Sled Dogs

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Each year McCall Idaho sponsors the Idaho Sled Dog Challenge, a 300-mile race through the winter snow. This race is an Iditarod and Yukon Quest qualifier. After introducing students to the race, have them observe different types of sleds and share their ideas about how the sleds move so quickly across the snow. Next, introduce an engineering design challenge to determine the best type of runner to move a sled up a hill using the least amount of force. Students could design model sleds using wood blocks with cup hooks attached. Materials for making sled runners could include rulers, coffee stir sticks, straws, dowels, or pipe cleaners.

Additional Resources:

- Idaho Sled Dog Challenge Volunteer Education
- Iditarod Educational Site

Performance Standards:

Kindergarten	3rd Grade	Middle School
K-PS-1.2. Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.	3-PS-1.1. Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.	MS-PS-2.2. Plan an investigation to provide evidence that the change in an object's motion depends on the sum of the forces on the object and the mass of the object.