

Passing Time at Checkpoints

Developed by: Jen Reiter, 2014 Iditarod Teacher on the Trail™ **Created 9/15 UPDATED 12/17**

Discipline / Subject: Math

Topic: Calculating Elapsed Time

Grade Level: 3-5; others with modification

Resources / References / Materials Teacher Needs:

Fairbanks Route Iditarod Trail Map: <https://iditarod.com/race-map/>

Huslia Welcomes the Iditarod Video: <https://www.youtube.com/watch?v=bFPdXNJygVw>

George Atlla: <http://indiancountrytodaymedianetwork.com/2015/02/17/alaskans-mourn-passing-george-atlla-mushing-legend-and-mentor-159254>

George Atlla: <http://atllamakingofachampion.com/>

DeeDee Jonrowe in Huslia: <http://www.knom.org/wp/blog/2015/03/15/in-huslia-dee-dee-jonrowe-pauses-to-savor-the-moment/>

2015 Checkpoint Date from the Huslia Checkpoint: <http://iditarod.com/race/2015/checkpoints/9-Huslia/>

2017: Kids Report from Huslia: <https://www.youtube.com/watch?v=sgXMcp0fBQg>

Lesson Summary:

The students will use race data to calculate elapsed time.

Standards Addressed: (Local, State, or National)

CCSS.MATH.CONTENT.3.MD.A.1

Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.

Learning Objectives:

TLW calculate elapsed time.

Assessment:

The students' worksheets can be assessed.

Procedural Activities:

1. Tell the students that the 2015 Iditarod Race was very unique in that due to weather issues, the normal route could not be used. For only the second time in the race's history, the race restart was held in Fairbanks, Alaska.
2. Display for the students the 2015 race route map. Have them identify the new villages that were given the opportunity to participate in the Iditarod.
3. Point out the village of Huslia that served as the halfway point of the race. Huslia has a long and storied history with mushing as it was the home of famed sprint musher George Attila.
4. Share with the students the video of Huslia preparing for the race.
5. Many mushers were honored to be in Huslia and were touched with how excited the villagers were for them to be there. Many may have stuck around longer than they intended to just to soak it all in.
6. You could at this point, share with the students about DeeDee Jonrowe's arrival and visit to Huslia. ** PLEASE preview the article and audio clip prior to sharing. It may not be appropriate for all students.**
7. Tell the students they are going to take a look today at how long various mushers stayed at the checkpoint and how busy the checkers were checking mushers in and out.
8. To do this, they will need to learn or review how to calculate elapsed time. Please use whatever strategy or method works best for you. With my third graders we use the Mountains, Hills, and Rocks strategy that is similar to the one found here: <http://www.scholastic.com/teachers/top-teaching/2013/01/teaching-elapsed-time-strategies-work>
9. When the students are ready for independent practice, they complete the assignment using real world data. **Note: Real world data isn't always pretty! They will need to carefully look not only at the times the mushers arrived and departed, but the dates as well! It can be tricky!**
10. When they have finished analyzing the 2015 data, they may be interested/ surprised to learn that the route was used AGAIN in the 2017 Iditarod! Share with them the videos created by the kid reporters to get a glimpse into the most recent return to Huslia!

Materials Students Need:

Worksheet, attached

Technology Utilized to Enhance Learning:**Other Information:**

The problems that the students create as part of the assignment could be assigned as homework the next night!

Modifications for Special Learners/ Enrichment Opportunities:

Students could work with a partner.

