

T-GEM and Forces		Teacher Strategies Background Info from teacher: students watch https://www.youtube.com/watch?v=8iKhLGK7HGk	Student Processes
Generate	1	Walk through scientific process, provide prompts. Brainstorm what ideas we learning in Bill Nye Video. Partner talk “What will happen when we push a box A versus box B on the floor?” Partner B reports out on partner talk. Students then record their predictions, generate a hypothesis.	Students in partners <ul style="list-style-type: none"> - Make predictions about what will happen when a box is pushed - Generate a hypothesis about forces - Make a prediction about what they will discover
Evaluate	2	Teacher introduces PhET simulator to allow for exploration “learn from building, critiquing, and changing our mental models of the way the world works.” (Khan, 2007)	In partnerships students explore PhET simulator for Forces https://phet.colorado.edu/sims/html/forces-and-motion-basics/latest/forces-and-motion-basics_en.html Identify patterns, relationship between motion and forces
Modify	3	Teacher directs students back to initial prediction, hypothesis and explains why/ how they are right or wrong and why. Create book creator to show understandings and new concepts learned.	Generate a book in Book Creator that explains final understandings, return to simulator to cement understanding.