



KIDS UNDER CONSTRUCTION'S COVID-19



# VIRTUAL LEARNING ACADEMY

## DAY 4: ALIEN GENETICS LAB

### MATERIALS NEEDED FOR TODAY:

- 2 coins per child
- 1 copy of the alien genetics lab per child
- colored pencils, crayons, or markers
- a pencil (wood or mechanical)

### BACKGROUND INFORMATION:

In this activity, children (and maybe adults!) learn about heredity and how traits are passed on to each generation by creating a baby alien. Genes are units of heredity. There are two alleles, one is dominant ("aggressive", capital letter, heads) and the other is recessive ("passive", lowercase letter, tails). Genetic makeup (letters) are called genotype. Physical characteristics are called phenotype. Stay with me... 😊

### DIRECTIONS:

1. Give each child 2 coins. One coin represents mom, and one coin represents dad.
2. Flip the first coin to determine mom's eye trait. If it lands on heads, circle "E" in mom's column. If it lands on tails, circle the "e" in mom's column. Repeat the process for dad.
3. Copy the letter from mom and the letter from dad, and write them next to each other in the "genotype" column. Two heads will be EE, 2 tails will be ee, and one of each will be Ee.
4. If you have at least 1 capital letter (EE or Ee), the phenotype is 2 large eyes. If you have 2 lowercase letters (ee), the phenotype is 1 large eye.
5. Repeat steps 2-4 for each row of traits, using the key on the right to determine the phenotype.
6. On the second page, have your child draw their alien!

**FAMILY DISCUSSION: WHAT DID YOU LEARN ABOUT GENETICS? HOW MANY ALIENS DID YOU MAKE? POST A PICTURE OF YOUR ALIENS! JOIN THE DISCUSSION AND SHARE YOUR FINDINGS AT:**

**FACEBOOK.COM/KUCINC/**

