Nature or nurture: behaviourism or genetics? By Sprouts Schools

https://www.youtube.com/watch?v=tbSgU41FIac

This video, titled **"Nature vs Nurture: Behaviourism or Genetics?"** by Sprouts, explores the age-old debate of whether our traits are determined by our environment (nurture) or our biology (nature). It is an excellent resource for English learners to practice vocabulary related to science, statistics, and psychology. Here is a summary of the key concepts and examples from the video to help you prepare your pre-listening exercise:

1. The Core Debate

- **Nature:** Historical figures like Charles Darwin believed we are largely programmed by our genetics [00:00:32].
- **Nurture:** Thinkers like John Locke argued that our personalities are shaped by the environment we are raised in [00:00:25].
- **Modern View:** Scientists today believe it is a complex interaction between the two [00:00:42].

2. Understanding "Heritability"

- The video introduces **heritability** as a factor between 0 (environmental) and 1 (genetic) [00:02:34].
- **Crucial Distinction:** Heritability measures differences within a *group* of people, not the specific traits of one individual [00:02:20].
- **Example (Dyslexia):** It has high heritability (closer to 1), meaning genes explain more of the spelling differences in a group than schooling does [00:03:05].

3. Case Studies: Height and IQ

- **Height:** In well-nourished groups, height is about 80% genetic (0.8). However, if there is a famine, the environment becomes more significant, and heritability might drop to 0.5 [00:04:12].
- **Intelligence (IQ):** For young adults, IQ is roughly 60% genetic and 40% environmental [00:05:15].
- **The Random Factor:** Interestingly, environmental factors for IQ are often random. For instance, first-born children are statistically more likely to have higher IQs than their siblings [00:06:16].

4. The Mystery of the Marbled Crayfish

- In 1995, scientists studied a crayfish that could clone itself, meaning every offspring had the **exact same genes** [00:06:51].
- Even when raised in identical water and food conditions, the crayfish turned out completely different: some were large, some small, some social, and some solitary [00:07:20].
- **Conclusion:** This suggests there is still much we don't understand about how life and personality develop [00:07:30].

Here are 20 unusual or academic words used in the discussion, each listed with three synonyms:

Nurture: Foster, Cultivate, Raise [00:15]
Genetically: Hereditarily, Innately, Biologically [00:32]
Geneticists: Biologists, Heredity experts, Gene researchers [00:38]
Crayfish: Crawfish, Freshwater lobster, Decapod [00:46]
Conception: Fertilization, Inception, Impregnation [01:41]
Nurture: Upbringing, Environment, Training [01:53]
Siblings: Brothers and sisters, Kin, Relatives [02:03]
Heritability: Inheritability, Genetic transmission, Heredity [02:28]
Dyslexia: Reading disability, Literacy impairment, Word blindness [02:59]
Straightforward: Uncomplicated, Simple, Direct [03:32]
Variance: Divergence, Disparity, Variation [04:02]
Systemic: Widespread, Comprehensive, Universal [04:14]
Droughts: Aridities, Water shortages, Dry spells [04:15]
Maturity: Adulthood, Full growth, Ripeness [05:07]
Attributed: Ascribed, Assigned, Credited [05:39]
Correlation: Connection, Association, Link [06:23]
Upbringing: Rearing, Education, Breeding [06:26]
Mutated: Altered, Transformed, Modified [06:48]
Asexual: Non-sexual, Agamic, Parthenogenetic [06:51]
Solitude: Isolation, Seclusion, Loneliness [07:30]

The summary of the video and word list were generated using Gemini, May 2026