



Activity 1.2 - Acquired vs Inherited Traits

Name: _____ Hr: _____

Variation among individuals of the same species can be explained by both genetic and environmental factors. Inherited traits are passed from parents to offspring through DNA. Acquired traits are not passed on to offspring through reproduction alone.

What do you think: Is the trait acquired, inherited, or both?	Explain: Why do you think that?
<p>Case 1: A man lifts weights every day and develops large muscles. His child is born and does not have large muscles.</p>	 <p>The image shows two side-by-side photographs. The left photo shows a man from the back, shirtless, lifting a dumbbell with his right arm, highlighting his large, muscular back and shoulder. The right photo shows a young child from the front, shirtless, with both arms raised in the air, smiling.</p>
<p>Case 2: A woman lays out in the sun everyday keeping her skin tan. All of her children are born without a sun tan.</p>	 <p>The image shows a Polaroid photograph of a young boy in a red hoodie, smiling. The caption below the photo reads "Jacob, 3 years old". To the right of the Polaroid is a close-up photograph of a person's skin, showing a tan or sun-kissed complexion.</p>

Case 3: A little girl is born with Albino skin entirely lacking the dark pigment Melanin. She burns easily in the sun. Neither of her parents have albino skin, but her grandmother has albino skin.



1. What additional information would you need to know if your predictions are true?

2. Predict whether the white color in the Axolotl is acquired, inherited, or both. What information would we need to know if it is true?

Sources:

https://books.google.com/books?id=avpVUs7AtmkC&pg=PT12&lpg=PT12&dq=is+a+sun+tan+an+acquired+trait&source=bl&ots=TXB-T5scsP&sig=OgOmsW1K-8AvDkNtnGRogF8d2FE&hl=en&sa=X&ved=0ahUKEwiSvOOZqr7XAhUI0IMKHaz_Df4Q6AEIMzAC#v=onepage&q=is%20a%20sun%20tan%20an%20acquired%20trait&f=false

<https://en.wikipedia.org/wiki/Albinism>