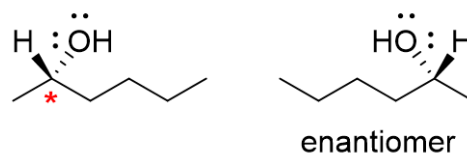


## Answers to Exercise 10.5 Chirality and Enantiomers

1. *In these answers, the molecule was flipped left-to-right to generate the image. It would be equally acceptable to flip it top-to-bottom or front-to-back.*

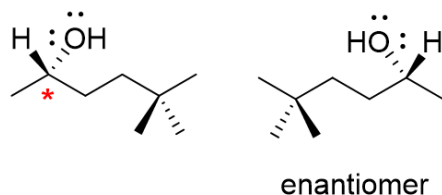
(a) achiral (*with no chirality centers*)

(b) chiral



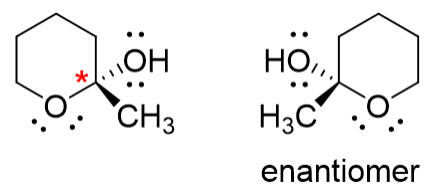
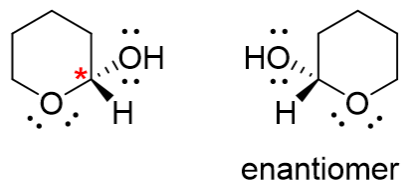
(c) chiral

(d) achiral (*with no chirality centers*)



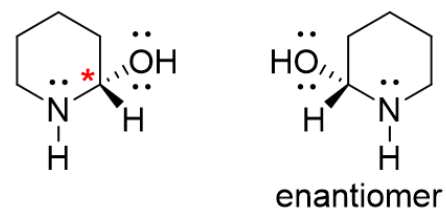
(e) chiral

(f) chiral



(g) achiral (*with no chirality centers*)

(h) chiral



*Please remember that achiral molecules containing chirality centers do exist. We saw examples of them in class. It was a coincidence that there weren't any in this Exercise.*