**Racing for the Championship!**

Grade Three

**Objective: The student will develop an understanding of the length of the various races, the amount of time planned for each race, make comparisons among race lengths and times, and solve problems related to the race.**

**Virginia Standards:**

**Math SOL 3.11**

* **Determine the elapsed time in one-hour increments within a 12-hour period.**
* **Solve practical problems in relation to time that has elapsed.**

**Math SOL 3.4**

* **Solve single-step and multistep problems involving the sum or difference of two whole numbers, each 9,999 or less, with or without regrouping.**

**Math SOL 3.6**

* **Create and solve problems that involve multiplication of two whole numbers, one factor 99 or less and the second factor 5 or less.**

**Materials:** Worksheet

**Background Information**:

Share with your students the following information related to the Richmond 2015 UCI Championships.

The Road World Championships (Worlds) will take place in Virginia’s historic capital city from September 19-27, 2015. (Have students identify Richmond on a map and discuss the distance using kilometers and miles from their city.) This is the first time in 29 years that the World Championships will be held in the United States. This is truly a great global sporting event. There will be more people watching the World Championships (300 million) than the Super Bowl (115 million viewers).

Approximately 1,000 men and women from among the world’s top cyclists, representing about 75 countries, will compete in the 12 championship races. The World Championships and two of the three [Grand Tours](http://en.wikipedia.org/wiki/Grand_Tour_(cycling)) (the [Giro d'Italia](http://en.wikipedia.org/wiki/Giro_d%27Italia) and the [Tour de France](http://en.wikipedia.org/wiki/Tour_de_France)) form the [Triple Crown of Cycling](http://en.wikipedia.org/wiki/Triple_Crown_of_Cycling). But unlike the Tour de France or any other pro race, at the World Championships you represent your country’s team, not your professional trade team. It is a rare opportunity for the athletes to compete for their country, just as they do during the Olympic Games.

The athletes will compete in three race events including the traditional Road Race, the Individual Time Trial, and the recently introduced Team Time Trial. World Champions are crowned for each event and they are entitled to wear the [rainbow jersey](http://en.wikipedia.org/wiki/Rainbow_jersey) until the next Championships.

**Activity:**

Share with students that the races are different lengths and different amounts of time have been set aside for each race. Have students solve the elapsed time problems and practical problems found on the attached worksheet.

**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**WHAT’S YOUR TIME!**

**The chart below shows the approximate information regarding the start time, the finish time, or the elapsed time for individual races.**

**Complete the missing information in the chart below.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date | Event | Start Time | Approximate  Finish Time | Elapsed Time (hours/minutes) |
| September 19 | Team Time Trial Training | 9:00 a.m. | 12:00 pm | 3 hours |
| September 20 | Team Time Trial (Men) | 1:30 p.m. | 3:30 p.m. |  |
| September 21 | Individual Time Trial  (Jr. Women) | 10:10 a.m. |  | 1 hour |
| September 21 | Individual Time Trial  (U23 Men) | 12:00 p.m. |  | 4 hours |
| September 22 | Individual Time Trial  (Elite Women) | 1:30 p.m. | 4:30 p.m. |  |
| September 25 | Road Race  (U23 Men) |  | 4:50 p.m. | 4 hours |

**Solve the following**:

1. The course for each race will close to traffic approximately one hour before the race begins and will re-open one hour after the estimated finish time. How long will the course be closed for traffic for the September 25 Elite Men’s Road Race?
2. The 2015 Worlds will be the first time the United States has hosted the event since 1986, when it was held in Colorado. How many years has it been since the Worlds were hosted in the United States?
3. The length of a lap in the Time Trial Circuit is about 9 miles. How many miles will a rider travel if they complete 8 laps?
4. One lap for the Elite Women Road Circuit is 10 miles? How many laps will it take for a one person to have traveled 60 miles?
5. The Team Time Trial Circuit is approximately 24 miles in length. If there are 6 members who will split that distance equally, how far will each have to bike?

**Fun Fact:**   
In October 2014, nearly two dozen Team USA cyclists gathered in Richmond to train and familiarize themselves with the courses for the Road World Championships.

**Bonus Activity:**

1. Which country held the 2014 UCI Road World Cycling Championships?

2. How many times have the UCI Road World Cycling Championships been held? How many times have they been held in the United States? When and where?

3. How many days until the 2015 UCI Road World Cycling Championships begin?