

Time

Students will get more out of a service-learning project in the field if they work on the learning module in the classroom first, so please plan to schedule a service learning experience that follows classroom work. There will be a pre- and post-assessment on energy transfer. Classroom time will be 5 to 6 hours, plus a day of volunteering. Students will create the cover of their science notebooks as homework. Notebooks can evolve as the project progresses.

Pre-Assessment: 15 minutes

Convection:

Convection activity and questions – 60 minutes

Teacher demonstration (Hot & Cold Water) – 20 minutes

Conduction and Radiation:

Steep Fire, Flat Fire Activity – 30 minutes

Inquiry and data collection – 20 minutes

Energy Transfer Activity: 15-20 minutes

Firewise Activity: 120 minutes of reading and answering questions

Defense by Diorama Activity: 60 minutes

Post-Assessment: 15 minutes