# Testable vs Non-Testable Statements

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| Statement | Testable / Not Testable | How to Make it Testable |
| Do fingers wrinkle faster in hot or cold water? | Testable | Put finger in hot and cold water, measure time until wrinkles appear (T1, T2), compare |
| How do cats meow? | Not Testable | Too broad – break into specific conditions |
| Will the cat meow if I pull the ear? | Testable | Pull the cat's ear and observe if it meows |
| Will the cat meow if I give him milk? | Testable | Offer milk and observe cat's response |
| Will the cat meow if it sees a rat? | Testable | Show a rat to the cat and observe if it meows |
| What makes plants grow? | Testable | Add water, sunlight, and nutrients separately; track plant growth |
| Will plant grow by nurturing it with water? | Testable | Water the plant consistently and observe growth |
| Does soil type affect plant growth? | Testable | Use different soil types and measure growth rate (T1) |
| How do kites work? | Not Testable | Too general – reframe to measurable aspect |
| Will kites fly because of air speed? | Testable | Test kites in varying air speeds and observe flight performance |
| Does Pepsi have more carbonation than Coke? | Testable | Measure carbonation levels in both drinks and compare |
| What makes something sink or float? | Testable | Test objects with different weights/densities in water |
| Does weight make an object sink or float? | Testable | Use various weights and check float/sink behavior |
| Does the saltiness of water affect how fast it freezes? | Testable | Freeze different salt concentrations and record time (T1) |
| Does the temperature of the air impact how high a basketball bounces? | Testable | Bounce ball at different air temperatures and measure height |
| Can I design a device that attaches my skateboard to my bike? | Testable | Build and test a prototype |
| Does the amount of TV people watch affect their school attendance? | Testable | Collect TV time and attendance data; analyze for patterns |
| Can different scents in the room affect how long people sleep? | Testable | Use various scents and track sleep duration |
| When will fossil fuels run out? | Not Testable | Predictive and too broad to test directly |
| Is fossil fuel running out? | Testable | Analyze current consumption vs reserves data |
| How do batteries work? | Not Testable | Explanatory – better suited for research, not testing |
| Why is the color blue calming? | Not Testable | Too subjective – needs measurable behavior or physiological response |
| Does using emojis make people happy? | Testable | Survey users before and after emoji use for mood ratings |
| Can I solve the problem of my grandfather finding his way to the bathroom at night without turning on a light? | Testable | Set up aids (e.g., motion lights), observe if he navigates successfully |
| Does eating school lunch affect how alert people are in their afternoon classes? | Testable | Track alertness (tests or observations) with/without lunch |
| Does having plants in a house reduce the carbon dioxide level in the house? | Testable | Measure CO₂ with and without plants indoors (T1) |
| Can I create a backpack/umbrella combination? | Testable | Design and test prototype for usability |
| Why am I awesome? | Not Testable | Subjective – no measurable criteria |
| Is he awesome? | Not Testable | Subjective – cannot define or measure 'awesome' clearly |
| Why are Reese’s Cups so good? | Not Testable | Subjective – could test preference instead |
| Why is our galaxy moving? | Not Testable | Requires astronomical theory, not direct experimentation |
| Is the galaxy constant or moving? | Testable | Verified through scientific astronomical data |
| Why do people watch TV? | Not Testable | Too broad – survey could provide insight, not definitive test |