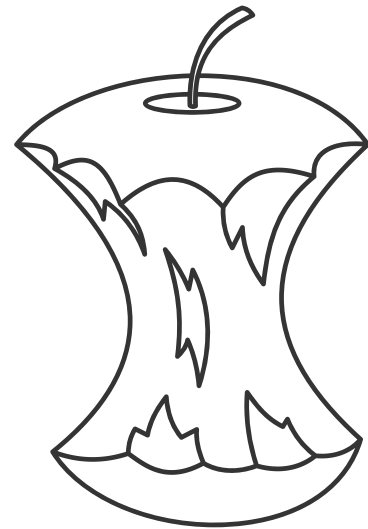
Now that your students have de-puzzled and coloured their sheets, each square can be cut out and used for a variety of life cycle activities. For example:

- Labeling each one
- Sorting into chronological order
- Adding any "missing" pictures (ex: a picture of a bee to show pollination)

You could also try:

- Forming groups and playing a game of "memory" or "snap"
- Using the cards to help further animate a favourite story book about apples (i.e. matching the cards to the words)





**Colour by Number:**

1 = Pink  
2 = Red

3 = Light Brown  
4 = Dark Brown

5 = Orange  
6 = Yellow

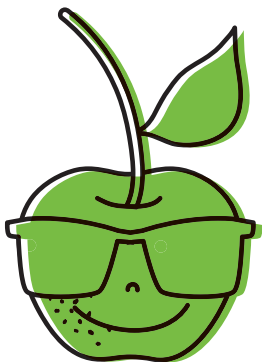
7 = Light Green  
8 = Dark Green

# Macky Mac & the Crunchy Bunch: A Literary Exercise in Rapping

You might want to put your cap on backwards for this one! Although students may not get the '90s hip-hop reference, they'll love being able to demonstrate the use of verbs, adjectives and nouns in such a cool and fun way!

## You Will Need:

- The Apple Rap written onto poster board or chart paper with blanks left to insert words
- Filler words written onto pieces of paper with tape on the back
- Poster board with a 3-column chart for verbs, adjectives and nouns
- Fun rapping props (ex: music speaker, microphones, caps or sunglasses)



1. First, we need to sort out our adjectives from our nouns from our verbs... what's what?
  - a. **Adjectives:** Describe nouns
  - b. **Nouns:** A person, place or thing
  - c. **Verbs:** Action words
2. Using the list of words you see below, which at this stage will be scattered on pieces of paper, place them in the correct column on your T Chart. You can add your own too!

Verbs	Nouns	Adjectives
• decay	• worms	• beautiful
• grow	• bacteria	• smelly
• feed	• moulds	• nutritious
• shrink	• fungi	• happy
• wait	• trees	• angry
• watch	• Farmer Fran	• chilly
• crunch	• Farmer Frank	• warmer
• buzzing	• apples	•
• eat	• blossoms	•
• throw	• bees	•
• harvests	• pollen	•
•	• honey	•
•	• apple pie	•
•	• apple juice	•
•	• apple chips	•
•	•	•
•	•	•
•	•	•
•	•	•



3. Have students come up one by one to choose the filler words that best fit into the Apple Rap blanks. It may take a couple of goes and some swapping around to get it sounding (and rhyming) just right.
4. Now you're ready to perform your rap as a group! Incorporate some actions for extra effect!

## The Apple Rap

Put an apple into the compost, just \_\_\_\_\_ and it will slowly \_\_\_\_\_,  
As the \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ munch and \_\_\_\_\_ the apple away  
I then take this beautiful compost, a perfect food for hungry \_\_\_\_\_,  
And \_\_\_\_\_ it to the apple tree, that the farmer \_\_\_\_\_ with expertise.

The tree is so very happy, well fed, and full of life,  
It is blooming with pink and white \_\_\_\_\_ that smell so very nice.  
The \_\_\_\_\_ are terribly busy, collecting \_\_\_\_\_ while \_\_\_\_\_ with glee,  
And slurping nectar to make sweet golden \_\_\_\_\_, and pollinating the tree.

The temperature is getting \_\_\_\_\_, the summer is nearly past,  
The little flowers have turned into \_\_\_\_\_ so I can \_\_\_\_\_ one at last!  
What can we make with those apples? Do you have a favourite recipe?  
You can make \_\_\_\_\_ or \_\_\_\_\_, let's make sure it's fresh and healthy!

After we made our apple treats, we had a bucket of apple \_\_\_\_\_,  
Should we add this to the \_\_\_\_\_? The worms are asking for more!