



iFLY Education Program  
 Minnesota Elementary School Standards Alignment

<https://education.mn.gov/MDE/dse/stds/>

Field Trip Activity	Standard
<p>Interactive Presentation:</p> <ul style="list-style-type: none"> <li>Identify the differences between solids and fluids. Discuss the different ways solids and fluids exert forces on objects</li> <li>Identify the forces acting on a flyer (gravity and the force of air), and determine which direction those forces are pushing or pulling on the flyer</li> <li>Observe and describe the behavior of a variety of objects in the wind tunnel. Predict which objects will fly at faster velocities and justify your predictions with evidence</li> <li>Educator leads a discussion about engineering careers, the engineering process as applied to the design of iFLY tunnels, and other applications of wind tunnels in STEM</li> </ul>	<p>Science:            K.1.1.1, K.0.4.1.1.1            1.1.1.1            2.1.1.1.1            3.1.1.1            4.1.1.1            5.1.1.1</p>
<p>LAB ACTIVITY</p> <ul style="list-style-type: none"> <li>Students break into small groups to investigate parachutes</li> <li>Students first build a basic parachute, then decide on an area to investigate</li> <li>Students identify one variable they want to change, describe how they will change it, and predict what effect this will have on their parachute's behavior.</li> <li>Students use measuring tapes, scales, and stopwatches in their investigations</li> <li>Students record data during their parachute launches</li> <li>Students discuss possible reasons for their results</li> </ul>	<p>Science:            K.1.2.1, K.3.2.2            1.1.2.1, 1.3.2.2            2.1.1.1.1, 2.1.2.1, 2.3.2.2            3.1.2.1, 3.3.2.2            4.1.1.2, 4.3.2.2            5.1.2.1, 5.3.2.2            Math:            2.3.2.2, 4.3.2.4</p>
<p>Post-field trip classroom activity</p> <ul style="list-style-type: none"> <li>Students conduct an investigation about parachutes, collecting multiple data samples</li> <li>Students plot their data on a graph</li> <li>Students use the graph to discuss the overall trend of their results</li> </ul>	<p>Science: K.1.2.1, K.2.1.1            1.1.2.1, 1.2.1.1            2.1.2.1, 2.2.1.1, 2.2.2.1.1            3.1.2.1, 3.2.1.1            4.2.1.1, 4.2.2.1            5.1.2.1, 5.2.1.1, 5.2.2.1            Math: 3.4.1.1, 4.4.1.1,            5.4.1.2</p>