## WHAT'S YOUR TIME!

## Grade Four

Objective: The student will develop an understanding of the length of the various races, the amount of time PLANNED FOR EACH RACE, AS WELL AS MAKE COMPARISONS AMONG RACE LENGTHS AND TIMES.

## Virginia Standards: <br> Math SOL 4.9

- Determine the elapsed time in hours and minutes within a 12 -hour period (times can cross between a.m. and p.m.). In elapsed time problems, there are three common elements: a beginning time, an ending time, and the amount of time that has elapsed. If given any two of these three elements, the students should be able to find the missing element.
- Solve practical problems in relation to time that has elapsed.


## 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 (the Giro d'Italia and the Tour de France) form the 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 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.

## WHAT'S YOUR TIME!

The chart below shows the Official Schedule for the start and finish times of the upcoming bicycle races. Use this data to complete the following:

Complete the missing sections of the following race times.

| Date | Event | Start Time | Finish Time | Elapsed Time (hours/minutes) |
| :---: | :---: | :---: | :---: | :---: |
| September 19 | Team Time Trial Training | 9:00 a.m. | 12:00 p.m. |  |
| September 19 | Time Trial Circuit Training | 1:00 p.m. |  | $11 / 2$ hours |
| September 20 | Team Time Trial (Women) | 11:30 a.m. | 12:55 p.m. |  |
| September 20 | Team Time Trial (Men) | 1:30 p.m. | 3:35 p.m. |  |
| September 21 | Individual Time Trial (Jr. Women) | 10:00 a.m. |  | 1 hour 10 minutes |
| September 21 | Individual Time Trial (U23 Men) | 11:30 a.m. | 3:50 p.m. |  |
| September 22 | Individual Time Trial (Jr. Men) | 9:30 a.m. | 1:05 p.m. |  |
| September 22 | Individual Time Trial (Elite Women) |  | 4:45 p.m. | 3 hours 15 minutes |
| September 23 | Individual Time Trial (Elite Men) | 1:00 p.m. | 3:35 p.m. |  |
| September 24 | Road Race Training | 10:00 a.m. | 12:00 p.m. |  |
| September 25 | Road Race (Jr. Women) |  | 11:50 p.m. | 1 hours 50 minutes |
| September 25 | Road Race (U23 Men) | 12:45 p.m. | 4:50 p.m. |  |
| September 26 | Road Race Training (Jr. Men) | 9:00 a.m. | 12:15 p.m. |  |
| September 26 | Road Race (Elite Women) | 1:00 p.m. |  | 3 hours 25 minutes |
| September 27 | Road Race (Elite Men) | 9:00 a.m. | 3:40 p.m. |  |

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 27 Elite Men's Road Race?
2. The Elite Men's Road race is 161 miles while the Elite Women's race is 80.5 miles. What is the difference between the lengths of the two races?
3. The length of a lap in the Time Trial Circuit is 9.3 miles. How many miles will a rider travel if they complete 8 laps?

## 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 Championship?
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?
