DISTANCE *Distance* = Speed x Time

9. How far can you get away from your little brother with the squirt gun filled with paint if you can travel at 3 m/s and you have 15s before he sees you?

10. How far can your little brother get if he can travel at 2.5 m/s and in 5 seconds you will discover that his squirt gun has run out of paint?

11. If you shout into the Grand Canyon, your voice travels at the speed of sound (340 m/s) to the bottom of the canyon and back, and you hear an echo. How deep is the Grand Canyon at a spot where you can hear your echo 5.2 seconds after you shout?

CHALLENGE PROBLEM

Bill and Amy want to ride their bikes from their neighborhood to school which is 14.4 kilometers away. It takes Amy 40 minutes to arrive at school. Bill arrives 20 minutes after Amy. How much faster **(in meters/second)** is Amy's average speed for the entire trip?

Be sure to show all necessary metric conversions!!