Legend

- Legend --
- Town
- Checkpoints
- Iditarod Fairbanks Route
- Iditarod Northern Route
- Iditarod Southern Route

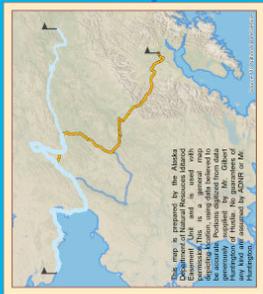
Iditarod Race Route
Mileage Differential Estimates

| | |
|-------------------|--------------------|
| Anchorage to Nome | 987 mi |
| Fairbanks to Nome | 943.03 mi |
| Difference | 18.95 miles |

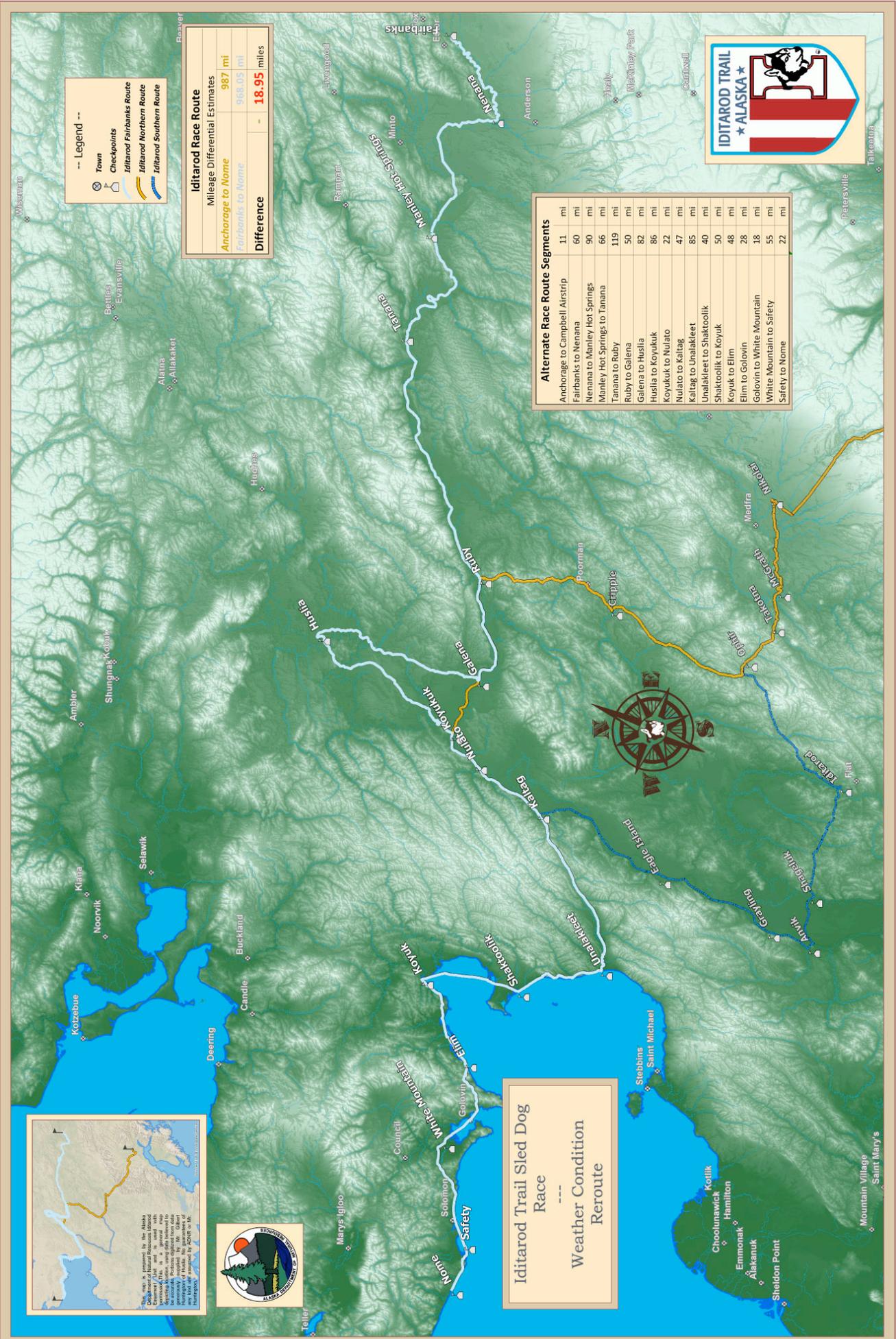


Alternate Race Route Segments

| | |
|--------------------------------|--------|
| Anchorage to Campbell Airstrip | 11 mi |
| Fairbanks to Nenana | 60 mi |
| Nenana to Manley Hot Springs | 90 mi |
| Manley Hot Springs to Tanana | 66 mi |
| Tanana to Ruby | 119 mi |
| Ruby to Galena | 50 mi |
| Galena to Huslia | 82 mi |
| Huslia to Koyukuk | 86 mi |
| Koyukuk to Nulato | 22 mi |
| Nulato to Kaltag | 47 mi |
| Kaltag to Unalakleet | 85 mi |
| Unalakleet to Shaktolik | 40 mi |
| Shaktolik to Koyuk | 50 mi |
| Koyuk to Elim | 48 mi |
| Elim to Golovin | 28 mi |
| Golovin to White Mountain | 18 mi |
| White Mountain to Safety | 55 mi |
| Safety to Nome | 22 mi |



Iditarod Trail Sled Dog Race
Weather Condition Reroute



Passing Time at the Checkpoints

The volunteers who work at each checkpoint need to wait for all of the mushers to come through and must carefully record all of their data and report it to the race committee. While awaiting mushers, there may be some down time, as there could be days that pass between the first and the last musher. Below is a PARTIAL chart of data from the Huslia Checkpoint during the 2015 Iditarod. In 2015, the race was rerouted do to weather, and the people of Huslia were called on to help the race... which they did in spectacular fashion! Use the chart to answer the questions on the next page.

