**Super Spicy Chilli Challenge**

**Speed, Distance and Time Problem Solving**

We are learning to use the formulae to calculate Speed, Distance and Time.

1. Complete the table above.

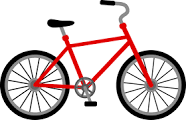
|  |  |  |  |
| --- | --- | --- | --- |
|  | Distance travelled | Time taken | Average speed |
| A | 150 miles | 2 hours |  |
| B | 260 miles |  | 40mph |
| C |  | 5 hours | 35mph |
| D |  | 3 hours | 80km/h |
| E | 544km | 8 hours, 30 minutes |  |
| F |  | 3 hours, 15 minutes | 100km/h |
| G | 215km |  | 50km/h |

1. Colin drives home from his son’s house in 2 hours 15 minutes. He says that he drives at an average speed of 44mph.
2. Change the 2 hours 15 minutes to a decimal.
3. How far is it from Colin’s home to his son’s home?
4. The distance between Paris and Le Mans is 200km. The express train between Paris and Le Mans travels at an average speed of 160km/h.
5. Calculate the time taken for the journey from Paris to Le Mans.  
   Write your answer as a decimal and in hours and minutes



1. Jade runs and walks the 3 miles from home to work each day. She runs the first 2 miles at a speed of 8mph, then walks the next mile at a steady 4mph.
2. How long does it take Jade to get to work?
3. What is her average speed.
4. A train travels at an average speed of 18m/s.
5. Find the approximate time the train would take to travel 500m.
6. The train set off at 7.30 on a 40km journey. At approximately what time will it reach its destination?
7. A cyclist is travelling at an average speed of 24km/h.  
   What distance does he travel in 2 hours 45 minutes?
8. You need to get to class, 200 meters away, and you can only walk in the hallways at about 1.5 m/s. (if you run any faster, you’ll be caught for running). How much time will it take to get to your class?
9. 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?



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 is Amy’s average speed for the entire trip?