## Combustion 1 Bond Energy

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## 1 Atomic Radii

We often treat individual atoms as spherical entities. While it isn't strictly true, this simplification provides motivation for studying chemical reactions using the notion of distance.

Recall that a sphere is uniquely defined by the length of its radius, the line segment from its center to any point on its boundary (see Figure 1).

**Definition 1.1.** When we treat an atom as a sphere, its *atomic radius* is the radius of that sphere.

## References

[Mar] MarinaVladivostok. File:sphere and ball.png.

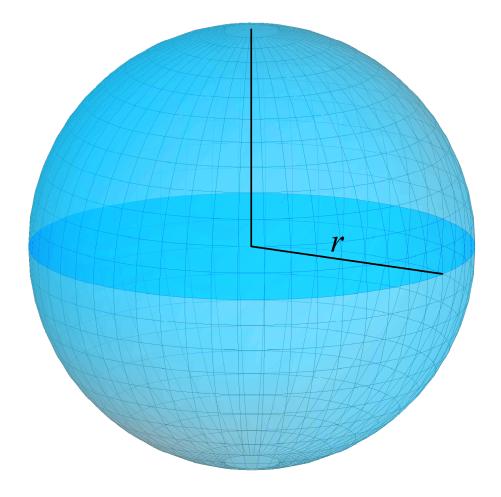


Figure 1: Two radii of a sphere are shown. Note that they have the same length.  $[\mathrm{Mar}]$