## Intellectual Need Task for Average Rate of Change

Below is a video of two toy cars.

- The blue toy car is spring-loaded. The distance $d$ (in inches) of the car from its starting position $t$ seconds since the car started moving is $d=2.8 t^{2}$.
- The red toy car is battery powered and travels at a constant velocity.
- The blue car passed the red car 5 seconds after they started.

What was the average speed of the blue car over the first 5 seconds?