| Musher | Bib | In | | Out | |
|---------------------|-----|---------------|------|---------------|------|
| | | Time | Dogs | Time | Dogs |
| Aliy Zirkle | 32 | 3/13 20:08:00 | 16 | 3/13 20:20:00 | 16 |
| Mitch Seavey | 18 | 3/13 20:36:00 | 13 | 3/13 21:07:00 | 13 |
| Jeff King | 59 | 3/13 15:39:00 | 16 | 3/13 21:27:00 | 16 |
| Aaron Burmeister | 63 | 3/12 21:47:00 | 13 | 3/13 22:20:00 | 13 |
| Dallas Seavey | 46 | 3/12 23:40:00 | 14 | 3/14 00:46:00 | 14 |
| Jason Campeau | 70 | 3/14 03:01:00 | 16 | 3/14 03:30:00 | 15 |
| Thomas Waerner | 8 | 3/13 01:21:00 | 14 | 3/14 03:43:00 | 13 |
| Michelle Phillips | 6 | 3/14 03:35:00 | 13 | 3/14 04:02:00 | 13 |
| Joar Leifseth Ulsom | 16 | 3/13 22:18:00 | 14 | 3/14 04:08:00 | 13 |
| Peter Kaiser | 54 | 3/13 22:14:00 | 15 | 3/14 04:10:00 | 14 |
| Jessie Royer | 3 | 3/13 20:05:00 | 15 | 3/14 04:17:00 | 15 |
| John Baker | 78 | 3/13 22:07:00 | 15 | 3/14 06:12:00 | 15 |
| Wade Marris | 65 | 3/13 22:19:00 | 14 | 3/14 06:21:00 | 13 |
| Kelly Maixner | 9 | 3/14 01:05:00 | 15 | 3/14 06:43:00 | 14 |
| Nathan Schroeder | 26 | 3/13 22:55:00 | 12 | 3/14 07:25:00 | 11 |

1. How long did Kelly Maxiner spend at the checkpoint?
2. How much time passed between the departure of Jeff King and the arrival of Joar Leifseth Ulsom?
3. How long did Nathan Schroeder spend at the checkpoint?
4. How long passed between the arrival of Peter Kaiser and the arrival of Jessie Royer?
5. Which two mushers arrived the closest together? How close were they?

Make up and solve two of your own elapsed time questions based on this chart.

1. _____

2. _____
