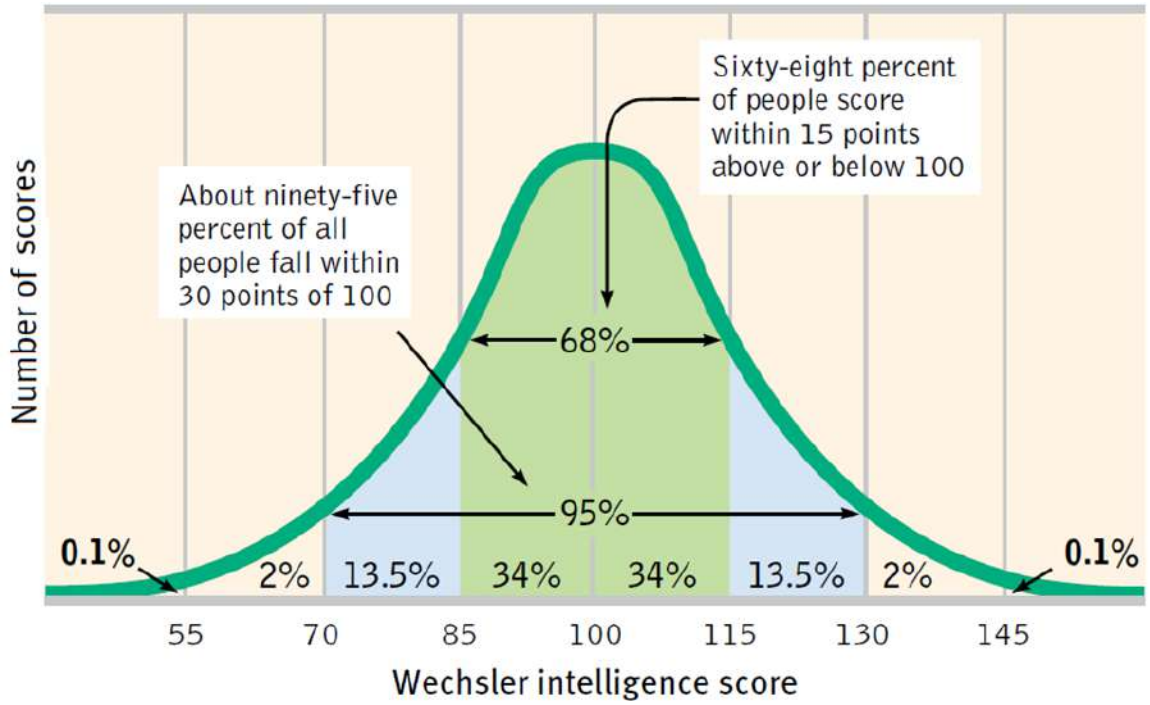
# Intelligence Testing Review Sheet

| Name | Origins of Intelligence | Name of Test | Summary of Test |
|---|---|---|---|
| Francis Galton (Cousin of Charles Darwin) | **Nature**—Intelligence comes from good genes. He suggested that smart families should breed and believed in *eugenics* | None. His attempts were crude and unscientific | • He looked at successful European families in his book *Hereditary Genius* |
| Alfred Binet | **Nurture--** Assumed low scoring kids could make gains with more remedial help and attention. | Binet's Mental Ability Test | • Tested French school children to determine their strengths and weaknesses.<br>• Provided a **mental age,** showing the intellectual capabilities of the student. |
| William Terman | **Nature—**Also supported *eugenics*; encouraged low scoring groups to become sterilized. | Stanford-Binet | • Revised Binet's Mental Ability Test<br>• First to adopt IQ score<br>• **IQ= mental age/chronological age x100** (Note: this procedure is no longer used to calculate IQ)<br>• Only included verbal sections and were biased against non-English speakers.<br>• Tested immigrants (which led to quotas in immigration policy) and WWI recruits. |
| David Wechsler | **Nurture—**believed in a broad view of intelligence. "Intelligence is the aggregate or global capacity of an individual to act purposefully, to think rationally and to deal effectively with the environment." | WAIS (for adults)<br>WISC (for children) | • Includes 11 sections, including **verbal** and **performance** subtests.<br>• Allowed non-English speakers to demonstrate their intelligence on the performance sections |

# Test Construction

1. **Standardization**—Allows a researcher to make meaningful comparison by giving the test to a preselected group that is representative of the population. Tests are re-standardized in order to keep the average at 100. This enables the test scores to be placed on a **normal curve**, where the standard deviation is 15 IQ points.




2. **Reliability--** A test produces consistent results (like Mr. Uliasz's shoe size x10 IQ test). Can be tested by using:
   - Split half—Divide test into two halves and compare the results (like odd v. even)
   - Different tests—Take the test more than once and compare the results.

3. **Validity--** A test measures what it is supposed to measure.
   - Content validity—extent that the test measures a subject, trait, or behavior (A math test measures math skills)
   - Predictive validity—how well test predicts a future behavior or trait; used in aptitude tests, like the SAT that attempt to predict success on a criterion (GPA freshman year).
     - Note: as the range of scores narrows the predictive validity of a test weakens (football lineman and weight example).