

Grade 5 - Mister C Live: The World in Motion

PA STEELS Standards	3.2.5.C 3.2.5.F 3.5.3-5.M 3.5.3-5.Q 3.5.3-5.U
Big Ideas	- Gravity affects objects. - Materials impact design. - Evidence improves engineering.

Essential Questions	- How do forces and motion affect our world? - How do engineers improve designs through testing?
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Academic Vocabulary	motion, force, friction, gravity, inertia, speed, energy, engineering design
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Instructional Considerations

DIY Hovercraft

Standards	Connection to Activity
3.2.5.C	Analyze materials and surfaces
3.5.3-5.U	Evaluate design criteria

Discussion Questions	- What did you observe? - What forces were acting? - How could the design be improved?
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DIY Centripetal Force Board

Standards	Connection to Activity
3.2.5.F	Understand gravity effects
3.5.3-5.M	Engineering process

Discussion Questions

- What did you observe?
- What forces were acting?
- How could the design be improved?

DIY Egg Drop Tower

Standards	Connection to Activity
3.2.5.F	Gravity and inertia investigation
3.5.3-5.Q	Refine designs through testing

Discussion Questions

- What did you observe?
- What forces were acting?
- How could the design be improved?