

Temperature Conversion

Developed by: Erin Montgomery, 2015 Iditarod Teacher on the Trail™

Discipline: Math

Topic: Converting Fahrenheit temperatures to Celsius

Grade Level: Any grade level

Resources / References / Materials Teacher Needs:

1. Dictionary
2. <http://iditarod.com/race/2015/mushers/list/>
3. <http://www.accuweather.com/>
4. Temperature conversion worksheet

Lesson Summary: Students will be working to convert temperatures between Fahrenheit and Celsius.

Standard's Addressed: Common Core Standards

1. CCSS.Math.Content.6.RP.A.3d: Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.

Learning objectives: Students will be able to convert temperatures between Fahrenheit and Celsius.

Procedural Activities:

1. Introduce the lesson by telling the students the day's temperature in Celsius. Don't tell the students it is in Celsius. Ask students if they agree with you.
2. Have students define both *Celsius* and *Fahrenheit*
3. Class discussion on how the U.S. uses Fahrenheit and most other countries use Celsius.
4. Discuss with students that there are many mushers participating in the Iditarod that are from countries other than the United States. Have students make a list of mushers signed up for the 2015 Iditarod that are from other countries. <http://iditarod.com/race/2015/mushers/list/>
5. Teach students formula needed to convert from Celsius to Fahrenheit and vice versa. $C = \frac{5}{9}(F - 32)$ and $F = (C \times \frac{9}{5}) + 32$
6. Do practice conversions together on board.
7. Independent practice - See attached worksheet.
8. Allow students time in class or overnight to complete Temperature Conversion worksheet.
9. Discuss answers together in class.

Materials Students Need:

1. Dictionary
2. Temperature conversion worksheet
3. <http://iditarod.com/race/2015/mushers/list/>
4. <http://www.accuweather.com/>

Technology Utilized to Enhance Learning:

1. Computer access to Internet

Other Information:

Modifications for special learners/ Enrichment Opportunities:

1. An extension for students is to report the temperature daily to school using both Fahrenheit and Celsius.
2. During the Iditarod have students report temperatures from checkpoints using both Fahrenheit and Celsius.

Notes:

6th grade students report the weather daily in my building as part of an ongoing weather unit. My challenge to them is going to report both the temperature in Fahrenheit as well as convert it to Celsius.