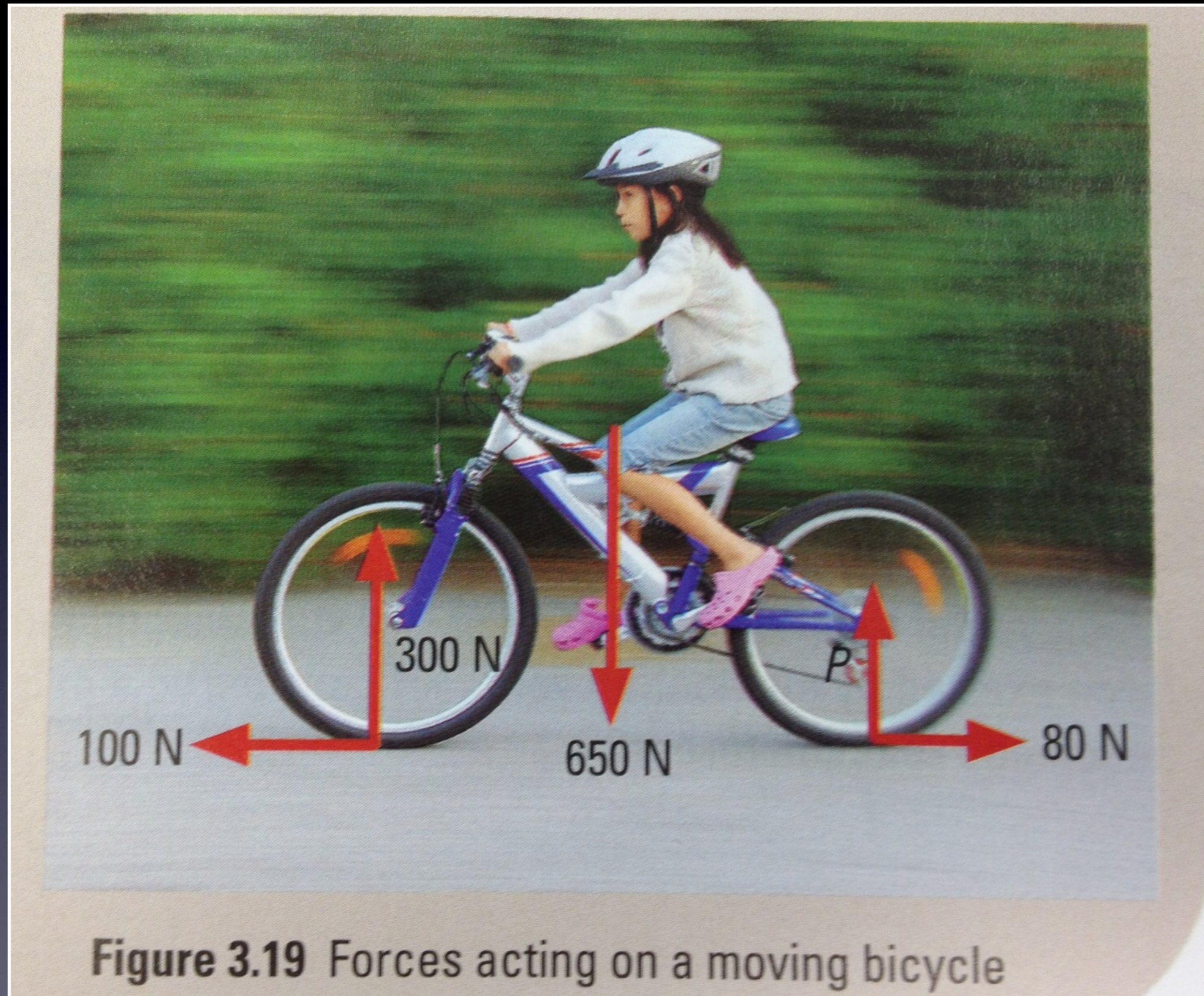


From Chapter 3 in **All About Physics O Level** textbook



Spot the 2 errors in this freebody diagram!

The front wheel is free rolling, so the frictional force should be acting backwards (to the right).



Figure 3.19 Forces acting on a moving bicycle

The front wheel is free rolling, so the frictional force should be acting backwards (to the right).

