

Physics

Writing Ideas for Homeschool Package

1. After watching the bowling or roller coaster video, summarize three key ideas that you learned. (3-12)
2. After watching the Physics 9 video, did you learn things that didn't fit with what you thought designing roller coasters was like or what you already knew reinforced? Do you have new insights into them? Write two paragraphs to answer these questions. (5-12)
3. Describe a solution that minimizes the force of an object during a collision. (9-12)
4. Write an argument to support the claim that when the kinetic energy of an object changes, energy is transferred to or from the object. (9-12)
5. Research and write about the composition of a bowling ball and the different ways balls can be changed to help bowlers be successful. (6-12)
6. Compare and contrast Newton's 1st law of motion to Newton's 2nd law or Newton's 3rd law. ((6-12)
7. Research and describe why a smaller person can knock down many pins in bowling as a large person. (9-12)
8. Research and describe three different jobs of people that design roller coasters. (3-8)
9. Research and describe three different ways that engineers focus on making roller coasters safe. (5-12)
10. Compare and contrast potential energy, kinetic energy, and dissipated energy. (6-12)
11. Make a flowchart of the steps that go into making a roller coaster, from the designing to the building. (9-12)
12. Write three journal entries describing the feelings an engineer may have as he rides in his/her roller coaster for the first time. (3-8)