

Students will determine the phenotype and genotype for an awesome Agriculture Teacher. They will then mate with another student' s creation to explore the world of genetics and practice with punnet squares!

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## Purpose:

Students will be introduced to the topics of genetics and practice completing a punnet square using phenotypes and genotypes. Students will explore why Ag Education would be a fun career fit for them and everyone will enjoy some great laughs from the genetic creations.

#### Timeline:

2 (45 minute classes)

The instruction can be modified to fit your own classroom needs.

Genetic Creations				
Name:	Date:			
Class/Hour:				
Due Date:				
Directions: Step 1. As a class fill out the Step 1 Page t agriculture teacher. Give it a name!	together and determine your genetics of an awesome			
Name:				
Step 2: Find a partner and complete the in	formation below.			
Partner's Name:				
Partner's Creations Name:				
You will cross your creation with your par	ther's creation using the alleles for head. Complete a			

You will cross your creation with your partner's creation using the alleles for head. Complete a punnet square below. One set of alleles should come from your creation and the other from your partner's.

Choose one of the offspring (squares). Circle that offspring. You must use that same square throughout the remaining crosses. For example if you chose the top left that is the square you will circle throughout the remaining steps.

Step 3: Using the same partner and their creation set up a punnet square for body below. Circle the same offspring as above

## **Genetic Creations**

Step 4: Using the same partner and their creation set up a punnet square for ears below. Circle the same offspring as the previous steps.

Step 5: Using the same partner and their creation set up a punnet square for legs below. Circle the same offspring as the previous steps.

Step 6: Using the same partner and their creation set up a punnet square for arms below. Circle the same offspring as the previous steps.

Step 7: Using the same partner and their creation set up a punnet square for smile below. Circle the same offspring as the previous steps.

Step 8: Using the same partner and their creation set up a punnet square for hair below. Circle the same offspring as the previous steps.

## **Genetic Creations**

Step 9: Using the same offspring from each punnet square create the new creation that was born from crossing your creation with your partner's. You need to draw, color, and name your new awesome Ag Teacher.

## **Genetic Creations**

Step 10: Answer the questions below about Agriculture Education and why <u>YOU</u> would be a great <u>Agriculture Teacher</u>!

1. How has your Ag Teacher impacted your life?

- 2. Have you ever thought about becoming an Ag Teacher? You get to do some pretty awesome things!
- 3. What do you love most about FFA and Ag Class? Write down 5 things and explain. You get to do ALL of that when you are an Ag Teacher!

4. What does it take to be an Ag Teacher? Use the internet and your resources to find out! Write down the salary, school requirements, and three facts about what it takes to be an Ag Teacher.

# **Step 1: Genetic Creations**

Fill out the following information below as a class. Determine the dominant phenotype and letter (Allele) being used to identify each trait.

	Dominant Phenotype Include Allele being used	Recessive Phenotype Include Allele being used	Your creations genetic alleles	Your creations phenotype
Example: Color	Blue B	Yellow b	Bb	Blue
Head				
Body (Torso)				
Ears				
Legs				
Arms				
Smile				
Hair				