The rear wheel is powered (connected by a chain to the pedals), so the frictional force should be acting forwards (to the left).

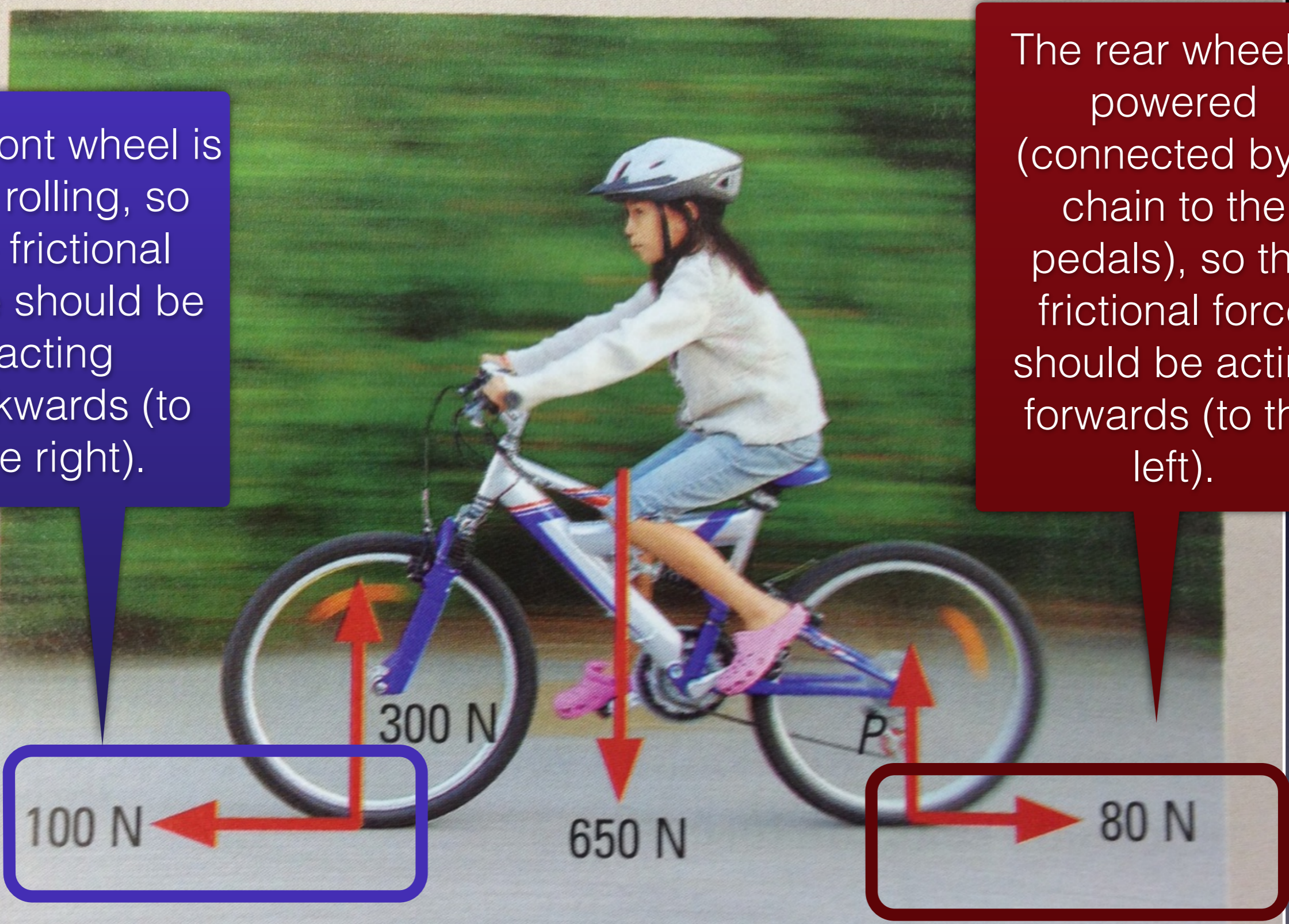


Figure 3.19 Forces acting on a moving bicycle

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If the bicycle is accelerating (moving faster), the forward frictional force must be greater than the backward frictional force (plus air resistance)