

Mechanical Properties of Turtle Shells

- The turtle shell is an evolutionary adaptation that provides physical protection
- Testing mechanical properties of turtle shells:
 - Literature search on turtle shells (function, growth, structure, and mechanical properties)
 - Determine testing methods (hardness, compressive, or bending tests?)
 - Where on bulk materials should specimens be cut?
Specimen dimensions
 - Conduct mechanical tests
 - Examine microstructure under SEM
 - Correlate structure with properties



Brazilian turtle



Brazilian turtle shell