

Variation Within a Species

READ ALOUD PASSAGE

No two members of a species are exactly alike. Those differences are called variation. Look around a classroom. Everyone is human, but no two people have the same height, hair, voice, and handwriting all at once.

A trait is one feature at a time. Traits are what we actually measure and compare. Eye color is a trait. So is the length of a dog's ears, or the number of petals on a flower.

Inherited traits come from parents through genes. Acquired traits come from a living thing's own life and stop with it. A scar is acquired. So is knowing how to ride a bike. Neither one gets passed on to your children. Genes set what is possible. The surroundings a living thing grows up in decide how much of it happens. A tomato plant may have the genes to grow tall, but without enough water and sun it will stay small.

Variation helps a species survive change, and it is what people put to work in selective breeding.

Activity 1: Word Sort Challenge

Sort the words in the box. Write each word under the right heading.

WORD BANK

gene tall ride compare scar tomato plant measure inherited acquired trait

Nouns

Verbs

Adjectives

Activity 2: Sentence Scramble

These words are mixed up. Put them in order to make a sentence. Start with a capital letter and end with a period.

1. exactly / two / are / a / of / no / alike / species / members

2. variation / those / differences / are / called

Activity 3: Make It Better

This paragraph is short and plain. Follow each instruction to improve one sentence. Check the box when you finish. Then write the new paragraph.

WHAT TO CHANGE

- ☐ **T.S.** Add a detail that tells when or where.
- ☐ **D1** Add an appositive.
- ☐ **D2** Expand it with because, but, or so.
- ☐ **C.S.** Begin it with a transition.

THE PLAIN PARAGRAPH

T.S. Traits are different. D¹ Some are inherited. D² Some are acquired. C.S. Traits matter.

WRITE YOUR NEW PARAGRAPH

[illegible]

Activity 4: Finish the Thought

Finish each second sentence. The connecting word tells you how your sentence should relate to the first one.

1. A scar is acquired. As a result, ...

2. Eye color is inherited. In contrast, ...

3. The tomato plant had genes to grow tall. However, ...

4. No two people are exactly alike. For example, ...
