

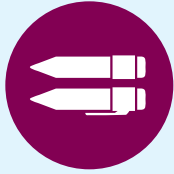
ADVANCED LEARNING LABS

A partnership between the North Carolina Department of Public Instruction and Duke TIP
TO ENGAGE, ACTIVATE, AND GROW OUR STUDENTS

GRADES

2-3

Lab 6 • Growth



ENGLISH LANGUAGE ARTS

Characters that grow and change over the course of a story are often the most interesting. Authors can teach us about a character through physical descriptions and what the character says, does, thinks and feels.

Think of a fictional story where a character has changed over the course of the story. Think about ways people can change and write a story in which a character changes over the course of the narrative.

How is that change reflected in the behavior of the character? How has that character shown growth in his/her actions and behaviors?



SOCIAL STUDIES

Communities grow and change over time depending on different factors and events. Some differences are more obvious than others. Review the data for the 15 fastest growing cities in the United States between 2018-2019. Why do some cities experience such rapid growth in a short period of time?

Link: <https://www.census.gov/library/visualizations/2020/demo/fastest-growing-cities-2010-2019.html>

Create a T-chart and list reasons a city or local area's population may grow (for example: new businesses or more homes being built) on one side, and why they may decrease on the other side. Share your findings with a family member!



SCIENCE

Blowing bubbles is like sneezing in slow motion. Blow some bubbles and notice how they travel and where they land.

Do you notice a pattern in how they travel and spread? How is this similar to sneezing? In what ways is sneezing different? Can you think of a better way to model it?

Based on your observations, explain why our hygiene practices (washing hands, covering mouth when coughing or sneezing, etc.) when we are sick are effective.

You can make bubbles with 1/4 cup of dish soap and 1 1/2 cups of water.



MINDFULNESS

Have you ever made a mistake? Believe it or not, making mistakes is a very important part of learning. When you make a mistake, you have the unique opportunity to learn and grow from that mistake.

Think back on the school year and identify two mistakes that you made. What did you learn from these mistakes? How would you do things differently now?

Share what you learned with an adult whom you love. Give them the opportunity to share with you about lessons that they have learned from their own mistakes that contributed to their growth.



LOGIC PUZZLE

Decode the Fallen Letters

Uncover the joke in this puzzle by placing the correct letters into each square. The list of available letters is given at the bottom of each column.

Follow this link: <https://bit.ly/3e68XSY>



FIELD STUDIES

M & M's candies were first introduced in 1941 and at one point were only sold to the military! Since their introduction, they have grown to become a staple in the candy industry. Watch the 360 video tour at the link below to learn how M & M's candy is made.

Link: https://youtu.be/GtfkemNzG_I

Why do you think M & M's candy has grown in popularity since it started? How do you think technology has improved the way they make the candy over the years?



RESEARCH EXPLORATIONS

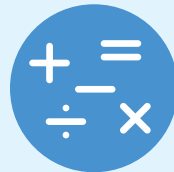
What conditions are best for growing a fruit or vegetable in your home?

Pick one food that you can grow from leftover scraps and seeds that you have at home or can get.

Link: <https://www.buzzfeed.com/jesseszewczyk/16-food-scraps-that-you-can-regrow>

Try to grow that food with three different conditions. The "traditional" way uses sun, water, and soil. Then change one condition for each of the other two plants – for example, provide more/less sunlight or water to one, or play music for one every day. Every three days, draw a picture of what they look like.

After three weeks, write what conclusions you can draw about growth, based on your experiment.



MATH

Salt Dough is a recipe you can use to make keepsakes (like a model of your handprint) that show how much you've grown.

The recipe is simple: 2 cups of flour, 1 cup of salt, 1 cup of water. One batch makes 24 keepsakes. You want to make the dough but you only have 1/2 cup of salt. How much flour and water should you use? You have 36 people for whom you want to make keepsakes. By how much do you grow the recipe?

Extension: With an adult's help, use the recipe and directions here to make and bake something.

Link: <https://www.yummytoddlerfood.com/activities/the-best-salt-dough-ornaments/>



North Carolina Department of
PUBLIC INSTRUCTION



Lab 6 • Growth

Works Cited and Answers

Research Explorations:

Link for All: <https://www.buzzfeed.com/jesseszewczyk/16-food-scrap-that-you-can-regrow>

Additional 4-5 Link: <https://empressofdirt.net/regrow-vegetable-scrap/>

Additional links for All: <https://www.ruralsprout.com/regrow-vegetables/>

Math:

2-3 Recipe Link: <https://www.yummytoddlerfood.com/activities/the-best-salt-dough-ornaments/>

4-5 Recipe Link: <https://sugarspunrun.com/the-best-pizza-dough-recipe/>

Answers:

2-3 Answers: With a 1/2 c of salt, you need 1 c of flour and 1/2 cup of water. If you need 36 keepsakes, you need 1 1/2 times the ingredients - 3 c flour, 1 1/2 c salt, 1 1/2 c water.

4-5 Answers: To make 4 pizzas, you need 4 times each ingredient - 8 c flour, 4 packages of yeast, 6 tsp/2 tbsp sugar, 3 tsp/1tbsp salt, 1/2 tsp garlic, 8 tbsp oil, 3 c water. With 1 c flour, you need to cut all ingredients in half - 1/2 package yeast, 3/4 tsp of sugar, 3/8 tsp salt, 1/16 tsp of garlic, 1 tbsp oil, 3/8 c water.

Advanced Learning Lab 6

NC Standards Alignment

Math	
K-1	N/A for Lab 6
2-3	NC.3.NF.1, NC.3.NF.2, NC.3.NF.3
4-5	NC.4.NF.2, NC.4.NF.3, NC.4.NF.4; NC.5.NF.1, NC.5.NF.3, NC.5.NF.4; NC.5.NF.7
6-7	NC.6.RP.3 NC.7.RP.1
8-9	NC.M1.A-CED.1 NC.M2.A-CED.1 NC.M3.G-GPE.1
10-12	N/A for Lab 6
English Language Arts	
K-1	N/A for Lab 6
2-3	W 3.3.c
4-5	RL 5.3
6-7	W.1
8-9	W.9-10.6
10-12	N/A for Lab 6
Science	
K-1	N/A for Lab 6
2-3	3.L.1
4-5	5.L.1
6-7	7.L.2
8-9	8.L.1
10-12	N/A for Lab 6
Social Studies	
K-1	N/A for Lab 6
2-3	3.H.1
4-5	5.G.1.4
6-7	6.G.2.2
8-9	AH1.H.3
10-12	N/A for Lab 6