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| Disciplinary Core Idea | Artifact | Selected Trade Book |
| PSA2.A: Forces and Motion   * Pushing or pulling on an object can change the speed or direction of its motion and stop or start it.   PS3.C: Relationship Between Energy and Forces   * A bigger push or pull makes things speed up or slow down more quickly. | Rollercoaster | Incredible Inventions by Lee Bennett Hopkins  Roller Coasters: From Concept to Consumer by Kevin Cunningham  How to Design the World’s Best Rollercoaster by Paul Mason  How Stuff Works: Roller Coaster by The Brothers |
| PSA2.A: Forces and Motion   * Pushing or pulling on an object can change the speed or direction of its motion and stop or start it. | SuperSoaker | Whoosh!: Lonnie Johnson’s Super-Soaking Stream of Inventions by Chris Barton  Super Soaker Inventor Lonnie Anderson by Heather E. Schwartz |
| PSA2.A: Forces and Motion   * Pushes and pulls can have different strengths and directions * Pushing or pulling on an object can change the speed or direction of its motion and stop or start it. | Bicycle | The Story of Inventions by Anna Claybourne  Bicycles (Made by Hand) by Patricia Lakin  From Steel to Bicycle (Start to Finish: Sports Gear) by Robin Nelson  Bicycles (How do They Make That?) by Rachel Lynette |
| PSA2.A: Forces and Motion   * Pushes and pulls can have different strengths and directions * Pushing or pulling on an object can change the speed or direction of its motion and stop or start it.   PS3.C: Relationship Between Energy and Forces   * A bigger push or pull makes things speed up or slow down more quickly. | Skateboards | Inventing the Skateboard (The Spark of Invention) by Christine Zuchora-Walske  Skateboards (Made by Hand) by Patricia Lakin  How do They Work? Scooters and Skateboards by Wendy Sadler |